

A record of the main speeches given by the

Provost of Trinity College Dublin,

Dr Patrick J Prendergast

Academic Year 2012 - 2013

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Tuesday, 14th August 2012

Biotechnology and National Transformation: The Role of Universities

National University of Rwanda (NUR), Butare, Rwanda

Thank you Professor Musahara for your kind introduction.

Ladies and Gentlemen,

It's a pleasure to be addressing you here today, on the fifth day of my ten-day tour of your beautiful country. I've already had the great experience of visiting several museums and I look forward to visiting more in the next few days - for example the Nyungwe Forest Reserve and Akagera National Park.

I've been the Head (or 'Provost' as we call it) of Trinity College Dublin, Ireland's oldest university, for a year now. And in the course of this year, I've paid visits to universities around the world, including Moscow and California, but these have been flying visits for a day or two.

This is my longest official visit, to date, to a university and to a country. It is, for me, the culmination of a long-expressed desire to learn more about Africa.

And to visit the National University of Rwanda, with which Trinity has such an important link through the Masters in Development Practice programme. I thank Dr Padraig Carmody and Professor Herman Musahara, and others who helped put the itinerary together. I would like to take this opportunity also to thank the Rector most warmly for his hospitality, and for this opportunity to address you today.

When I was standing for election as Provost in Trinity, I made a commitment to support Trinity's partnerships with universities and institutes of higher education in Africa.

Developing such partnerships is a key element of Trinity's new Global Relations Strategy, and of the Trinity International Development Initiative.

Last year our two universities signed a Memorandum of Understanding in the context of our joint Masters programme. This enables our postgrad students to undertake training programmes and field work here in Rwanda.

I know that our students - and 'our' in the sense of joint Trinity/UCD MDP students hosted by NUR - are currently doing their internships in, for example, Akagera National Park, Volcano National Park, the Gender Monitoring Organisation, and Mayange Mellenium Village. I hope that, in the

coming years, we can deepen the teaching and research links between our two institutions. As I say, it's a very great pleasure for me to be visiting now and observing how our partnership is developing.

The given title of today's talk is '*Biotechnology and national transformation: the role of Universities*'. Biotechnology is, according to its dictionary definition: "The application of scientific and technical advances in life sciences to make commercial products". As such it's a key growth area for universities, but I want to slightly expand today's talk because I don't just want to talk about life sciences but about science and technology in general.

So my talk could have a broader title, something like "Science, Technology, Commercialisation and the Role of Universities".

In short I want to address, as best I can, the very topical subject of innovation, entrepreneurship, and the nature of research and scholarship in a contemporary university - in universities, like both of ours, that are acting "in the public service" or "in Education and Service to the People" as NUR has in its motto.

Today, in universities around the world, staff and students are asked to think about using their research to serve society, whether it be through policy research or through directly contributing to economic growth. Academic staff, together with postgraduate students and post-docs, are forming campus companies, and even undergraduates are starting to think about applying ideas commercially. This level of engagement wasn't happening when I was a student in the 1980's. Universities then weren't so linked in with the local or global economy; the biggest change since my student days is this emphasis on innovation and entrepreneurship. So it is a really important and dynamic area, and one we must consider alongside the core mission in education and research.

IRELAND AND TRINITY: SOME CONTEXTUAL COMMENTS

But first I should tell you a bit about myself, and about my country, Ireland, and about my university, Trinity.

****Ireland****

Ireland is a European island about three times larger than Rwanda. We're unusual among European countries in that we were colonised - in fact we're often known as Britain's earliest colony - a "laboratory for the experiment of colonisation" as one of my historian colleagues has termed it. We are now approaching the centenary of independence, which was gained in 1921.

We were the first colony to leave the British Empire since the Americans in 1789, and this gained us a lot of attention on the world stage. Another reason why Ireland is well known is that the world is full of people of Irish descent.

There has been large-scale emigration from Ireland for two centuries and there are now huge Irish diasporas in Britain, the United States, Australia and Canada. This emigration started in earnest after the Great Famine of 1845-1848, a cataclysmic event in Irish history where more than a million people starved to death and another million emigrated.

On the eve of the Famine, in 1840, the population of the island of Ireland was at least 9 million - it has never recovered to anything like that figure.

For a decade - from 1998 to 2008 - Ireland was also famous for having one of the highest economic growth rates in the world. This was the period when we were known as the Celtic Tiger. The world financial crash of 2008 hit Ireland hard, particularly the banking sector. Things haven't been easy but I think we're dealing with the crisis well and the mood in the country is broadly optimistic.

At the time of independence in 1921, Ireland had a predominantly agricultural economy. We now have a knowledge and service economy, although agricultural products still account for a sizeable proportion of our exports. Our national strategy is to develop into an economy where knowledge is turned into wealth through the intellectual capabilities and skills of our people. This knowledge can be scientific and technological, but it can also be cultural knowledge. Music, drama, film, literature, dance - these are all potentially important components of a knowledge economy. In the discussions I have had in the last few days I can see parallels with Rwanda.

Any country that wants to be a knowledge economy needs a very strong technological base and a globally-competitive education system. But such countries have to invest heavily in their universities.

****Funding Environment****

University funding is a potentially controversial issue, at least in Europe. Funding can come through different paths:

- government direct subvention,
- student fees, with perhaps different categories of students paying different fees based on country of origin,
- research funding, won through funding agencies or industry,
- private benefactors,
- commercial activities.

People feel strongly about how universities are funded, and in Ireland, as in other countries, this can be an electoral issue, with some people opposed, for instance, to tuition fees for students. I'm not going to get into the pros and cons now. I will only say that any position on university financing must be

pragmatic, not ideological, and the starting point must be quality of education.

Allowing our universities to decline through lack of funds is not an option and is destructive to the whole idea of a knowledge economy. Once that premise is accepted, we can, I hope, talk equably about how to find the necessary funding.

My personal position is that since a university education benefits the private individual in terms of career and life opportunities, and benefits the public good in terms of providing the doctors, lawyers, teachers and entrepreneurs that society needs, then university funding should be both exchequer public and non-exchequer private - at least for universities with a mission to serve the public good.

Of course, all the players involved in funding universities - government, students and their families, industry, private benefactors - deserve an excellent return on their investment. This puts pressure on us, the academic staff and administrators of universities, but it's pressure we welcome.

Trinity College Dublin

So, the university sector is crucial to Ireland and to its ambitions for the future. Ireland has about forty higher education institutes, including large multidisciplinary universities in the main cities.

Trinity is Ireland's highest ranked university in the world rankings, and also the oldest by quite a few centuries. In fact it is not only Ireland's, but one of the world's premier universities, ranking in the top 50 until the recent economic downturn. It is also one of the most beautiful. It was founded over four hundred years ago when a group of influential Dublin citizens petitioned Queen Elizabeth the First.

When an institution has been around that long, it tends to build up an important history, and Trinity is no different. I don't have time to go into all the things that make Trinity famous - I hope that many of you will get a chance to visit and walk round our campus to see the beautiful buildings for yourselves, and particularly the Old Library, which has some of the world's most valuable books, including the 9th Century Book of Kells.

Notable Trinity Alumni

Over the four hundred years, Trinity has educated some great minds, who have left their mark on the world. Ireland is famous for writers and many of them went to Trinity. Jonathan Swift, who wrote *Gulliver's Travels*, was a student here back in the seventeenth century.



In science and mathematics, we have Ernest Walton who won the Nobel Prize for Physics in 1951 for his work, with John Cockroft, on splitting the atom - the Lithium atom. A century earlier William Rowan Hamilton made history with his Hamiltonian Mechanics and discovery of Quaternions.

In medicine we have Denis Burkitt, who is particularly significant in this continent, because of his research into cancer in children in equatorial Africa. He established a link between lymphoma and malaria. This was the first demonstration of a causal link between a virus and human cancer and it changed the direction of cancer research.

Research and Scholarship

You'll gather from this brief roll-call of alumni, that Trinity has traditional strengths in the Arts and Sciences and Medicine. We've extended and diversified these strengths.

To take some recent examples of Trinity research that has made newspaper headlines: researchers at our Nanoscience Institute are developing technology to create the flattest screen ever, using a new material, transparent conducting oxide, that enables the creation of screens that are completely see-through.

Our department of civil engineering is looking at air-filtering technology that reduces maintenance and energy costs; and our Professor of Immunology is researching the potential of the rainforest for new therapies to combat inflammation.

Many of our research projects involve different departments, schools and faculties. We are a multidisciplinary university and we're also interdisciplinary - we believe some of the most important research takes place at the interface of disciplines.

Personal Context

You will gather that I am very proud of my university - my pride is not only that of a staff member and university head; I'm also a graduate of Trinity. I arrived - from rural Ireland - to study engineering in 1983. I was one of the first in my family to attend university - neither my parents nor my uncles and aunts went to university, but many of their children did. I mention this because my story is typical in Ireland - since my generation, higher education has opened up opportunities for many, way beyond the experience of our parents or grandparents. I imagine this is something that Rwandans can relate to.

After doing post-doctoral research in Bologna in Italy and in the University of Nijmegen in the Netherlands, I returned to join the staff of Trinity in 1995, where I've been ever since. I've been fortunate, in my own research on medical devices, to be at the very heart of the science and technology revolution, and of developing university entrepreneurship and innovation, which is what I want to talk about now.

UNIVERSITIES AND THE KNOWLEDGE ECONOMY

But let me first recap: Ireland is a small, open economy. Because of our desire to develop a knowledge economy, universities are hugely important, and Trinity as Ireland's oldest and highest ranking university is particularly important.

Trinity is a long-established multidisciplinary and inter-disciplinary institution, engaged on cutting-edge research. I want to look now at how such a university can play a role in the "national transformation of a country", to reprise the words of the original title.

The Innovation Ecosystem

When we talk about developing a knowledge economy, we're talking about a national strategy involving the public and private sectors. We're talking about numerous players, including individual entrepreneurs, business enterprises, higher education institutions, venture capital, and governmental bodies interacting in the right regulatory environment to create jobs and open up opportunities.

I think it's useful to employ the term 'innovation ecosystem' to characterise this 'system'. The biological metaphor is apt: it gets across the idea of different players, or "organisms", interacting to sustain a flourishing environment. And because the word "delicate" is often attached to "ecosystem", it gets across how subtle this interaction is and how the balance has to be right for economic growth.

Job creation per se is not the responsibility of universities, but universities are key players in this innovation ecosystem, because they supply the research that constitutes the 'knowledge' in a knowledge economy, and they supply the talented graduates who drive the economy.

A university like Trinity helps grow the ecosystem through providing lynchpin companies with the skilled workforce they need. So, for instance, Trinity's Nanoscience Institute educates PhD scientists and engineers, who are then recruited by global technology leaders, such as Intel.

Ireland is the European base for many global companies, including Google, Twitter, Facebook, and many leading pharmaceutical companies. Part of the reason why these multinationals locate to Ireland is our skilled workforce.

But of course a knowledge economy is built not only on well-established multinational companies, but also on smaller companies created locally. A flourishing knowledge economy is known by its start-up technology companies, and this is where university research is crucial.

Commercialisation: Biotechnology

I've been asked to describe how the biotechnology sector developed in Ireland and Trinity; I think it's an interesting story, particularly since it starts in the 1980s, during a period of severe economic recession for Ireland. I wish to record my appreciation to our Dean of Engineering, Mathematics and Science, Professor Clive Williams, for the historical background here.

The story of biotechnology in Ireland shows that even during difficult periods, when there are not a lot of available funds, you never stop strategising for a better future.

Perhaps it is in these periods that the dice of success or failure are really cast.

In the late 1980s the Irish Government took a decision to enter into partnership with universities to invest in science and technology. There weren't a lot of funds available but BioResearch Ireland was founded. It had five centres, one of them in Trinity. The aim of Trinity's National Pharmaceutical Biotech Centre was to help academics develop a biotech portfolio of Intellectual Property (IP), licenses, company interactions or products.

The funding - only about 1 or 1.5 million Irish pounds - financed high-profile life scientists, and Trinity built a specific-purpose Biotechnology building to support their work.

Strategic recruitments, success in research funding rounds, and a strong biotech/pharma component in the innovation area and in Trinity's publications output meant that by 1999, when the Celtic Tiger was kicking in and there was suddenly much more money available, Trinity was in a great position to leverage significant funds from government and private philanthropy. Today Trinity has world-class strengths in basic molecular and cell biology, and related chemistry and translational research, all revolving round biopharma and therapeutics.

Campus Companies

So, from a daring government initiative in the 1980s to put precious funds into a radical growth area like biotechnology, Trinity was in a great position to capitalise on the improved funding environment of the late 1990s and early 2000s to build up significant strength in this important sector, and crucially, to increase the number of campus companies. I would like to thank Margaret Woods from Trinity Research & Innovation for the information in this section.

Twenty years ago campus companies were few and far between in Ireland.



This slide shows the logos for the campus companies founded in the academic year 2009-2010. As examples:

- Biocroi's PlateMinder™ technology represents a breakthrough in stabilising cell-based assays performed in micro volumes, used for rapid screening in the drug development industry;

- Trocht Ltd is developing a web-based system to monitor global events, using print, video and audio sources, and then applying sentiment analysis to Web 2.0 and self-learning systems to deliver a rapid decision support system for financial market predictions.

- Miravex specialises in imaging devices and its first product is targeted at skin imaging for the aesthetic medicine and dermatology markets.

Is the academic year just gone by, 2011-2012, there were 13 campus companies: PixilPuffin is a software company developing tools for the media post-production industry, and Synergy Flow Ltd's lead product is ArtiStent, a cardiovascular device targeted specifically at the treatment of peripheral vascular disease in the superior femoral artery. Xcelerit develops algorithms to speed up financial services software.

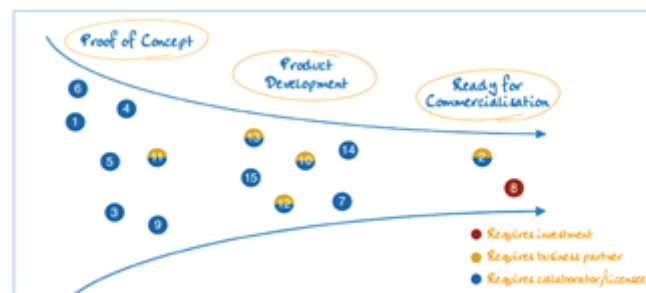




How do we get such campus companies? Well, it's hard work. One of the highlights of every year in Trinity is the "Innovation and Technology Showcase". Here is a brochure from some previous years' showcases - The front page of one of the brochures is shown here in the slide; I know the text is too small to read

but it gets across the process. There are 36 ideas for commercialisation of research here; some fifteen on this first page.

The stage of development stage classified in the 'funnel' which appears on the brochures I've handed around, and is here on the slide, which I've expanded here in this slide to show we keep track of these, taking a strong interest to ensure as many as possible get investment and create jobs.



Innovation Academy and the new breed of PhD

Encouraging an innovative, entrepreneurial mindset in students is something to be proactive about, not something to leave to chance.



Some people are natural entrepreneurs; others, whose ideas may be just as good, aren't used to thinking in terms of innovation. So a few years ago, we established an Innovation Academy.

We did this together with another university in Dublin, UCD, and together we are beginning to pioneer a new breed of PhD student - as the slide says "Study makes a scholar, action makes an entrepreneur".

This new breed of PhD graduate will be expert in their discipline, with a thorough understanding of how innovation can convert knowledge and ideas into economic and social benefit.

It's early days yet for the TCD/UCD Innovation Academy but so far it is proving as exciting and dynamic a hub as we could wish. One of the students on the PhD students doing research here in Rwanda, Caroline Ryan, is also a student in the Innovation Academy. She is currently based in the veterinary university in Umatara and is looking at human-livestock related interactions that can lead to poor health. Her project was short-listed for an award this February.

THE GLOBAL FRAMEWORK

Playing our part in ensuring that research supports the innovation ecosystem is now an important activity for Trinity, as for other global universities. While I'm proud of our work in this area, I know that a great deal remains to be done. There could, for instance, be improvements within the regulatory framework in which technology-business develop, particularly in the way the labour market works. For example, it's not as easy as in some countries for academics to take time out to concentrate on start-up companies.

One of the keys to improving commercialisation - and indeed improving university research in general - will come through extending global networks. Ensuring research is globally competitive is an absolute imperative which can easily be lost for local political reasons flying a flag under the guise of strategy.

This means that Trinity needs to develop its global outreach and link up with more universities round the world. Paradoxically perhaps, in order to bring about national transformation, we have to look beyond our national boundaries.

COLLABORATIVE PARTNERSHIPS AND GLOBAL REACH



Our commitment to interdisciplinarity - which I've already mentioned - underpins our approach to inter-institutional collaboration: we know we have much to learn from, and much to teach, our peer institutions round the world.

This slide shows some of our international publications over the last four years.

*** Exchanges ***

Student exchanges are important and something I'm particularly keen on because I, personally, have had such a great experience studying in Italy and the Netherlands. European countries are fortunate because exchanges are facilitated by an EU programme, Erasmus; however I'd like to see more of our students availing of the opportunity to study abroad. This is one of my goals. There is no educational substitute to immersing yourself in another culture.

And it's not just student exchanges - I'd like to see more international students coming to study full-term in Trinity. An international campus, reflecting diversity in both the staff and student bodies is a feature of the contemporary leading university.

Academic staff exchanges are also crucial. Even in centuries past when communication was through the postal system and transport through horse-drawn carriages, academics managed to exchange ideas, using Latin as a common language. As that great academic traveller of Europe Erasmus himself said: *Ego Mundi Civis Esse Cupio*. I long to be a citizen of the world. And I agree with that.

And I'd like to see more institutional collaborations beyond the island of Ireland. The Masters in Development Practice between Trinity, UCD and the NUI Galway is a great instance of such collaboration. It will, I hope, lead to more such programmes and more research projects between Ireland and Africa.

Trinity's Global Relations Strategy

As with innovation, we know that encouraging global thinking is something we have to be proactive about. It requires strategising, prioritising and resources. To this end, Trinity has incorporated, within our new strategic plan, a 'Global Relations Strategy' and we have designated a Vice-Provost for Global Relations.

The aim is to increase and deepen all the linkages I've just been speaking of. This is an entirely new post, created with the express aim of improving our messaging abroad and focusing global interest on Trinity. By creating such a post we are seeking to coordinate our activities towards the core aim of opening Trinity to the wider world.

When I leave office, in 2021, I want this map (i.e. the collaborative slide) to have double, or treble, the number of links. That will signal to me that Trinity has helped transform Ireland as Ireland's university on the world stage.

CONCLUSION

I've been concentrating, so far, on recent developments. I've been talking about the new initiatives we've taken and our strategies for the future. But I

want to close by recalling Trinity's core values, the age-old strengths behind our academic excellence.

If I had to say what Trinity's greatest strength is, my answer would be: research-led education.

The essence of a 'research-led education' is that students are actively engaged in primary research in a common enterprise of discovery alongside their professors. They learn to see knowledge, not as 'concreted-in and static' but as dynamic and changing - and what is more that they themselves can change it, can rewrite the textbooks. In this mode of education there is no division or compartmentalisation between research and teaching. Students develop strengths in critical enquiry and learn the importance of evidence-based knowledge.

A research-led education is demanding of staff and it is expensive, but the pay-off is worth it. Everything I've been talking about - a knowledge economy, campus spin-outs, inter-institutional collaborations, an education hub - all of these are premised on research-based education.

Education is a huge, diverse sector and typically countries will have different types of higher education institutes. In Ireland, for instance, we have colleges, where students are trained for specific jobs rather than in primary research and critical enquiry. That's fine. Diversity is to be encouraged and different skills are always needed. But in my view a knowledge economy will always have a number of universities which deliver a research-led education, because that's where the cutting-edge knowledge comes from.

Research-led education is a core Trinity value, and it encompasses another core value, of maintaining - and I quote now from the policy itself:

Of maintaining "an environment for teaching and learning that values diversity of opinion, encouraging exchange of opinion between teacher and student as part of a robust educational process. Staff are not required to present as valid what they consider to be inaccurate or untrue, and students will be enabled to question that for which inadequate evidence is given. In all cases, the College will seek to develop the search for truth as a part of the experience of teaching and learning, relying not on the imposition of authority or acceptance of received knowledge but rather on the exercise of the critical faculties of the human mind."

We have enshrined these principles in Trinity policy because we recognise that we must explicitly value that "common enterprise of discovery" between student and staff - and therefore, by extension, imbue common values that lead to societal regeneration and transformation.

We know that if we move too far from our ideals, then we no longer have open-ended research in a spirit of critical inquiry. This threatens not only the university, but the society and economy that the university serves.

As we recognise, this search may take us to unexpected places. But it's the willingness and courage to follow truth *wherever it leads* that allows us to come up with new ideas - that allows us innovate, to transform the way we think about the world and our lives, and ultimately to transform the countries and societies where we live.

Thank you very much.

* * *

Saturday, 25th August 2012

Graduates Reunion Banquet

Dining Hall, Trinity College

Ladies and Gentlemen, Alumni and friends,

This time last year, I began my official engagements as Provost with the Graduates Reunion Dinner, and here we are again, in what, for me, is one momentous year later!

I don't know if it's by accident or design but I must congratulate the Alumni Office on the timing of this annual dinner. The academic year is about to begin. We're refreshed from our vacations and excited about the coming year. The College has that calm but excited air of expectancy before the students return. There could be no better time for me to be meeting graduates - and ones who demonstrate, as you do by your presence here tonight, just how much Trinity means to you.

Because I know everyone in this room is joined in their loyalty - I don't think it's too strong a word - to Trinity, this dinner presents the perfect opportunity to take stock of our achievements in the past year, and consider our aspirations for the academic year to come.

But first let me welcome you all to Trinity! Or rather welcome you all back. Gathered here tonight are about 400 graduates of Trinity, and you span over sixty years, from 1941 to 2002. Many of you have travelled some distance to be here - from Queensland, Australia; from Portland, Maine; from Williamsburg, Virginia and I do wish to welcome personally Dr Stanley Quek from Singapore; Stanley hosted me to a nice lunch in Singapore when I was still Provost-elect. He is a regular visitor to us and we thank him for his continued guidance for the Medical School, and the College, over the decades.

There are graduates from the full spectrum of Trinity disciplines here tonight. I want to extend a special welcome to BESS 2002 and 1992, to Medicine 2002 and 1972, and to Economics 1972, because I know there are many of you here from those disciplines. We are delighted to have Senator Barrett in attendance with the Economics Group. Usually we face each other in exchanges at Board, but this evening before the academic year begins we are still in vacation - hostilities have not yet begun!

And I also welcome our two earliest graduates here tonight:

- David McCausland who graduated in civil engineering in 1941,

- and Professor Loudon Ryan, who just said grace, and is of course our former Whatley Professor of Political Economy. He graduated in 1945, and his portrait hangs in the corridor leading from Provost's House to the College - looking down on me, hopefully with approval.

I don't have time to mention everyone, but please be assured that you're all very welcome and I hope you've been enjoying this great Alumni weekend. Your enjoyment and your support is important to us. Indeed the good standing of the College depends on it.

In my inaugural address, which I delivered in September last year, I cited one of my predecessors as Provost who referred to Trinity as "a small republic of letters". We're a republic of some 17,000 students and about 3,300 staff - which is of course more than when any of you were undergraduates so I should probably say that we're a 'small, expanding republic of letters'. And in our wider global community we count over 90,000 alumni in 130 countries.

We regard our relationship with our alumni as life-long. And so tonight I want to take this opportunity to tell you a bit about what's going on in your university. And I want to talk about the different ways in which you can personally engage with the College.

* * *

Well, it's been an extraordinary year. Obviously it would be for me anyway - it's my first year in office as Provost, but even leaving that aside, we can point to, for example:

- The opening of the Lir Academy for Dramatic Art. If you haven't had a chance to see this rather remarkable building, do stroll up Pearse St towards Grand Canal Dock. It offers courses to actors, playwrights, and stage designers and is affiliated to RADA in London;
- The Olympic flame came through Dublin, carried by, amongst others, three Trinity students and one alumnus; and the Trinity Olympians' celebration - a remarkable homecoming of almost all Trinity men and women who have participated in the Olympics, for whatever country.
- Academic matters also rank highly - we held a very high-profile Admissions Conference where we looked at extending admissions beyond CAO forms. Doing something about admissions was one of my key electoral promises and it's something the Minister for Education, Ruairí Quinn, is also keen on. We took the initiative in holding this conference with international experts from the US and the UK in attendance. We are now intending to pilot an alternate admissions scheme and, among Irish universities, we are leading the way in this.
- And, of course, we've celebrated the Tercentenary of the Old Library - which has involved hosting important exhibitions - I know many of you

have visited the exhibition this weekend. And we've also celebrated other seminal Trinity events, like 250 years of the College Chapel Choir;

- On a sad note of course, we buried the redoubtable R.B. McDowell, and we did it with fitting tributes which I think he would have appreciated;
- Personally, I've enjoyed official visits to several countries, spreading the message of Trinity far and wide - including to California, to Moscow, and just the other week, to Rwanda, where we are running a joint Masters in Development Practice with internships coordinated by the National University of Rwanda. My colleague, the Vice-President for Global Relations Professor Jane Ohlmeyer is leading a new strategic approach to setting Trinity out as a university of global consequence. I'm glad to see her here this evening, just back from a highly successful tour of India with the Faculty Deans.

So, yes, quite a year - those are just a few of the highlights! I've been thinking now what this first year as Provost has meant to me? What are the key themes, if you like, of the academic year 2011/2012?

Three things stand out - to me anyway: I would say it's been a year of our

- First, Global Engagement - resurrecting Trinity's presence on the world stage as a university with a worldwide reputation.
- Next, Innovation - this is important; the best universities in the world are excellent at the core mission of education and research but they also engage in creating the environment - the ecosystem - for economic and social change.
- Finally, Public Engagement - this is a challenge for universities like Trinity but we must succeed in persuading the public of the value of what we do, that we are a university operating in the spirit of public service, but that this does not mean being bureaucratised to the extent we cannot compete with our peer universities around the world.

In fact, these three are closely related, which I'm delighted about because when it comes to College strategy and messaging, it's my primary job to ensure cohesion, unity and the further development of Trinity's reputation.

* * *

Trinity cannot grow in strength without the input of its alumni - our past students.

Many alumni already support the College financially and for that I would like to extend my thanks, and the thanks of all our staff and students. Your

contribution can make the difference between struggling along and achieving excellence.

In this context, I'd like to mention the Trinity Annual Fund, which is our tax-efficient alumni giving fund. In your "goodie bags" there is a brochure on the Alumni Appeal 2012.

This year's appeal will support postgraduate research and the Trinity Access Programme which transforms the lives of students from disadvantaged areas and enables them to study at Trinity.

There are currently over 2,000 postgrad research projects in Trinity. These range from developing treatments for killer diseases to advancing equality in the developing world. So, by giving to Trinity, you're not just helping our current students but contributing to a better future for everyone.

I should say, of course, that all levels of support are welcome. I think there's sometimes a perception that, in order to support your *alma mater*, you have to endow a building. Well obviously we won't say no to a building....but our model is more like - look what can be done by lots of people giving what they feel is appropriate - targeting causes of the College that mean something to them.

I buy into the evolving global idea that alumni can remain connected to the home university throughout their lives. Financial support is only one way in which you can retain a stake in Trinity's continuing success.

There are, for instance, currently hundreds of alumni involved in College activities as mentors or as volunteers.

And many more alumni act as the College's ambassadors worldwide. Whenever you talk about your education or great student experience, you're spreading the word about Trinity.

But I know that I'm now preaching to the converted: by coming here tonight you're affirming your commitment to this university. So what I really want to say is thank you very much and do stay in touch.

The Alumni Office is constantly improving ways of communicating and engaging. It is currently extending its overseas branch network and implementing an annual programme of events for alumni on campus.

* * *

I would like to finish by reassuring you that, despite the social and economic crisis in Ireland, Trinity College Dublin is managing well: the values here are strong, there's a streak of independence about Trinity that serves us well in these straightened times; the finances are difficult and require us to make

daunting decisions - but as ever conscious of our mission, our destiny even, we face all challenges with a good deal of confidence, knowing that what we offer - high quality education in an environment of research and scholarship - is never more needed in this country, and in the world.

With the support of all its wider community, Trinity is, and will, become an ever more globally-engaged institution with a track-record of delivering for Ireland on the world stage.

It's a great university - a cosmopolitan university - because it encourages debate and it has never been afraid to adapt and change.

With your help and support, with one year done, and nine to go...

And I look forward to meeting as many as possible of you after dinner.

Thank you

* * *

Friday, 7th September 2012

Address to the Bridge and Concrete Research in Ireland Conference

MacNeill Theatre, Trinity College

It's my pleasure this morning to welcome to Trinity College Dublin for the second day of this conference. I know you were all here last night for the conference dinner in the Dining Hall, and I hope you enjoyed it.

I'm delighted to be with you this morning, not only because this is an important conference with international keynote speakers, but also because I am myself an engineer. My area is medical devices and bioengineering so I'm not a civil engineer, but of course I remember my civil engineering lectures as a Trinity undergraduate. Also I note this lecture theatre is named after a civil engineer and the first professor of the subject here in Trinity, dating from 1847.

Later this morning I will attend the funeral of a former Head of the School of Engineering, John Fitzpatrick. He was Professor of Mechanical Engineering here for eighteen years and no-one did more than John to build up the great international reputation of Trinity's School of Engineering.

He was originally from Belfast, and was a strong advocate of engineering research - throughout his career he worked closely with industry, including in later years with Airbus and Rolls Royce. I think John would find it very fitting that the major conference in Trinity on the day of his funeral is an island-wide conference for engineering researchers, which promotes a sharing of ideas between engineers working in academia and those working in industry.

Conferences such as BCRI seem to me to be significant for three reasons - well, there are no doubt more reasons, but I've focused on three:

- First, as enablers of large number of postgraduate students to present their research nationally, many for the first time. The importance of having such a well-established forum for postgraduate researchers can't be over-estimated;
- Second, it provides a conduit for industry-academic exchanges. I know that there are industry practitioners, consultants and suppliers present today, as well as organisations such as the National Roads Authority, and Irish Rail.
- However the effect of the national economic downturn has nowhere been felt harder than in the construction sector and in civil engineering in

general, which brings me to my third point. Because civil engineering and construction are under pressure due to the economic downturn, this makes it all the more important that conferences like this one are being held. We need to show that exciting research collaborations between industry and academia are still going on, and that they will ultimately drive innovation in the construction industry.

I hope the media picks up on some of the papers being presented at this conference. There is currently a shortage of civil engineers being produced by Irish universities, due to fall off in undergraduate admissions in this discipline. But society needs civil engineers. Shortages will pose problems for the economy in the future.

Civil engineering does, of course get some good media coverage. A few months ago, for instance, there was positive reporting on the airfiltering technology being developed here in the civil engineering department in Trinity - the technology reduces energy and maintenance costs. The department's solar water disinfection project in Kenya also received good coverage. I'm sure there are many more such examples of positive stories from universities around the island of Ireland.

I spend a lot of time in speeches urging the government and the third level sector to make this country into an educational hub. I believe we have real potential to develop in this way, and that it provides the best hope for the future. Being an educational hub will involve, of course, excellent universities, but also efficient, facilitated and well-publicised collaborations between universities and industry. And it will involve socio-political emphasis on the importance to society of university research in general, of how the work of universities serves the public good.

I was thrilled, like so many others, that Dublin was City of Science this year, and that it all went off so well, despite the rain. Successfully hosting such large-scale international conferences will contribute to building Ireland's scientific reputation. I would like, in this context, to thank the SFI for funding this conference under the City of Science festival.

I was also delighted to see so many Dublin universities and Institutes of Technology collaborating to make City of Science happen. This spirit of collaboration, such as we have here for this conference between Trinity College Dublin and the Dublin Institute of Technology, maximises our strengths for the benefit of Irish higher education. I thank the Co-Chairs Dr Alan O'Connor from Trinity and Dr Colin Caprani from DIT for their leadership here, and all others involved in the Organising Committee.

If I may be allowed a somewhat derisory pun, in moving from the real to the metaphorical, the key lies in building bridges. Isaac Newton said "we build too many walls, and not enough bridges" .

On the matter of bridges, it seems to me, reading the *Irish Times*, that the whole country is obsessed with bridges, or at least with naming the new Liffey

Bridge. I haven't seen if there's a letter in today's Irish Times, but if there isn't it's just an off day for bridges.

It's now my pleasure to hand over to the Chair of the next sessions Professor Alexander Pavic of the University of Sheffield who will deliver the Joe O'Donovan Memorial Lecture, entitled *Making Sense of Bridge Monitoring*. Professor Pavic has particular expertise in vibration serviceability of slender structures, such as long-span floors, footbridges and grandstands.

The Joe O'Donovan Memorial lecture was instituted in 2010 to recognise the contribution made by Joe O'Donovan to civil engineering in Ireland. His firm, Roughan O'Donovan, designed the Taney Luas Bridge, the Boyne Cable Stayed Bridge, the Macken Street Bridge, and the marvellous Samuel Beckett Bridge - named if I'm allowed boast, for a Trinity graduate and indeed one of our first ever state exchanges with École Normale in Paris - he liked it so much he never came home. Every time I look at that same Beckett bridge, I remind myself that if the boom years produced some horrible housing, they also left us with a few magnificent structures which our grandchildren and their grandchildren will rejoice in.

Thank you and I hope you enjoy the rest of the conference.

* * *

Friday, 7th September 2012

Eulogy: Professor John Fitzpatrick

Unitarian Church, St Stephen's Green

I remember my first meeting with John. I think all his students remember their first meeting with John! I was a Freshman up from Wexford and he was a lecturer in the then relatively new department of mechanical and manufacturing engineering. It was the early Eighties, so he was a young lecturer, but he was formidable. There was nothing soft about his lectures - they were straight from the hip, so to speak.

He was - as even those of you who were never taught by him can imagine - forceful, energetic, and intellectually demanding. He wasn't there to make your life easier. Decades later when we were lecturers ourselves and he was our professor he would say of the students: "if they're not all happy, you're doing something right".

But he was inspirational, he was a motivator. No matter how senior and busy he became, he always had time for the genuine student. To be introduced to his teaching at a young age was to feel all the passion and force of scholarship. Certainly he inspired many of us, his students, to embark on the academic life.

When I joined the department myself, as a member of staff in 1995, I had the pleasure of becoming his colleague and his friend. John was so many things: he was teacher, scholar, engineer, Head of School, Board member, advisor, colleague, friend, husband, father. It is a measure of his warmth and exuberance that everyone who knew him, knew and valued him in all these roles. He was not a man who compartmentalised, or withheld, or displayed different sides to different people.

His route to academia was an unconventional one. When he left school he started as an apprentice ship's engineer in Plymouth. He told me once that he thought he'd get to travel and see the world; then he realised you only ever saw the inside of the ship...

Anyway, his intellectual curiosity about "how things work" soon drove him to university. He attended Queen's University Belfast where he did his BSc and PhD degrees, the latter under the supervision of Professor Sir Bernard Crossland, who became a close friend and mentor.

I often thought his early experience on board ships gave him the wide perspective and egalitarianism which were such a hallmark of his character. It certainly gave him a strong practical engineering bent, which he never lost.

As a teacher he was particularly strong on concepts. I still remember him lecturing his senior sophister course: I know many of you non-engineers will find this hard to believe, but the title of this course was just “Vibrations”.

I consider myself privileged to have had 54 hours of John Fitzpatrick extolling on the topic of vibrations. All kinds of vibrations: even frightening us dazzled undergraduates with his favourite kind of vibrations - which were “flow-induced vibrations”.

But he combined this mastery of concepts with hands-on practicality. Throughout his career, he worked closely with industry, including Babcock & Wilcox in the early days, and the likes of Airbus and Rolls Royce later on.

His early research work was on fluid mechanics and noise, and when he took up his first academic posting in Glasgow University, he added vibration analysis to these research interests. His initial reading on the fundamental physics of noise generation from turbulence inspired him throughout his career. He was particularly focused on experimental studies in jet noise -and the fruits of his research in aeroacoustics are today being incorporated in modern quieter jet engines.

He built up a substantial international reputation, collaborating with industrial and academic researchers around the world. He was a visiting Professor in McMaster University, Canada; CIRA, Italy; and Poitiers, France and his professional honours were many, including the Doctor of Science degree from his alma mater - Queen’s University Belfast - , Member of the Royal Irish Academy (MRIA), and Fellow of the Royal Society of Engineering (FREng).

However, only one certificate hung on his office wall - the one qualifying him as a Bushmills’ Whiskey Taster!

John came to Trinity in 1980 as part of the rapid expansion of the School of Engineering. Almost his first task was the re-development of the curriculum. He told me once that he was so exasperated by the dithering about in the development of the curriculum, that he went home - I think John and Hilary were living in Trinity Hall at the time - and wrote a mechanical engineering curriculum out from scratch himself, had it typed up the next day, and presented it to the Head of Engineering, who accepted it - and that was that. I can well believe it!

As Professor of Mechanical Engineering for eighteen years, as head of department and later Head of School, John strove constantly to consolidate and augment the standing of Engineering in Trinity College.

I think it is fair to say that, in terms of getting his own way in Trinity, he had few equals. Despite his tough exterior he was well able to plot a strategy and carefully execute it. The excellent infrastructure for mechanical engineering is a testament to this: in terms of the buildings and equipment; in terms of the

size and quality of staff; and in terms of the great reputation for research-led education.

He also helped establish the culture of properly funded research in engineering, and in particular addressed opportunities within EU Framework Programmes, which in addition to a certain independence, offered immediate access to the international research community and to the mechanical and aeronautical engineering industries.

John took huge pride in being a leading member of the academic community that has made the Engineering School in Trinity one of the best in the world.

John had a great zest for College life - the research and teaching for sure, but also the politics, the policy, the building of friendships. My abiding memory of John is of him hailing me on campus and us adjourning somewhere for coffee, where the conversation might flow from the newest College appointment, to the latest in fluid mechanics, to tales from his trips to conferences - now the stories were often repeated but - strangely - they lost nothing whatsoever in the repeating. Conversation was amusing, invigorating and productive because he genuinely sought to build and find constructive solutions to problems.

That doesn't mean discussion always flowed easily and agreeably. I well remember one row I had with him - over the relative importance of my Bioengineering Group and his Vibrations Group - and it was pretty epic... He gave me the "You listen to me here" treatment with the index finger in the chest - I had the bruises to show for it. But the next time I saw him, he wanted to go for a pint and bury the hatchet...

That was the thing with John, you might argue - only over policy, never personal matters - but he didn't bear grudges. Policy didn't get in the way of friendship. And you never minded the rows because they were a part of his characterful directness, his lack of airs and graces, his confident way of being himself.

As Paul Durcan wrote of Paddy Kavanagh: *"He was pure straight; God rest him; not like us."*

John, himself so successful in his career, was concerned for the career development of junior colleagues, and served as a kind of mentor to many, including to myself.

I counted so much on his advice and vision. I hoped very much to have him as one of my Officers. Sadly his illness did not permit this, though even when ill, he committed himself heroically to his teaching - earlier this year he delivered his Senior Fresh fluid mechanics course. His attitude was 'business as usual'.

Knowing John for thirty years, first as teacher, then as friend, colleague, and supporter, it is difficult to think I can no longer avail of that warmth, intellect and loyalty - as it is difficult for all who knew him. Although our loss is not comparable, we, his friends and colleagues, mourn together with Hilary, Jamie, Katy, and Daniel, the loss of this great man, who leaves a gap in all our lives.

The night before he died I found myself reading the Walt Whitman poem, 'O Captain, my Captain', and it is those lines I think of when I think of John, erstwhile seaman, our captain of Mechanical Engineering, who achieved for the College the great prize of sound scholarship and international reputation:

*"O Captain! my Captain! our fearful trip is done;
The ship has weather'd every rack, the prize we sought is won;
[...] The ship is anchor'd safe and sound, its voyage closed and done;
From fearful trip, the victor ship, comes in with object won;
Exult, O shores, and ring, O bells!
But I, with mournful tread,
Walk on the deck my Captain lies..."*

Rest in peace, John.

* * *

Monday, 10th September 2012

Launch of Trinity College Dublin's Global Relations Strategy

Long Room Hub, Trinity College

Lord Mayor of Dublin, Tánaiste, Ambassadors, Distinguished Guests, Ladies and Gentlemen,

Welcome to the Trinity Long Room Hub and to the launch of Trinity's Global Relations Strategy. I'm delighted to welcome our Tánaiste, Eamon Gilmore, who will shortly launch this Strategy.

By your presence here this morning, Tánaiste, you mark the vital importance of this strategy - its importance not only for Trinity, but for Ireland.

The Global Relations Strategy is about building up the international reach of Ireland's leading university, strengthening our position as a global university with an international profile of students, staff, and research collaborations.

By internationalising Trinity, one of Ireland's strongest brands, we build up Ireland's international reputation, and further position this country as a global educational hub.

The success of this Global Relations Strategy will help establish Trinity at the leading edge of higher education in the world, to the benefit of the whole Irish higher education system.

* * *

This new Global Relations strategy operates on a number of fronts and addresses a number of key actions, including:

- increasing the number of international students, particularly students from outside the European Union. This creates the necessary cosmopolitan environment of a global university; it also pays an essential financial dividend;
- improving the student educational experience, which includes enabling students to broaden their minds and become global citizens through studying abroad on exchange programmes;
- building global relationships, which includes strengthening international research collaborations;

- and further connecting with our diaspora of alumni, which involves encouraging alumni to support the mission of the university and increasing philanthropic income.

The Strategy was approved by the College's Governing Board in May of this year; and I thank board members for their commitment to this new initiative.

It's a new initiative but it formalises a mission and a philosophy as old as the College itself. Trinity has never been about splendid isolation. Whilst there was an 'involuntary' isolation for a few decades after independence, Trinity's overriding history has always been about reaching out to the wider world. To give some examples:

- In the early 18th century our great philosopher, George Berkeley, provided endowments for the libraries at Harvard and Yale, along with scholarships for graduate studies.
- Trinity's engagement with Asia began with the founding in 1762 of a chair in oriental languages, and the subsequent appointment of Mir Aulad Ali - an Indian Muslim known as 'The Mir' - as Professor of Arabic, Hindustani, and Persian.
- During the nineteenth century, Trinity - together with Oxford, Cambridge and Edinburgh - trained generations of young men for the Indian Civil Service.
- In 1907 missionaries from Trinity established the Trinity School Fuchow in China, known today as Fuzhou Foreign Languages School. This school has a distinguished history and a Nobel Prize winner among its alumni.

For much of the twentieth century, Trinity had the most international student profile of any university in Ireland, with the medical and engineering Schools in particular boasting numerous students from Asia and Africa. Our staff was similarly international - as professor of international law, Kader Asmal inspired generations of students to join the anti-Apartheid struggle; I can remember myself as a Trinity student going on marches singing "Mandela will be free". After 1990, Asmal returned to South Africa and was subsequently Minister for Education in Mbeki's government.

* * *

So, this global relations strategy represents no radical new direction. But it does represent a radical new ambition.

We recognise that while we're fortunate in Trinity's international heritage, if we want to maximise potential as a university for Ireland on the world stage, we have to strategize, prioritise and allocate resources.

We have to improve our messaging abroad and coordinate all activities towards this core aim of making Trinity a global player. We will do this, as I've outlined, through collaborative research, through internationalising staff and students, and through building on the great resource of our alumni - of which there are now 90,000, living in over 130 countries.

Our first to alumni is to ask that they spread the message about what a great education they received. This is at the heart of the global relations strategy. We wouldn't have such a strategy if we weren't convinced by the quality of a Trinity education.

It's frustrating to know that we have such a commanding university - one with beautiful grounds and buildings; a stunning location; world-famous alumni; an incredible record in research; and flagship research institutes such as the Biomedical Sciences Institute, the CRANN Nanoscience Institute, and this arts and humanities institute, the Trinity Long Room Hub.

It's frustrating to know that we have all this but that the message may not be getting to where it needs to - to bright students in countries like India, China, Kenya, Canada, Russia, who are deciding which university to attend; this will change - it is already changing.

In the past few months we have signed strategic partnerships with Brown University in the United States, with Beihang University in China, with the Indian Institute of Technology in Delhi and Thapar University in Patiala - to add to our existing partnerships with, for instance, Moscow State University, the University of California system, or the National University of Rwanda.

As an educational hub, Ireland will have an international student body, mirroring the international profile of its academic staff - some 50% of our academic staff are from outside Ireland. University research will be even more collaborative and inter-institutional, our expertise pooled with centres of excellence abroad, linking effectively with other universities in Dublin and throughout the country where it makes sense to do so.

The resulting dynamism of the education sector could have a multiplying effect on the whole economy. However, constraints on universities need to be taken off before the potential of our universities can be fully realised.

This is a good week for progress towards being an educational hub. Today we launch the Global Strategy. Tomorrow the world QS rankings will be launched from Trinity and my address will be streamed live on the internet. And this summer Dublin was City of Science. It's through such high-profile international engagements that we will make their presence felt globally.

Dublin was not only City of Science this summer, it also hosted ESOF, Europe's largest open science forum. On that occasion I again had the pleasure of welcoming to Trinity, the Tánaiste and Minister for Foreign Affairs and Trade, Eamon Gilmore.

Allow me to take this occasion, Tánaiste, to thank you for your commitment to raising Ireland's international profile, including as an educational hub, and to thank our embassies abroad for their support and expertise in this great project. Ambassador McDonagh in Russia and Ambassador Collins in the US this year, gave invaluable guidance, and I look forward to working with the Embassies in Singapore, Delhi, and Beijing in visits I will make over the next three months.

Thank you for your attention, Ladies and Gentlemen, and please welcome to launch this strategy the Tánaiste and Minister of Foreign Affairs and Trade, Eamon Gilmore.

* * *

Monday, 10th September 2012

Opening of the International Symposium on Domestic Wastewater Treatment and Disposal Systems

Edmund Burke Theatre, Trinity College

Thank you Dara for your introduction,

Colleagues, Ladies and Gentlemen, Distinguished Guests,

Welcome to Trinity College Dublin and to this international symposium on domestic waste water treatment and disposal systems, which Trinity is co-organising with the national Environmental Protection Agency - the EPA.

The title of this symposium sounds quite dry and academic, but the issue is anything but! Our visitors from abroad may not be aware how much the issue of wastewater has dominated the national media all year. If you were to do a search for 'wastewater' in newspaper archives, you might not uncover much, but try 'septic tanks'...

This issue - of on-site wastewater treatment and disposal - has stirred passions in this country, ever since the government began to draft legislation in response to the European Court of Justice's judgement against Ireland. The Court reserved particular criticism for the lack of any national registration system.

Accordingly the government is now trying to put in place, through the EPA, a national inspection plan, which will use a risk-based approach to prioritizing areas of higher risk to human health and water quality.

Obviously this is desirable, but rural dwellers are concerned that they will have to pay to have their system inspected, and they are concerned about the cost of any remedial work which will be required as a result of such inspection.

People who live, 'in the country' as we say, point out that most people in towns and cities in Ireland do not pay directly for disposal of wastewater at present, and that the government has spent millions on upgrading centralized wastewater treatment plants over the last few years.

So septic tanks have become a topic of hot political debate. And there is a need for the professionals involved - mainly engineers - to inform the debate, and put some shape on it. This would be doing the country a great service.

In this regard, there have been significant advances in research in wastewater disposal over the last ten years. A new Code of Practice has been developed for on-site wastewater treatment and disposal. This Code of Practice has defined a lower limit on subsoil permeability, below which it is not possible to provide adequate percolation for on-site systems. This has caused some problems in places that have very heavy clay soils, like Leitrim, Monaghan, and Wexford, as they claim that this will effectively stop development. I understand that this is not necessarily the case, as this conference will explore, but areas of low permeability clayey subsoils now have their own specific regional concerns to add to the national rural concern about septic tanks.

So what you say here may be taken down and used against you - by our media at least...

But I do hope it will be recognised that it is important to have informed debate - and, complex as the issues are, (very few people understand the concept of permeability, or of its relationship to percolation, for example), complex as they are, they can, and must, be understood by those attempting to lead national debate.

In fact, the proposed national inspection plan, which is Ireland's answer to the European Court of Justice ruling, will be described for the first time at the Symposium. Other papers will look at solutions for sites in areas of low permeability clayey subsoils. Still other papers will look at the environmental impact and the regulatory framework. So this Symposium should be the subject of sharp focus by the Irish public.

But I know that as experts in your field, you will welcome such scrutiny. And, of course, it's precisely because Ireland is at such a turning point with respect to this issue, that the EPA and Trinity felt the time was right to hold this symposium, to gather together a panel of national and international experts in order to present recent findings, to discuss the content and context of new legislation, to gain constructive feedback, and to share experiences and best practice from other international jurisdictions.

This is a really vital conference and I congratulate the EPA and Trinity's Department of Civil, Structural and Environmental Engineering for organising it. Over the next two days we will hear papers from experts from Denmark, the US, Scotland, Australia, London, as well, of course, as many Irish experts.

I would like to thank the organisers, and in particular Dr Laurence Gill of Trinity College for inviting me to give these words of welcome to you this morning.

You have a particularly full two days ahead of you. I think I counted 26 papers in total! I don't know how much time you will get to enjoy Trinity but I hope that new visitors to our university will get a chance to walk round our

beautiful grounds, and perhaps visit the world famous Book of Kells and the Science Gallery.

This is a particularly busy period for Trinity - and, if I may say, seems a particularly fruitful period for the School of Engineering. Three days ago, I launched the *Bridge and Concrete Research in Ireland* conference, and on Wednesday I will address the International Research Conference on the Biomechanics of Injury. I'm an engineer myself and I can't help being particularly pleased by such impressive activity.

Tomorrow the world university rankings will be launched from Trinity. I will be talking, in my welcome address, about the importance, for high ranking universities, of research-led education and cutting-edge collaborative research with peer institutions. Universities now have to think globally, which means putting faith in the free movement of ideas, research, and people.

Trinity's mission is to help make of this country an educational hub. I believe Ireland has real potential to develop in this way and that it provides the best hope for the future. Being an educational hub involves lots of things: it means excellent universities, of course, and efficient and well-publicised collaborations between research and industry. But it also means socio-political emphasis on the importance to society of university research. This conference brings home, like nothing else, the importance to society of university research in forcing informed debate on issues of current importance to all in society.

I thank all attendees for travelling to be with us, some of you from very far afield.

I look forward, like many around the country, to the findings of this conference.

Thank you.

* * *

Tuesday, 11th September 2012

**Welcome Address to the European Association for
International Education (EAIE) Site Visit to Trinity
College Dublin**

Long Room Hub, Trinity College

Distinguished Guests, Ladies and Gentlemen,

Welcome to Trinity College Dublin, - The University of Dublin!

It is a pleasure to have the opportunity to open this site-visit to Trinity here in the Trinity Long Room Hub which is our Arts and Humanities Research Institute.

It is great to see representatives from so many of Europe's great universities, and indeed from further afield, from Asia, and North America - you're all very welcome to this international academic gathering on this day which celebrates internationalism in education.

As many of you know, later today, in about four hours actually, we will be launching the QS World University Rankings from our Trinity Biomedical Sciences Institute. It is fantastic that the QS Rankings and the European Association for International Education conference have both come to converge on Dublin. Tomorrow I believe 3,000 delegates will descend on the city. Today, 300 delegates will be present for the QS launch, and of course many thousands more will be watching live, online, around the world.

It's an honour for Dublin to be hosting the European Association for International Education and for Trinity to be launching the Rankings. It's been a really great year for Dublin and Trinity - in July we had the privilege of hosting the European Science Open Forum - the largest general science conference in the world - with a series of exciting talks and exhibitions. And you're luckier in the weather now than we were in July....

This afternoon you'll be getting a tour of the campus, taking in the Old Library, the Museum Building, and the Science Gallery, this means you'll get to see the earliest and the latest in Trinity's heritage. Our Dean of Students, Dr Amanda Piesse, will shortly tell you about our educational programmes, and Professor Jane Ohlmeyer, Vice-President for Global Relations, will talk about our international office and the student exchange programmes.

So I'd like, in the time I have, to give you a brief overview of Trinity's history and talk about how this links into our vision for the future.

Trinity was founded in 1592 when a group of influential Dublin citizens petitioned Queen Elizabeth the First, of England. It was modeled after the collegiate universities of Oxford and Cambridge, and many of our early Provosts were Cambridge dons.

But, unlike Oxford and Cambridge, only one college was ever established, so "Trinity College Dublin" is the "University of Dublin" to all intents and purposes. There is a difference of course; in the statutes Trinity College Dublin is 'the mother of' the University; I challenge even the best legal minds to work out what that means! The degrees we award are University of Dublin degrees.

By the eighteenth century, Trinity was established as a flourishing multi-faculty university. We were lucky in our early scholars. They immediately set a standard that was to endure. In the 17th Century, Archbishop Ussher prioritized the use of primary sources, insisting on authenticity and accuracy in the use of medieval manuscripts. To this day, a Trinity education is research-led and every undergraduate undertakes primary research, using original sources.

Trinity was an outward-looking university from very early on, which is something I'd like to stress to this group in particular.

In the early 18th century, our great philosopher, George Berkeley, provided endowments for the libraries at Harvard and Yale, along with scholarships for graduate studies.

A few decades later our engagement with Asia began with the founding in 1762 of a Chair in Oriental Languages, and the subsequent appointment of a Professor of Arabic, Hindustani, and Persian.

In 1907 missionaries from Trinity established the Trinity School Foochow in China, known today as Fuzhou Foreign Languages School, a most distinguished school which counts a Nobel Prize winner among its alumni. Trinity was also one of the earliest universities to admit women students, and before Oxford and Cambridge, in 1904 – which is also, of course, proof of outward thinking.

After Irish independence, in 1921, there were a few decades of what I call 'involuntary isolation' when Trinity was finding how to best navigate the new political waters, but beginning in the 1950s, under my predecessor Provost A.J. McConnell, Trinity began its journey back into the mainstream of Irish life. After several decades of relentless change, today Trinity is Ireland's highest ranking university, with 16,400 students, 3,300 staff, and a world reputation in research. We continue to think globally, and recently signed up to new partnerships with universities, some of whom I'm glad to say are represented here today. As the VP Global Relations will tell you presently, our 21st century mission is to have more international students, more student exchanges, and more research collaborations with peer institutions around the world.

From the 1960s, Provosts began building enthusiastically, adding contemporary buildings to reference the older ones. The last decade was a particular boom period: the Biomedical Sciences Institute went up, and the Sports Hall, the Science Gallery, this building the Long Room Hub, and the Lir: The National Academy for Dramatic Art. We're fortunate in having such a fine campus to build on, but space is at a premium and we have begun to expand into the streets around the main campus, such as Pearse St.

We are currently looking to develop the east end of the campus. The old chemistry extension is to be replaced by a new engineering and natural sciences complex.

The contemporary buildings - I hope you'll agree, walking round - manage to add to, rather than detract from the older buildings, and I like to see this juxtaposition as part of the Trinity heritage and mission - the traditional and the modern working together in harmony.

We believe in exchanges and collaborations - that's international exchanges of students and staff; and collaborations between the old and the new, between academia and industry, and between disciplines, departments, institutes, and countries. We have great faith in our way of doing things but our faith is flexible, and incorporates learning from others.

We know that some of the most fascinating new research discoveries take place at the interface of disciplines. And of course industry-academia collaborations have led, globally, to the commercialisation of research, to campus companies, and to an innovation revolution, which is providing immense opportunities for universities round the world.

In Trinity we are proactive about innovation, including establishing, together with UCD, the Trinity/UCD Innovation Academy to help create a new breed of PhD student, one who will honour the value of what they create, and one who is ready to think entrepreneurially.

In the past academic year, we had thirteen new campus companies, and we're hoping that some of them are going to prove as successful as Havok, a Trinity spin-out which developed the physics-engine that has transformed the gaming and virtual worlds. Trinity is contributing to growing the Irish economy and this is very important to us.

We take our position as Ireland's highest ranking university seriously. As you can see, we're situated in the centre of the city and have been, for 400 years, one of the great Dublin landmarks.

In all countries, but in particular I think in smaller countries, leading universities assume a special, pivotal place. It's certainly the case with Trinity and Ireland. We're a university working in the spirit of public service, with a keen sense of serving the public good. I like to use a line which I think captures the nature of Trinity's relationship with Ireland: "Trinity is a

university playing for Ireland on the world stage". This brings across that symbiosis between the local and the global, which leading universities strive for. As such I hope it resonates with you, the delegates of the *European Association for International Education* conference.

A week which brings the QS launch and this conference to Trinity and Dublin is a good week to reiterate this mission. Thank you all for travelling to be with us, and I wish a most successful visit and conference.

* * *

Tuesday, 11th September 2012

Address at the QS World University Rankings Launch

Trinity Biomedical Sciences Institute, Trinity College

Thank you John,

Good afternoon and welcome to Trinity College Dublin for this important event. As Provost of Trinity and head of the university, I would like to say we're honoured that the QS World University Rankings are being launched from our university today.

Allow me to take this opportunity to tell you a little about Trinity College Dublin.

Recently I was reading an interview in a magazine with one of our alumni, Tana French, now a best-selling, prize-winning author. She said: "What I love about Trinity is that sense that there are four hundred years of layers of memories - and that I've left my own little layers, together with those of the thousands on thousands of people who have been there before me."

I found that an insightful quote. It's the way I feel about Trinity. I was a student here in the 1980s before I joined the faculty, and I remember being hit by that sense of history when I walked under Front Arch, out into the great cobbled expanse of Front Square.

If you've any imagination, then you do indeed think of the great writer Oscar Wilde walking through that same arch - or,

- The Nobel Prize-winning dramatist Samuel Beckett
- The savage satirist Jonathan Swift
- The political theorist Edmund Burke
- The philosopher George Berkeley
- The mathematician William Rowan Hamilton
- The Nobel prize-winning physicist Ernest Walton
- Ireland's former president and UN High Commissioner for human rights Mary Robinson,

and all the thousands upon thousands of other Trinity alumni, who as Tana French so poetically put it, have left their own small layers of memory on these stones.

Trinity is fortunate in its location, in the heart of Dublin city. That's why we're also the University of Dublin. It's unusual to be at once an intimate college and a university in the heart of a vibrant capital city. Staff and students alike benefit from the dynamism of our location. And the city, in turn, benefits from our presence - it's impossible to think of Dublin city centre without Trinity.

Behind the old college walls, the university is a hub of activity - of research and teaching, and of the activities of our student clubs and societies. We have over one hundred of them, covering just about every sport and interest you can imagine. Because, in Trinity, we believe in a sound education based on academic achievements for sure, but also the development of the whole person through student-organised extracurricular activities.

Trinity has always teemed with creativity and ideas, but in recent years it seems to be surpassing itself. So much so that the university is now literally "bursting its walls" - we have extended beyond our campus to build for instance, a new Academy of Dramatic Art, The Lir, which offers degree courses in acting, directing, and stage management. And we recently opened the Science Gallery, a pioneering public gallery 'where art and science collide'.

Trinity - like, of course, all the high-ranking universities in the QS Rankings - carries out leading-edge research across numerous fronts. Trinity is a multidisciplinary university of many faculties, schools, and departments and all of them are engaged on great research, so it's difficult to pick out one over the others.

But let me tell you about three of our research projects that really seized my imagination:

- First: As you know, the DNA of humans and chimpanzees is 99% identical. The distinctive nature of that elusive 1% has eluded scientists for decades... Now, for the first time researchers in Trinity's Genetics Department have discovered three genes that are unique to humans. These specific genes originated during the evolution of humans following separation from chimpanzees. So thanks to Trinity researchers we're one step closer to understanding the secret of what makes us human.
- Next: European countries share a continent and a history. To really research the spread of the Plague, for instance, you need to look beyond the national boundaries of your country, which probably didn't even exist in its current form in the Middle Ages. But traditionally historians have concentrated on national history because it's so difficult to access and compare sources from other countries. Now Trinity is leading an international digital humanities project, involving eight other European countries. The project will allow researchers to engage with geographically dispersed archives - via multilingual searches, custom visualisations, shared research spaces, and personalised virtual environments. This is truly revolutionising the study of history on our continent.

- In Trinity's CRANN Nanoscience Institute, researchers are working on the industrial production of graphene, a non-porous material which is 200 times stronger than steel but a hundred thousand times thinner than human hair. It will be used to make lighter cars, engines that use less fuel, and computer screens that fold into your pocket.

This research is high-level, cutting edge, futuristic even - but in Trinity it's not only members of Faculty that are engaged in research. For many centuries, a Trinity education has engaged students, including undergraduates, in research alongside their professors in a common enterprise of discovery.

Research-led education, which develops skills in critical thinking and innovation, will create the active and engaged citizens of the future.

We know it can be demanding of both staff and students, but it's not something we'll ever compromise on. Not only is it intrinsic to our core philosophy, but we know from employer evaluation surveys that it's something employers particularly value.

Like other high ranking universities, Trinity thinks globally. What does this mean? It means that we educate students, from all over the world, who might then remain to grow the Irish economy, or else take their knowledge and expertise far afield. We currently have ninety thousand alumni living in 130 countries. Wherever you're living, there is a Trinity graduate in your country, doing something useful, or at least, something interesting...

It means that our staff is international - half of them hail from countries other than Ireland - and that they collaborate on research projects with their peers round the world.

It means, in brief, that we believe in exchanging ideas, research, and people with peer institutions round the world. It means we believe in a world community of scholars, teachers, and innovators constantly striving for excellence.

And that's why we support these rankings, and why we're so delighted to be launching them. These are global rankings, which evaluate the world's universities relative to each other. Through attempting to use objective criteria, they compare universities in Europe, America, Asia and Africa. With such objective rankings, no university can hide behind a mere national reputation. But then, no good university would wish to.

Trinity is Ireland's highest ranking university, a position we take seriously. Ireland is a small country, with a huge diaspora, and an ambition to succeed as a smart, or knowledge economy, through using "the knowledge, skills and creativity of the people". In knowledge economies, universities have a special place, and Trinity, like other Irish universities, takes proud responsibility in providing:

- the smart entrepreneurial graduates,
- and the leading-edge, internationally-competitive research and scholarship,

which will make of Ireland a global innovation hub.

Trinity thinks a lot of itself, there's no denying that. You'll have got that much from my talk!

One of our alumni, Denis Burkitt - a remarkable doctor who established a link between lymphoma and malaria in equatorial Africa - was famous for saying that he was:

"Irish by birth, Trinity by the grace of God".

This suggests that a Trinity education is so special as to be obtained only through divine intervention - well, maybe, but we also admit students through the conventional routes...

Trinity is a place of contrasts - a juxtaposition of cobbled stones and nanotechnology, of the Book of Kells and biomedical sciences, of hundreds of years of tradition and of pioneering innovation - a unique place to which, I know, thousands more students and staff will - in this and in the coming centuries - add their 'layers of memory'.

Not only through the study of Genetics, but in all of Trinity's Schools and Departments, through different ways, we are constantly learning more about what it is to be human.

Thank you very much.

* * *

Wednesday, 12th September 2012

Welcome Address to the Raoul Wallenberg Centennial Conference

Neill Hoey Theatre, Long Room Hub, Trinity College

Minister, Your Excellencies, Ladies and Gentlemen,

You are all most welcome to the Trinity Long Room Hub for this conference commemorating the centennial of the birth of Raoul Wallenberg. With us today are participants from Israel, Hungary, Sweden, and Britain, as well as from Trinity College and the Holocaust Education Trust in Ireland.

In attendance, we have the Ambassadors of Hungary, Israel, Denmark and Sweden. And the Minister for Justice, Equality, and Defence, Alan Shatter. Who is, I'm happy to say, a graduate in Law of this university - the Minister will address you shortly.

The governments of Sweden and Hungary declared 2012 'Raoul Wallenberg year' and this conference is one of several events and academic conferences taking place in various countries to commemorate Wallenberg and to assess his role from a historical perspective. I understand that this is the first time that Wallenberg has been discussed in an academic context in Ireland, and I am very pleased that it is happening here in Trinity College Dublin.

We have the Hungarian Embassy to thank for this initiative, together with the co-sponsors, the Swedish Embassy, the Israeli Embassy and Trinity's Centre for European Studies.

I am most grateful to the Hungarian Embassy and the other sponsors for bringing this conference to Trinity.

It was one of my predecessors as Provost, the great Trinity historian, F.S.L Lyons, who provided one of the most famous, if most damning and controversial judgements on Ireland's role during World War II.

Referring to the government policy of neutrality in his book *Ireland Since the Famine*, Lyons wrote:

"The tensions - and the liberations - of war, the shared experience, the comradeship in suffering, the new thinking about the future, all these things had passed [Ireland] by. It was as if an entire people had been condemned to live in Plato's cave, with their backs to the fire of life, and deriving their only knowledge of what went on outside from the flickering shadows thrown on the wall before their eyes by the men and women who passed to and fro behind

them. When after six years they emerged, dazzled, from the cave into the light of day, it was to a new and vastly different world".

This is one of the most cited, if one of the most contentious judgments, by any Irish historian ever, and since I'm neither historian nor political theorist, it is not something that would be wise for me to comment on.

But I can say, for the benefit of our international visitors that, while all sides might argue the reasons, consequences and mitigating factors, all would agree that Ireland was indeed removed from the general European experience of the Second World War. This may indeed have been the right thing for Ireland at that point in our history - but nonetheless it is clear that this need not have prevented us from, at a crucial time, offering shelter to refugees from the Holocaust. For this failing, our then Taoiseach, John Bruton apologised in 1995, and our then Minister for Justice, Michael McDowell, at Ireland's first Holocaust Memorial Day in 2003 - and they were right to do so.

Many Irishmen joined the British or American forces in World War II and fought and died in the fight against fascism in Europe. Nevertheless as a country - as a body politic - we were observers rather than participants or sufferers in that tragic conflict.

F.S.L. Lyons's analysis, though controversial, does help us understand the past, and helps us to shape the future, to change our way of being in the world. He would, I think, be moved and would applaud that such an important evaluation of significant wartime events was being held in Ireland and in Trinity.

We are honoured to have with us distinguished speakers from abroad, whose range of disciplines throws new light on many aspects of Wallenberg's life and legacy.

I would like to welcome in particular our keynote speaker, Dr Robert Rozett, Director of Yad Vashem Libraries in Jerusalem, who will address why, among the 24,000 'Righteous among the Nations', Wallenberg has received so much attention. I would also like to welcome the Hungarian-born Israeli poet, Yaakov Barzilai, who is a Holocaust survivor. We are truly honoured to have both of you with us in Trinity today.

In concluding, I would like to thank Dr Balazs Apor for his kind invitation to me to welcome you here this morning.

And finally, I do wish to take this opportunity to welcome Professor Jürgen Barkhoff as new Director of the Long Room Hub - Trinity's Arts and Humanities Research Institute where we're gathered today.

Jürgen was appointed just two months ago. He comes from our School of Languages, Literatures and Cultural Studies, where he is a Professor in the Department of Germanic Studies. He was previously, Director of our Centre

for European Studies, and for many years filled the role of Registrar of the College with great distinction; as Registrar Jürgen oversaw the procedures for the election of the new Provost, and one of my favourite photographs is of the two of us exiting the election venue after four long hours of successive ballots - I don't know whose face showed the greatest relief!

I wish speakers and attendees a most stimulating conference.

Thank You.

* * *



Provost, Dr Patrick Prendergast with (front row from left); Ms Elisabet Borsiin Bonnier, the Swedish Ambassador to Ireland; Minister Alan Shatter, T.D.; Prof Jürgen Barkhoff, Director, Trinity Long Room Hub; (back row from left) Dr Balázs Apor, lecturer in European Studies, Trinity College; Mr Boaz Modai, the Israeli Ambassador; Mr Tamás Magyarics, the Hungarian Ambassador to Ireland.

Wednesday, 12th September 2012

**Welcome Address to the International Research Council
on the Biomechanics of Injury Conference**

Old Library, Trinity College

Thank you, Dr Ciaran Simms - for that tremendous introduction. And certainly I have to say that I don't think I've launched, as Provost, an international symposium as close to my own research interests as this one, so it really is a great pleasure to be with you this evening and to welcome, for the first time to Trinity, and only the second time ever to Ireland, this International Research Council on the Biomechanics of Injury - IRCOBI.

We have about 170 delegates present, from academia, industry and public bodies, with many of you coming from abroad. I hope that you'll enjoy the conference and I'm delighted that time has been set aside for you to get a sense of Trinity and of Dublin. I congratulate the organisers and sponsors on an excellent programme.

As Ciaran has said, we're now in the Long Room of the Old Library, which was memorably described by a former student as "a cathedral of books... the dusty and resinous smell of centuries of learning". This room houses 200,000 of the college's oldest and most valuable tomes.

* * *

This is the third international engineering conference that I've launched in Trinity in the past five days. I congratulate the School of Engineering on tremendous activity! This conference, the Biomechanics of Injury, seems to me particularly important for Trinity, and for Ireland, for two reasons:

First, as many of you are aware, Ireland has unfortunately had a traditionally poor record in road safety. In fact, the very first recorded automobile fatality occurred in this country, in a small town in the midlands in 1869. The casualty was an exceptional woman, Mary Ward, a celebrated microscopist, artist, astronomer and naturalist, who fell from a steam carriage and died after crush injuries from its heavy iron wheels.

Second, for much of the late twentieth century Ireland's road safety record compared poorly with most of Western Europe's. Fortunately, due to large improvements - including in road quality, and in combatting speeding and drunk driving - our record is now far better. Last year an EU report confirmed Ireland as the sixth safest place to drive in the EU 27. This is a wonderful achievement. The last time this conference was held in Ireland was in 1996 when our record in road safety was still poor. It's great to be welcoming you back to such an improved environment. And of course biomechanists, medics, equipment design engineers, accident analysts - all IRCOBI's

members - were instrumental in building the better safety systems that have helped reduce our accidental injury levels.

Of course, as we all know, the price of success is more work - which is another way of saying that the price of peace is eternal vigilance.

So we need to continue to make significant fundamental and applied advances in our understanding of injury biomechanics, necessary to design a safer road transport environment, in which fatalities and serious injuries can be further reduced.

And as we know, the people of the world all want to move about more. There are over 1 billion cars in the world, and about 60 million cars will be produced in 2012 alone, a quarter of these in China.

So road safety will remain, for the foreseeable future, a major international consideration, with the World Health Organization predicting that countries such as India and China will be the main sources of road fatalities in the coming years.

So there remains much work to be done, and the second reason why I'm so delighted to welcome this conference is that bioengineering is a research pillar for Trinity - and one where we have proven international expertise.

As Ciaran has said, a decade ago I helped establish the Trinity Centre for Bioengineering. Impact biomechanics is a key research area in the Centre, for which we must thank, in large part, Ciaran who is a Principal Investigator in the Centre, and to Garry Lyons, formerly Senior Lecturer in Mechanical and Manufacturing Engineering who pioneered this subject in the Trinity engineering curriculum.

I first became aware of Ciaran's injury biomechanics research through his PhD, on whiplash back in the late 1990s, in which the nonlinear behaviour of muscles was modelled using differentially tensioned rubber bands. Years later I launched his book on *Pedestrian and Cyclist Injury Biomechanics*, published by Springer in 2009.

Dublin has a lot of cyclists, as you'll see walking round, and the number is on the rise, which is great, but cyclists are of course vulnerable to injury, as are pedestrians. This is the subject of two sessions in the main programme, and is also one of the preconference workshops.

Ciaran is also currently engaged, together with a company, McElmeel Mobility in Northern Ireland, in developing crash-resistant swivel seats for easy access to vehicles. This project is a great instance of academic-industry co-operation for the benefit of the general public. One of the reasons why I became so interested in bioengineering was precisely because it is such a potent and fertile area for academic-industry partnerships.

Innovation - the commercialisation of research - is probably the most exciting growth area for universities over the past fifteen years. Today, in universities round the world, staff and students are encouraged to think about using their research to directly grow the economy and serve society - with the result that industry projects, such as Ciaran's crash-resistant swivel seat, are greatly on the increase, as are campus spin-outs.

This level of engagement certainly wasn't happening when I was student here in the 1980s, and was only just beginning when I joined the faculty in 1995. It has been tremendously exciting to witness and participate in such a revolution - and I don't think revolution's too strong a word.

Innovation is now routinely referred to as the third pillar of university activity. There is teaching, research and innovation. But I'd like to move on from the analogy of three pillars - I prefer to think of innovation not as separate from, but as permeating, both education and research. In Trinity - as in other world-class universities - education, research and innovation are welded together into a common academic enterprise of discovery.

All university research areas can be part of this innovation revolution, but there's no doubt that bioengineering is, if you like, in the avant-garde. It's one of the pioneering 'innovation disciplines'. That's very evident tonight where academics and postgrads, members of the automotive safety industry, and national road safety bodies are gathered for this conference - in a common enterprise of investigation and discovery.

The excitement surrounding innovation is, of course, partly to do with increased revenue for universities, at a time when public funds are stretched and universities are greatly in need of such revenue. But, more than this, innovation and industry-academia partnerships centralise the importance of the research we do. The pejorative inference in the term "ivory tower" was always wrong. Universities have always engaged with, and oxygenated society. But there's no doubt that they are now doing so more directly than ever before - and I expect the old sense of "ivory tower", as applied to universities, to disappear during my lifetime.

Your area of expertise, biomechanics, has saved lives and improved quality of life. It will continue to do so.

I look forward to great future advances in this field, including in sports injury mechanics - an area where we have not, in Trinity, at least, much concentrated, but which is ripe for development.

Thank you for travelling to be here this week, and I wish all a most successful conference.

* * *

Friday, 21st September 2012

Address to Incoming Students

Edmund Burke Theatre, Trinity College

Thank you very much, Rory.

Welcome, all of you, to Trinity College, and to the start of what will undoubtedly be some of the most enjoyable, stimulating, and challenging years of your life.

There is nothing quite like that moment of walking through Front Arch into Front Square. You come from the busy street, through a dark and narrow archway, into this open and beautiful expanse of cobbles, trees and Palladian buildings. It's an unforgettable experience, which everybody waxes lyrical over. I like to say that the approach, through darkness into light, is a metaphor of what the university should do to the mind.

I certainly remember my first time entering through First Arch. It was 1983 and I had come up from County Wexford to study engineering. Of course many of you grew up in Dublin, or you are used to visiting, and since Trinity is now an open and inviting place which welcomes visitors, you may well be familiar with the College. But what a difference between visiting as an outsider and walking in as a Trinity student! This is now your university.

If you're anything like I was as a fresher, you will now be an interesting chemical compound of nerves and excitement, enthusiasm and trepidation. It's precisely because Trinity is such a remarkable, challenging place that we feel such trepidation: we want to live up to it. I do as Provost, and you do as the newest students.

I want all of you to have as good an experience as undergraduates - and maybe later as postgraduates - as I had. So I've been thinking about what I can tell you that will help maximise your student experience.

I'm speaking as a former Trinity student, as a lecturer who spent many years teaching undergraduates, and as the head of this university. Eighteen months ago I was honoured to be elected Provost by Trinity staff and students, and one of my key roles as Provost is to help you realise your potential. For your own sake. And for Trinity's sake.

You will all have worked hard to be admitted to this university. You deserve to be here - let no one take that achievement away from you. But you have won for yourself a privileged position. And in return much is expected of you.

It costs upwards on €30,000 per year to educate an undergraduate student, and the vast majority of that is paid by the Irish government. Your parents may have made, and will continue to make, sacrifices that allow you to be here. Your professors and the staff in Trinity will likewise work hard for you to achieve your potential.

This is a life-changing opportunity, made possible by the dedication of many individuals. Don't take this opportunity for granted - don't waste it.

Today I want to say a bit about the kind of education we offer - which is a rounded education that extends to extracurricular activities. And I want to say something about the resources and the people available to help you orientate yourself - around campus, and around your studies and your student life.

Trinity is a big university. The education we offer is demanding and requires more critical and independent thinking than you will have been used to from school. I know all this can be overwhelming, especially in the beginning. But it doesn't have to be. The more you familiarise yourself with our way of doing things, and the more you can avail of our resources, the more rewarding you will find this experience.

The Trinity Experience - 1. Education

You have come through one of the toughest pre-university systems in the world - the Leaving Cert. Congratulations for getting through it so well! But the kind of learning the Leaving Cert promotes is exam-focused - whereas a Trinity education is about learning to think for yourself.

A recent Trinity survey of employer expectations showed that employers of our graduates value:

- critical and independent thinking;
- excellent communication skills;
- and students who have developed a capacity for responsibility and initiative through extra-curricular activities.

The Trinity curriculum is aimed at developing these skills. You are about to embark on a voyage of discovery with your tutors, lecturers, and fellow students. How can you help to make the most of it?

As far as academic studies go, I'd advise three things:

- The first advice is obvious: go to your lectures and seminars, complete your coursework, and use the library and online research resources. In short, get into a regular pattern of study as soon as possible. It's astonishing how quickly time flies in university. If you leave study to the last minute, you'll panic, and there's no way to make up for lost time.

- Second, start thinking of yourselves not as pupils, but as scholars. As a Trinity student, your education is research-led. By your final years as undergraduates, you should be engaged on original research using primary sources. You will be discovering and writing up something that no-one else has ever looked into. It may be something small, but it will be the result of your unique research. The division between you and your professors will dissolve - you will be scholars together, engaged on a common enterprise of discovery.

So from the outset, start thinking not what you can remember, but what you can discover.

If you do your essays and coursework, you'll automatically get in the habit of discovery, because this work is aimed at making you think. Your lecturers don't want you to regurgitate what they say. They want you to come up with your own interpretation.

- Third, speak up in public. Use tutorials and seminars, to speak up and debate your position. This will help you strengthen your arguments and it will develop those communication skills that employers are looking for.

The Trinity Experience - 2. Extracurricular

But it's not just what happens in the classroom, the seminar, or the laboratory. It's the entire Trinity experience that counts. We currently have hundreds of clubs and societies - and societies keep multiplying. There are certainly many more than when I was fresher. We had never even heard of Paintball...

Today, whether your interest is chess, comedy, horse-racing, juggling, boxing, politics - you name it... there's a club or society for you. And if your interest isn't being catered for, start one of your own.

In clubs and societies, you'll have fun, make friends, learn new skills, and get a different perspective on the world. Employers favour graduates who have a life outside the lecture hall, because that's evidence of a rounded individual with a thirst for experience. If you hold positions of responsibility in the club or society, all the better.

Clubs and societies are just one aspect of extracurricular activity. There are many more. For instance in March this year I gave out the 'Business Student of the Year award'. The finalists had, as far as I remember: written articles, not only in college newspapers but for world publications; they had volunteered and fund-raised for charity; they had organised job fairs; one of them had started her own business; another had managed a student investment fund. Their portfolios were quite something!

There's probably no other time in your life when you're going to be surrounded by so many talented, dynamic people who have the time, energy

and vision to explore in all directions. In ten years' time many of you will be on set career paths and will already have firm commitments, both personal and professional.

The time for exploration is now. There are always going to be 'roads not taken'. That's part of life. But undergraduates have the time, the curiosity, and the courage to check out different roads - even difficult-looking terrains.

Orientation and Finding your Feet

So plunge straight into college life and spend your first term getting involved in as many extracurricular activities as possible. Start as you mean to go on - the more things you get involved with, the more familiar, and the friendlier, the campus becomes. Soon you'll know where everything is - the library, the lecture theatres, the canteen, the sports hall, the shops,..... Do make use of the orientation documentation mailed to you.

I also think it's useful to understand a bit about how the university is run and who is responsible for what. As Provost, I have ultimate responsibility. But this is a large university, so of course I need a team to help me run it. Some of my team are here today.

Dr Amanda Piesse is Dean of Students. Her job is to develop and coordinate policies to promote the student experience beyond the classroom.

Dr Claire Laudet is the Senior Tutor and she oversees the tutorial service provided to undergraduate students offering student support in all aspects of College life.

Let me tell you a little about this tutorial service. Trinity is unique among Irish universities in that we assign all our students a College Tutor when they begin. Your tutor is not there to help you write better essays or to study for your exams. There are other people to help with these academic issues.

Tutors have a pastoral role. Over the next four years your Tutor will be your administrative guide if you have any problems finding out how College works. Your Tutor will be your confidential counsellor if you experience any kind of personal difficulties - and will put you in touch with professionals who can help. Your tutor will be your confidential advisor should you ever get into any kind of difficulty in College, and will ensure that correct procedures are followed, and that you are never in a vulnerable position.even if you are in the wrong!

There are all kinds of services available to help you through college - there's an accommodation advisory service, a disability service, welfare and health services, careers advice... Your tutor will help you to avail of the service you need. But tutors aren't just for trouble-shooting. You can talk through every-day, practical issues with them.

For instance some of you may have to get a part-time job to make ends meet. That's life, and a job can help you develop skills and responsibility. But if you're spending too much time on your job, your studies may suffer and, after all, you are here to study. So if you're worried about getting this balance right, talk to your tutor.

Family

I'm concentrating on college services, but of course in terms of support, there's no substitute for family support. Something I would like to emphasise is the importance of your parents and your wider family and friends at home. Do keep in contact with them. Tell them how you're doing. Build up a mature relationship with them.

The Trinity Community

You are now a member of the Trinity community. This is a community of 16,700 undergraduates and postgraduates, of 3,300 staff, and of 92,000 past students, or alumni, living in 130 countries. It's a world-famous community: we're Ireland's highest-ranked university and we have a proud 400 year old tradition. You'll recognise the names of our most famous past students from the buildings and lecture theatres: Samuel Beckett, William Rowan Hamilton, Robert Emmet, Oscar Wilde, John Millington Synge. Today we're in the Edmund Burke theatre. He is one of the world's great political thinkers and his statue is by Front Arch.

The cutting-edge research carried out in Trinity today makes headlines around the world. You may, for instance, have seen some of the coverage earlier this year when Trinity researchers discovered three genes that are unique to humans; that are not shared with chimpanzees or any other primates.

So, as I like to say, Trinity scientists are helping us understand what it is to be human.

So this is a community highly visible on the world stage, and you are part of it. Your membership is not just for the next four years, or however long you study here. You will be a valued member of Trinity for the rest of your life.

Our past students, our alumni, often feel such affection for this university that many of them contribute their own money to build new faculties and libraries, or to found scholarships and prizes. In your turn you - as, I hope, well-paid and responsible members of society - will be asked to support the greatness of this College and I ask you to remember this day when you started here - and to ensure that others, in later generations, can feel as you do now.

One of our former students is now a best-selling, prize-winning author, Tana French. She lives in Dublin and her second novel, *The Likeness*, is set in

Trinity. In an interview, she said: “What I love about Trinity is that sense that there are four hundred years of layers of memories - and that I’ve left my own little layers, together with those of the thousands on thousands of people who have been there.”

I think this quote gets to the heart of what makes Trinity special. It’s not just the cobble-stones - it’s the memories layered in the stones. It’s all the unbroken generations of students who have lived and studied and debated and partied here for centuries, that make these stones breathe, that keep the flame alive.

You are now at the start of your Trinity journey and in the course of the next four years you will be adding your own layers of memory, as I added mine, as Edmund Burke added his.

And after you have added these layers and embarked on your chosen life, we know that you will be able to face the challenges of the future with confidence, because the Trinity experience will have transformed how you view the world, and how you view yourself.

I would like to wish you all the very best of luck in your studies - and in your extra-curricular activities.

I look forward to keeping in touch with you - this year, and in the years ahead.

Thank you.

* * *

Saturday, 22nd September 2012

Welcome Address at the 2012 Naughton Scholarship Awards

Science Gallery, Trinity College

Minister Quinn, Martin and Carmel Naughton and members of the Naughton family, Distinguished guests, Ladies and Gentlemen.

It is a pleasure for me to say a few words of welcome to Trinity College and to Science Gallery.

We are here for a very special occasion - the Naughton scholarship awards.

It is important that we as a country recognize and reward talent, that we encourage excellence and celebrate achievement - that is what these awards are about, and indeed what our universities strive to achieve.

In Ireland great things can happen, are happening every day through the work of universities. Education creates opportunities, and the Naughton scholarships allow a diverse group of young people to avail of these opportunities, talented young people from around the country.

It is fitting that we present the awards here in the Science Gallery on Pearse Street - on a street named of course after Padraig Pearse, a renowned educationalist who recognized the transformative power of education for each individual's life chances. Pearse Street is increasingly Trinity's street in the city, with our new Biomedical Sciences Institute just down the road, and buildings extending along Pearse Street towards The Lir - the National Academy of Dramatic Art, and the Trinity College Enterprise Campus at Grand Canal Dock.

It's a pleasure to welcome other university presidents here today - my comrades-in-arms so to speak - I'm sure they, with me, welcome the new Naughton scholars with open arms; Ireland's universities have a strong sense of their public mission, all ranking among the top universities of the world. They are a resource for our country's social and economic regeneration in these difficult times.

So welcome all.

And I hand back to our Master of Ceremonies, to Fergal Naughton, who was a student of mine in Mechanical Engineering many moons ago!

Thank you.

* * *

Wednesday, 26th September 2012

Provost's Statement on Trinity College Dublin's Higher Education Landscape Report

Today Trinity College Dublin publically released *Trinity College Dublin: Towards a Future Higher Education Landscape*, which was completed in July 2012 at the request of the Higher Education Authority.

It describes in detail how Trinity aims to contribute to the development of the higher education system in Ireland in response to the National Strategy for Higher Education.

Recognising that all universities in Ireland have distinct missions, *Trinity College Dublin: Towards a Future Higher Education Landscape* outlines where Trinity can contribute on the basis of its distinctive achievements and competencies. In particular Trinity College Dublin has an international reputation as Ireland's leading university. Trinity's stated mission is 'To engage our students and the broader society in the quest for knowledge, seeking to achieve excellence in all we do, and responding with creativity and imagination to the challenges and opportunities of a shared future'. By succeeding in this mission we will achieve our vision to be a university of global consequence.

Trinity College is committed to providing our students an education rooted in research, scholarship, and critical enquiry – with active citizenship in an inclusive society as our goal. Demand for our programmes is high and we consistently attract highly-qualified students. Within the national context one of Trinity's distinct features is its position as a provider of postgraduate education, with 200 Masters courses and 2,000 students enrolled for PhDs. The strength of Trinity's teaching and learning lies in its research-led teaching which is embedded throughout the entire curriculum. Trinity recognises that building on proven research strengths in core priority areas will achieve the goal of delivering research of consequence and recognition as a world reference point in such areas.

Trinity's distinctiveness in regional engagement is demonstrated by having all 32 counties of Ireland as 'our region', yet we are embedded in the heart of Ireland's capital, serving the local community through access initiatives and serving the city through civic engagement. Significant outreach activities are woven into the fabric of College life for staff and students.

Trinity College Dublin is distinctive in being Ireland's premier university as evidenced by independent metrics for international research collaborations. Trinity has always been an internationally-oriented university and remains so in terms of staff profile and the nature of international collaborations in

research and scholarship. The new Global will build on the national campaign for internationalization.

Recognised internationally as Ireland's leading university in all relevant rankings, Trinity has top 50 rankings in four subjects and top 100 rankings in a further 14 areas in the recently published QS Subject Rankings.

To compete for Ireland on the world stage, we must further develop those factors that lead to globally competitive universities – this will evolve Trinity's distinctiveness contributing to the overall effectiveness of Ireland's higher education system.

As Ireland's premier university for research activity and knowledge exchange, Trinity is ranked:

- 44th in the World in terms of research impact (citations per paper)(Times Higher Education Ranking 2011)
- 63rd in the World, 10th in Europe, based on research performance (Leiden World University Ranking 2011)
- in the top 1% of research institutions in the world in 17 fields (Thomson Reuters Essential Science Indicators), an increase of almost 150% from 2004
- 65th in the World, and 21st in Europe, across all indicators (QS World University Ranking 2011).

Knowledge Transfer Highlights include:

- 400+ collaborations with companies
- 76 campus companies formed since 1985, 29 companies were formed in the last 5 years, an average of 6 per annum
- Over 300 invention disclosures have been received in the last 10 years
- In 2011, Trinity granted full commercial licences to 4 Trinity spin-outs, 4 Irish SMEs, 2 US companies, and 2 multinational companies. Five evaluation licences were concluded
- In 2011 Trinity entered a total of 109 contracts with industry to conduct a wide range of collaborative research and research services projects.

Trinity will continue to collaborate with like-minded educational institutions to deliver a higher education system that meets the needs of students and

society. *Trinity College Dublin: Towards a Future Higher Education Landscape* outlines:

- 11 distinct clusters in which Trinity is an active participant
- two consolidations: with the Loyola Institute and with the Royal Irish Academy of Music (RIAM); the Governing Board of the College and the University Council have approved that the RIAM will become an associated college of Trinity College Dublin
- ten collaborations and collaborative initiatives which are in various stages of development.

Trinity College is determined to play its full part in meeting the challenges posed by the National Strategy for Higher Education. We can best meet those challenges by succeeding in our vision to be both a university of global consequence and a university that is fully engaged in the national context. As Ireland's university on the global stage, Trinity is uniquely positioned to leverage national and international opportunities for research and innovation to achieve institutional, national and European goals, deliver key economic and societal benefits and drive the advancement of knowledge.

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Thursday, 27th September 2012

Address at the Launch of the Grattan Scholars' Programme

Long Room Hub, Trinity College

Thank you, James, for your kind introduction;

And welcome, everyone, to the Trinity Long Room Hub for the launch of the Grattan Scholars Programme, and to introduce our two inaugural Grattan scholars, Christina Kingham and Sara Mitchell.

The Grattan Scholars Programme is an initiative of the School of Social Sciences and Philosophy. This School combines the departments of Philosophy, Economics, Political Science and Sociology. It's in the nature of these disciplines to ask the vital questions - like how can we make better use of our resources; improve quality of life; adjust our economic and political systems to take account of changing circumstances?

These are issues of public concern and this School is committed to placing its expertise at the service of public debate and discourse. It is one of the crucial ways that universities like Trinity serve the public good.

Some of the best public lectures in Ireland are organised by this School's Policy Institute and I was lucky enough to attend earlier this year the '*Henry Grattan Public Lecture on the End of the European Project*', which included on the panel, Joschka Fischer, the former German foreign minister. It was an event electrifying not only for the quality of the speakers but for the no-messing, to-the-point replies of Mr Fischer to testing questions from the audience.

And now, after the Grattan Public Lecture, we have these Grattan Scholarships.

The School is rightly celebrating Henry Grattan, the only Irish politician - and indeed the only Trinity alumnus - to enjoy the accolade of having a phase of parliamentary history named for him. 'Grattan's parliament' operated, as you know, from 1782 to 1800. It sat across the street from the College, in what is now the Bank of Ireland.

Grattan is famous as a constitutional parliamentarian, vigorous in his demands for legislative independence and Catholic emancipation. The great Trinity historian, R.B. McDowell, who wrote Grattan's biography, said of Grattan "that his speeches were infused with fire and drive, imaginative, often tinged with emotion, they are a rhetorical expression of the Romantic movement... His opinions reflect the outlook of an ardent, independent and

intelligent Whig in an era of vehement controversy, great wars, and rapid change”.

So these Grattan scholarships - which seek to advance cutting-edge social science research and teaching - are well-named for this brilliant communicator, who took on the big issues of his day.

* * *

Today’s issues are, of course, different in kind, but they still come under the heading of what Professor Peter Simons, Head of School, has called “economic, political, social and even moral problems”. The School is committed to researching solutions to such problems, and to ensuring that the thinking that goes into the research has consequences for public debate.

Our two inaugural Grattan Scholars are working in diverse areas: Christina Kingham is looking at micro-enterprise growth and expansion, and Sara Mitchell is researching the geographic clustering of creative workers. Both will add greatly to our knowledge of their respective areas of Development and Cultural Economics.

Christina and Sara will also be participating in academic life as teachers. This School is particularly dedicated to excellence in teaching. Indeed Dr Eleanor Denny, assistant professor in Economics and director of Undergraduate teaching in the School, is the winner of the inaugural *European Award for Excellence in Teaching in the Social Sciences and Humanities*.

We’re very proud of Eleanor. Trinity does not believe in compartmentalising teaching and research. We are instead committed to students and staff working together recognising that in all leading universities education and research are welded together into common academic enterprise.

This kind of education requires dedication, commitment, and resources. Two weeks ago the World QS University Rankings was launched from this university. It was great to host such a prestigious launch and it’s great that Trinity is still highly placed, but, as you probably know, for the past few years we have been slipping down the rankings from a height of 43rd. This is due to the funding crisis. Staff to student ratio and research capability are among the key indicators for the rankings.

Through building up a cohort of exceptional PhD student-teachers, the Grattan Scholarships will help Trinity maintain excellence in research and teaching.

At this particular time of cutbacks in state funding, these scholarships are hugely welcome. Increasingly, universities like Trinity will have to rely on such innovations to fund high quality education. Earlier today I was before the Public Accounts Committee of the Dáil, where I think members were

surprised to learn that such non-exchequer monies now accounts for 47% of Trinity revenue.

So I want to take this opportunity to thank, most warmly, the UK Trust for Trinity College Dublin who have generously provided funding for our first two Grattan scholarships. Unfortunately, John Pearson and Rupert Pennant-Rea of the UK Trust cannot be with us this evening, but they have made possible Christina and Sara's vital research. John and Rupert provide a wonderful model of alumni giving, and of that lifelong relationship with the alma mater which we hope to develop in all our alumni.

I've been talking about the funding crisis but today is a day of celebration. The Grattan Scholarships show that even in difficult periods, solutions can be found through the commitment, flexibility, and dynamism of individuals and institutions. This positive approach to challenges is a hallmark of this School... as it was of Henry Grattan. Daniel O'Connell said that Grattan was

“that old patriot who had given Ireland all she had and would have made her all she ought to be”.

I trust that Christina and Sara, and all those Grattan scholars that will follow you, will, like Grattan himself “make of Ireland all she ought to be”.

Thank you.

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(L-R) Ms Christina Kingham, Grattan Scholar; Provost Dr Patrick Prendergast; Ms Sara Mitchell, Grattan Scholar

Thursday, 27th September 2012

Address at the Rooney Prize for Literature

Provosts Saloon, Trinity College

Ambassador Rooney,
Ladies and Gentlemen,

I am delighted to welcome you to the Saloon in the Provost's House for the award of the Rooney Prize for Irish Literature. This prize has been awarded to an emerging writer every year since 1976. For the past six years, it's been administered by the Oscar Wilde Centre for Irish Literature, of the School of English, here in Trinity.

And for the past three years, we've enjoyed what may well be an unprecedented situation: the benefactor of this prize also happens to be the current US Ambassador to Ireland, Dr Daniel M. Rooney.

Ambassador Rooney's remarkable commitment to this country goes back many decades. He is one of the founders of the American Ireland Funds, which are dedicated to building bridges of peace, culture, and charity in Ireland and Northern Ireland. And 37 years ago he founded the Rooney Prize for young Irish writers, not knowing then, I guess, that he would one day be Ambassador to this country. And that, furthermore, his term would come during a period of economic difficulty when his generosity to the arts would be particularly appreciated.

The Rooney Prize is among the most significant literary prizes on this island. It is generous in financial terms, and it seems to have an uncanny ability to spot great talent. Among the former recipients of this prize are

- Neil Jordan,
- Frank McGuinness,
- Anne Enright,
- Claire Keegan,
- Colum McCann,
- Hugo Hamilton,
- Claire Kilroy,

- Nick Laird,
- and Kevin Barry.

Because the Prize is specifically aimed at young writers, they were awarded at an early stage in their careers, long before they had written the books that would later make them famous.

The selection committees' ability to get it right time and time again is, as I say, remarkable. Although - to look at it in another way - perhaps it's the prestige of winning this award at a crucial moment in one's career that propels a writer on to future renown. In any case, the Rooney Prize now marks out the 'young-writers-to-watch'.

The School of English is honoured that Dr Rooney, and his wife Patricia, have entrusted the administration of the prize to the Oscar Wilde Centre. The Centre was opened in January 1998 in Wilde's birthplace, as a teaching and research institute. It runs the M.Phil. programme in creative writing. One of the former students of this M.Phil, Claire Kilroy, is also a former recipient of the Rooney Prize, and her third novel was a fictionalised account of her time studying creative writing in Trinity. We know it's fictionalised because the book is called *All Names have Been Changed...* though when I read it, it didn't seem too fictional to me... hopefully it's more fictional than another book where the Head of a Dublin University is found murdered in the library....

A prize is only as good as its judges. This year the Rooney Prize selection committee was chaired by Professor Terence Brown and included, from the college, Professor Gerald Dawe and Professor Eiléan Ní Chuilleanáin. From the wider academic and literary community, they were joined by Eilís Ní Dhuibhne, Riana O'Dwyer and Carlo Gébler. The college is especially grateful to this latter group who gave so generously and thoughtfully of their time.

A particular word of thanks is due to Lilian Foley, administrator in the Oscar Wilde Centre. Her contribution was much appreciated by all committee members.

* * *

Trinity has always produced great writers. But creative writing courses were not previously part of the college curriculum, neither was music composition which has also recently started, acting or directing which are now offered in The Lir - the National Academy of Dramatic Art.

The creative and performing arts are intrinsic to any plan for the social and economic regeneration of this country, not only for their economic potential but for the sustenance they give to our identity, to our human spirit, and to the realisation of our potential as individuals and as a society.

We are delighted that Dr Rooney realised this as far back as 1976 and made such a commitment to what is certainly one of Ireland's greatest strengths - its literature. The constancy, and the calibre, of this prize is a source of continuing vitality and optimism - and, of course, of entertainment.

I am now pleased to call on Dr Rooney to present this year's prize to Nancy Harris.

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(L-R) Ambassador of the United States to Ireland Dr Daniel Rooney, Winner of the Rooney Prize Ms Nancy Harris, Provost Dr Patrick Prendergast

Tuesday, 2nd October 2012

Address at the Sion Hill Academic Prize Ceremony

Dominican College Sion Hill, Blackrock

Good morning, everyone, and thank you for inviting me here to Sion Hill this morning.

As you've just heard from Ms Sheila Drum, I'm the head - or the Provost, as we call it - of Trinity College Dublin. You will know Trinity College from your trips to town, and some of you will have walked inside to see the beautiful buildings and old cobblestones, and maybe the Book of Kells.

Or perhaps you've visited the Science Gallery. I hope that you've taken from your visit the feeling that universities are fascinating places, full of wonderful research and holding the treasures of the ages.

Today is your annual academic prize ceremony, when as a school you celebrate learning, creativity and the spirit of discovery. I've been invited to talk to you because, as a university, we in Trinity also celebrate those things. I'm sure you've all heard, often enough, the saying that young people are the hope of the future. That's something I realise every day.

Without talented, enthusiastic young people like you there would be no need for universities. Every year new students from Sion Hill and other schools decide to study in Trinity - if they didn't, then Trinity couldn't exist. And without Trinity and other universities, Ireland would not be educating the engineers, the lawyers and the teachers; writers, designers and architects; doctors, vets and business entrepreneurs; biochemists, speech therapists and psychologists - all the different people and different professions that help run our society and grow the economy.

So that's how important it is for us, as a society, that you, our young people, love learning, creativity and discovery. And that you have the drive, the energy, and the commitment to apply yourselves.

Important as it is to win prizes, the most important thing is the sense that you have worked to the best of your ability and done all you can to reach your potential. I know, from my years studying and teaching in Trinity, that, in the end, what upsets people most is the sense that they sold themselves short, that they didn't really try, that they gave up when the going got tough, that they took the lazy option.

I think that when we give prizes - in schools, universities and professional life - what we're really rewarding is effort, hard work, and courage. Because it's easy to say 'who cares?' It takes courage to say 'I want to excel'. A prize is great recognition from society that your work is good, but in life that

recognition can sometimes be a long time coming, and the most important thing is your own awareness that you're using your gifts, that you're using your talents.

About fifteen years ago, Seamus Heaney won the Nobel Prize for Literature. As you know, it is the highest literary honour you can receive. When it was announced there was great excitement in Ireland - but none of the newspapers or radio stations could get hold of him. He was on holidays in the Greek islands, and even the Irish Ambassador to Greece couldn't locate him.

This was 1995, before mobile phones - if you can imagine such a time. For a day or so it seems Heaney didn't even know he'd won the Nobel Prize. All over the world other famous writers were glued to their radios and telephones to see if they'd won, but Seamus wasn't, because, I think, he was content in the quality of his work.

He knew that his poems touched people's lives. He knew that in classrooms all over Ireland, children read that beautiful, simple, and heart-breaking poem 'Mid-term break'. He knew that people were able to connect to his feelings when he lost his four-year old brother. That's the magic of poetry. Of course he was delighted to win the Nobel Prize but he wrote 'Mid-term break' and other great poems long before he won any great prize - he had an inner determination that went beyond the need for any prizes....

And I could give you lots of examples of people whose work took time to be appreciated. One of my favourites is the Trinity mathematician, William Rowan Hamilton. In 1843, after fifteen long years of study, he discovered the equation for a 'four-element multiple of numbers' called quaternions. He was praised for this discovery but at the time nobody knew just how important it would be. In fact it was only more than a hundred years later that these quaternions became famous - today quaternions are used in the control of spacecraft and in 3-D computer modelling.

I'm not saying you have to wait hundreds of years before your work is appreciated, but I am saying that when you work hard on something you feel passionate about, then you get a feeling of exhilaration and your brain starts surprising you. It comes up with stuff you never knew you knew. I'm sure some of you - I hope all of you - have experienced this feeling. It's one of the best feelings in the world. It's a bonus if you get a prize for it, but the excitement comes from doing the work and pushing beyond your boundaries.

All professions offer the chance to push boundaries and excel. Whatever you're working on, you have the opportunity to make breakthroughs and find better ways of doing things.

In universities, discoveries are happening all the time. For instance, people have known for decades that the DNA of humans and chimpanzees is 99% identical, but what is in that 1% DNA that differentiates us? Nobody knew, until recently when Professor Aoife McLysaght the Trinity geneticist discovered three genes that are unique to humans. Aoife's discovery means

that we're one step closer to understanding the secret of what makes us human.

And then there's nanotechnology. 'Nanos' means dwarf in Greek, and nanoscience is the study of atoms, molecules, and objects on the nanometer scale. It's a new science with amazing potential. For instance, in Trinity's nanoscience institute, Professor Valeria Nicolosi is working on creating faster, smaller and lighter mobile electronics devices such as smartphones, tablets and computers.

I could give you lots more examples. I was recently in Moscow celebrating the translation of Irish poets into Russian. Russian schoolchildren will now have a chance to read 'Mid-term break'. I know you're all studying foreign languages. When you get to the stage with a foreign language that you can translate poetry - well then you know you'll be making a breakthrough!

The important thing is that, whatever you're doing, you apply yourself wholeheartedly, and believe in your ability to make a difference. Maybe you don't know yet what you'll be working on or how you'll make a difference. That's normal. Remember Hamlet's line to his friend, Horatio: "There are more things in Heaven and Earth than are dreamt of in your philosophy."

Well there are certainly more jobs in the world than we've dreamt of! And universities keep expanding and adding new subjects to keep up with the changing world.

When I went to Trinity to study engineering in 1983, there was no nanoscience institute - the word hadn't even been invented. There was also no Centre for Global Health, no School of Creative Writing. There were no courses for actors, directors, or playwrights. There are all these courses now, and more.

We are currently in an economic recession. Times are not the easiest. But compared to when I went to university there are many more diverse ways for you to express yourselves and to realise your potential, both inside and outside the classroom. This was brought home to me earlier this year when I was giving out the 'Business Student of the Year' award. Between them, the six short-listed students had:

- published articles, not just in college magazines, but in international journals,
- they had organised job fairs and Awareness Weeks,
- founded new college societies,
- learned languages,

- been finalists in the TES Dragon's Den,
- managed a €30,000 student investment fund,
- and volunteered and fund-raised in Ireland and abroad.

Believe me, we were not doing all that when I was at college! Students today are constantly pushing the boundaries of university life. That's how it should be because the university years are such a unique period, with such potential for growth. There is no other time in your life when you have so much freedom to explore who you are and what you want to do.

The most important thing when you're leaving school is to feel your horizons opening out, giving you a sense of the manifest possibilities of life. This is never a time to close down or narrow your options.

Sometimes we narrow our options because of unconscious societal pressure. When I was studying Engineering, there were few girls on my course. Fortunately this is changing and now many girls study engineering, nanotechnology, biochemistry, you name it. The pressure against girls studying certain subjects is fading, but there may be other unconscious pressures colouring our choices, in ways we can't even perceive. We are all sometimes prey to insecurities. We've all heard the negative voice within, whispering that something is beyond us.

Well we know what President Obama said to that negative voice. The resonance of his simple message - Yes, we Can - is because we know that too often, we believe we can't. It's terrible that your grandmothers who might have made brilliant mathematicians and engineers, believed society when it said they couldn't.

So yes, you can do and be what you want.

But don't box yourselves in. Try not to limit your choices. Try not to give up on subjects before you've given them your best shot. Try not to tell yourself self-fulfilling prophecies like 'I'm bad at languages' or 'If I don't get points for medicine, I'm a failure' or 'It's uncool to look like I care'. When you start telling yourself these things, you start defining, too early, what kind of a person you are, and if you do that, you stop surprising yourself.

Without surprises the future looks very dull. Young people are the hope of the future - which means that you are the hope of your own futures.

I wish you all a surprising future, and I look forward to seeing some of you in Trinity, pushing the boundaries of discovery.

Thank you.

* * *



(L-R) Provost, Dr Patrick Prendergast and daughter Eimear Prendergast

Tuesday, 2nd October 2012

Welcome Address at the Launch of A Family at War: the Mary Martin Diary

Long Room Hub, Trinity College

Minister, Colleagues, Ladies and Gentlemen,

You're all very welcome to the Long Room Hub for the launch of this remarkable scholarly digital resource, 'A Family at War: the Mary Martin Diary'.

It's a particular pleasure to have Minister Deenihan with us today because last year he launched our new M.Phil in Digital Humanities and Culture, for which the 'Mary Martin Diary' is a key project.

Also because he is Minister in charge of the Decade of Commemoration - that is, the decade from 1912 to 1922 which shaped contemporary Ireland. The Mary Martin Diary is a primary resource for that decade, and digital humanities in Trinity is making a unique contribution towards elucidating such primary sources for the widest possible audiences.

Mary Martin began her diary in December 1915 when she heard that her 20-year-old son Charlie, a member of the Royal Dublin Fusiliers, was wounded and missing in Gallipoli. She began the diary:

"Dear Charlie, since I heard you are missing as well as wounded it has occurred to me to write this diary in the form of a letter. We hope to hear from you soon and till then can communicate with you, and later on when you read this it will let you know what has been happening."

The optimism of that 'later on' is, as I say, almost too much to bear, because the boy was already dead as she wrote, and when she finally learnt of his death on 25 May 1916, she stopped writing.

It is a unique document which tells us much about how Easter 1916 appeared to ordinary, middle-class Dublin people, and how things were for the families of Irish soldiers fighting on the Front. Rachel has laid out for us, very fully, the ways in which she, and the other four Digital Humanities students, encoded, annotated, and contextualised the primary text.

This project - carried out under the direction of Professor Susan Schreibman associate professor in Digital Humanities - is a wonderful example of what student scholars can achieve when they are mentored and encouraged.

In Trinity we do not compartmentalise teaching and research. A central tenet of a Trinity Education is that professors and students engage alongside each other on a common enterprise of discovery. This project is a shining instance of such a common enterprise.

Irish higher education institutions are committed to research collaboration. That phrase ‘common enterprise of discovery’ can apply equally to our inter-institutional links. The HEA initiatives in this regard have been excellent, and I’m delighted that we are also extending collaborations beyond this island, and starting to build global academic networks under Trinity’s Global Relations Strategy launched two weeks ago.

Digital Humanities is particularly strong in regard to how Trinity represents Ireland on the world stage: Trinity now coordinates two major, European-wide Digital Humanities projects:

- CENDARI, a collaborative digital research infrastructure that is integrating archives and resources for research on medieval and modern European history;
- and CULTURA which is pioneering the development of next generation adaptive systems using humanities content for testing and development.

The Mary Martin Diary adds to the impressive range of digital projects hosted by Trinity for the benefit of the Irish public, including

- the ‘1641 Depositions project’
- gothicpast.com, a visual archive of gothic architecture and sculpture in Ireland
- and ‘CIRCLE: A Calendar of Chancery Letters, 1244-1509’.

These projects were Herculean in scope and took decades to achieve, but they have opened the way for new understandings of Irish history. Access to these projects is free, showing how universities like Trinity contribute to the public good through their research.

On the occasion last year when Minister Deenihan launched this new masters, Trinity’s Professor David Dickson said that the Masters in Digital Humanities and Culture will “involve the study of cultural memory and the public status of history in modern society. It will examine the political issues surrounding public commemoration and the role of museums, archives, galleries and the media in shaping public perceptions of the past. It will survey concrete questions involved in the conservation, presentation and communication of the physical heritage of past cultures.”

The new M.Phil was not specifically designed to coincide with the Decade of Commemoration.

But I'm sure the Minister will agree that during this decade when we examine, as a people, these issues of cultural memory and public commemoration, it is wonderful to have at our disposal the vast expertise and professionalism of the staff and students in Digital Humanities.

Thank you for your attention and it's now my pleasure to invite Jimmy Deenihan, Minister for Arts, Heritage and the Gaeltacht, to officially launch this project.

* * *

Thursday, 11th October 2012

Address at the New Fellows Dinner

Dining Hall, Trinity College

Good evening, and welcome all of you to our new Fellows Dinner.

Tonight we celebrate thirteen new Fellows, three new Professorial Fellows, and two Honorary Fellowships.

Fellowship of Trinity College Dublin is a singular distinction. In Trinity's first charter in 1592, three Fellows were named; a generation later in 1620, there were sixteen Fellows.

The numbers, the roles and the functions of Fellows have diversified over the College's four hundred year history.

According to the Trinity historian, R.B. McDowell - in the early nineteenth century, Fellows were recruited on the results of an examination which (I quote) "except perhaps that for admission to the Chinese civil service, had a good claim to its reputation as the most gruelling public examination in the world."

And once they'd passed this gruelling exam, Fellows faced a gruelling workload. Trinity was known for "exacting the most overwhelming labour from its Fellows... by the mental treadmill of the classes and daily lectures".

This was so much the case that William Rowan Hamilton only accepted the Professorship of Astronomy in 1827 on condition that he did not compete for Fellowship. He justified this by saying: "As a Fellow, on the present system, I would either have had no time for pursuing Science, or must have made that time by exertions at extra hours and to the injury of my health". Happily the condition of Fellows is now much improved, and I think no present-day Hamilton would refuse the honour.

Fellows have a central role in the governance of the College. To them falls the great task of moulding the College's distinctive traditions in each new generation. They are elected by other Fellows on the basis of serious scholarly work of international standing. And as I welcome now each new Fellow by name, position, and by saying something about their scholarly work, we can but admire the range, diversity and the quality of the research being carried out today in Trinity.

* * *

FELLOWS

Deirdre Ahern (Dr)

Deirdre Ahern is a Lecturer in the School of Law and author of *Directors' Duties: Law and Practice* (2009) on the legal obligations of company directors. She has engaged in interdisciplinary research on ageing and has worked with the Law Reform Commission on reform proposals on the legal capacity of vulnerable adults.

Peter Arnds (Dr)

Peter Arnds directs both the MPhil in Comparative Literature and the Centre of Literary Translation, as well as lecturing in the German and Italian departments. An expert on the work of Nobel Laureate Gunter Grass, and he is also a published poet.

Shane Butler (Dr)

Shane Butler is in the School of Social Work and Social Policy and specializes in the field of alcohol and illicit drug policy. His publications include *Alcohol, Drugs and Health Promotion in Modern Ireland* [2002] and *Benign Anarchy: Alcoholics Anonymous in Ireland* [2010]. He has served on governmental advisory committees and on the voluntary committees of drug and alcohol agencies.

David Chew (Dr)

David Chew is a Lecturer in Geology in the School of Natural Sciences. His research interests involve applying analytical techniques in geochronology and isotope geochemistry to problems in the field of tectonics. He has led two SFI-funded projects on isotopic dating of sedimentary rocks.

Derek Doherty (Dr)

Derek Doherty is a Lecturer in Immunology in the School of Medicine. He runs a group in the Institute of Molecular Medicine that is investigating the role and treatment potential of the immune system in hepatitis B and C, in HIV infection, and in autoimmune disease and cancer.

Peter Gallagher (Dr)

Peter Gallagher leads the Solar Physics Group and is Director of the Physics and Astrophysics degree in the School of Physics. He is a member of numerous ESA and NASA satellite teams, including ESA's Solar Orbiter, which will be launched in 2017 to explore the inner solar system for the first time.

Andrew Jackson (Dr)

Andrew Jackson is an evolutionary ecologist in the School of Natural Sciences. He researches into novel mathematical and computational models to understand how evolution has shaped complex systems of animal societies, and ecological communities that are dynamic, self-organising and stable.

Ed Lavelle (Dr)

Ed Lavelle is in the School of Biochemistry and Immunology. His research focuses on how vaccine adjuvants trigger immune responses and on strategies to increase the effectiveness of both injectable and mucosal vaccines.

Aideen Long (Dr)

Aideen Long is Senior Lecturer in Molecular Medicine in the Department of Clinical Medicine, and is Principal Investigator in the Institute of Molecular Medicine, where her research focuses on the signalling aspects of leukocyte-endothelial cell interaction with particular emphasis on the role of the Protein Kinase C (PKC) family of isoenzymes in T lymphocyte signaling. She is President of the Irish Society for Immunology.

Graeme Murdock (Dr)

Graeme Murdock is Assistant Professor of European History in the School of Histories and Humanities and Director of the Centre for Early Modern History. His research focuses on Calvinist religious life and culture in sixteenth- and seventeenth-century Europe.

Lorraine O'Driscoll (Dr)

Lorraine O'Driscoll is Lecturer in Pharmacology at the School of Pharmacy and Pharmaceutical Sciences. She focuses on translational cancer research, where outputs have included patents, and Phase I/II clinical trials.

Sam Slote (Dr)

Sam Slote is Assistant Professor in the School of English, with primary research interests in James Joyce and Samuel Beckett. He is the co-director of the Samuel Beckett Summer School at Trinity College, and his annotated edition of *Ulysses* has just been published by Alma Classics.

Emma Stokes (Dr)

Emma Stokes is a Senior Lecturer in Physiotherapy. Her clinical research has focused on physiotherapy intervention for stroke sufferers. She is Vice-President of the World Confederation for Physical Therapy.

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PROFESSORIAL FELLOWSHIP**Khurshid Ahmad (Prof)**

Khurshid Ahmad is the Professor of Computer Science. His research areas include artificial intelligence, neural networks, and fuzzy logic. He works closely on behavioural finance with colleagues in the School of Business, and on cell image annotation in the School of Medicine. His current work on the impact of sentiment on the prices of equities and commodities, and on systems for facilitating governance and risk assessment in financial systems, is funded by Enterprise Ireland.

Joseph Barry (Prof)

Joseph Barry is Professor of Population Health Medicine in the Department of Public Health and Primary Care. In addition to research and advocacy on drug related issues, he has published in relation to prisoner health, health inequalities and health data systems. He is a member of the National Advisory Committee on Drugs and is on the Board of Directors of the Irish Penal Reform Trust and Alcohol Action Ireland.

Louise Gallagher (Prof)

Louise Gallagher, who cannot be with us tonight, she is Professor of Child and Adolescent Psychiatry and a Consultant Child and Adolescent Psychiatrist. Her research focuses on autism spectrum disorders and other complex neurodevelopmental disorders. Her research seeks to better understand the clinical presentation, neurobiology and underlying genetic susceptibility of ASD.

* * *

HONORARY FELLOWSHIPS**President Michael D. Higgins**

It's an honour to have elected to Fellowship our President, Michael D. Higgins, who unfortunately cannot be with us tonight. We recognise him as an academic, a social theorist, and a poet. In his inaugural address, President Higgins called movingly for "an active inclusive citizenship, based on participation, equality, respect for all, and the flowering of creativity in all its forms." These are also the values we seek for our students.

Clive Lee (Prof)

And tonight we honour just one other individual, Clive Lee, Professor of Anatomy in the Royal College of Surgeons in Ireland - and at the Royal Hibernian Academy. A world-leading authority on diseases of the musculo-skeletal system, he is a graduate of Trinity and has maintained a strong connection with this university as a researcher and lecturer, and I have seen with my own eyes that he is also a cricketer!

* * *

I congratulate all our new Fellows. Each of you has achieved so much - both here in Trinity, and elsewhere. I am sorry that I have only had time to 'gallop' through your career highs. Each of you could merit a speech of your own. We are very proud that you have chosen to enhance this university through your research and teaching and we look forward to the continuance and deepening of our relationship with you.

Thank You.

* * *

Friday, 26th October 2012

**Keynote Address at Beihang University's 60th
Anniversary Celebration Conference on Engineering
Education & University-Industry Co-Operation.
“Activities and Outcomes: Internationalization of
Engineering Education – Trinity College Dublin's
Perspective”**

Beihang University, China

President of Beihang University, Professor HUI Jinping, Ladies and Gentlemen.

It's a great pleasure to be here, on behalf of Trinity College Dublin, the University of Dublin, Ireland, on this occasion of Beihang University's 60th anniversary.

The themes of this conference are close to my heart. I'm an engineer – before I became Provost, or President, of Trinity College Dublin, I worked in the Department of Mechanical and Manufacturing Engineering. My research interests centre on bioengineering and the design of next generation medical devices.

I was fortunate enough, as a postgrad and postdoc, to spend time abroad in the universities of Bologna in Italy, and Nijmegen in the Netherlands. My experience has made me a firm advocate for international education. Increasing student - and staff - exchanges is a priority of my leadership of Trinity College Dublin.

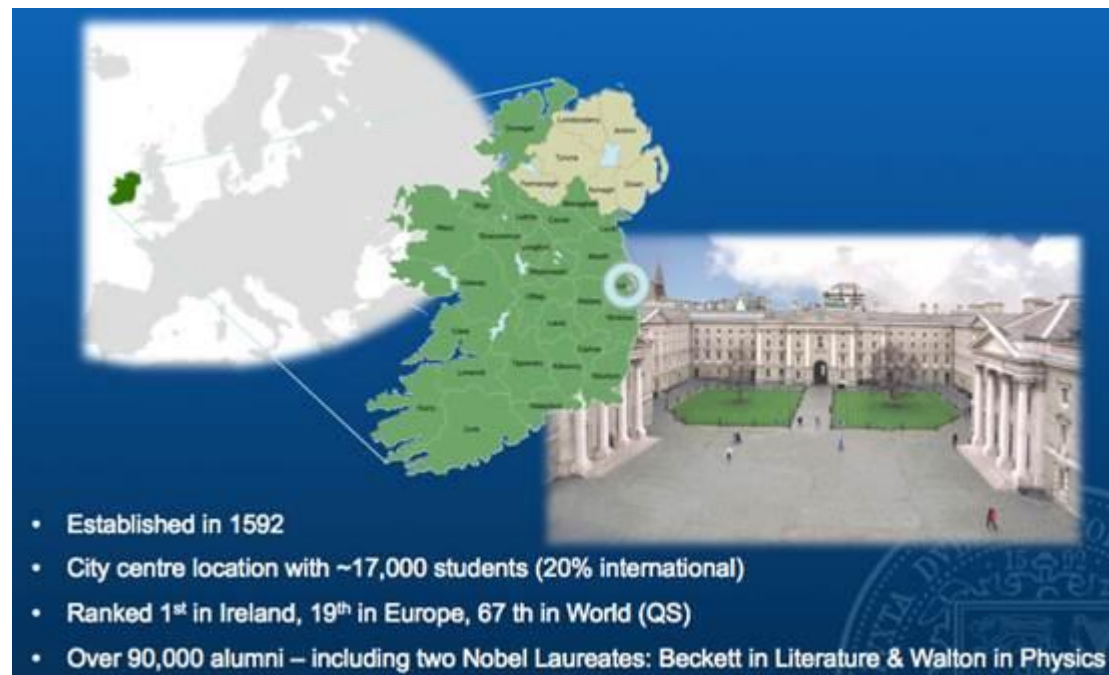
I was also fortunate, when I joined the Trinity Engineering faculty in 1995, to find myself at the cusp of a funding revolution. The key role of universities in developing the economy was starting to be recognised. Within Ireland, funding organisations were created to invest in excellent research, and European Union funding was available for collaboration across the continent.

On campus, we saw the blossoming of entrepreneurship. Academics were co-operating with industry on specific projects, and setting up campus companies, or what are often called 'spin out' companies. This level of engagement wasn't happening when I was a student in the 1980s, and I found it tremendously exciting. It was natural for me to work with industry on some of my own research projects.

So, my personal experience and my perspective on education have centred on precisely the themes of this conference: engineering, the internationalisation of education, and university-industry cooperation. It's great to be in China, which is increasingly at the forefront of new directions in education, to talk about my experience and Trinity College Dublin's experience.

Educating global citizens

I know many of you are familiar with Trinity College Dublin.



For those who aren't - well, we're a prestigious, multi-disciplinary, long-established university – in fact Trinity was founded exactly 420 years ago, this year. Trinity is Ireland's highest ranked university and ranked 19th in Europe. The education sector in Ireland is very important because Ireland's main wealth is the intelligence and ingenuity of the people, not in the exploitation of physical resources.

Industrial employment in Ireland is mainly through Foreign Direct Investment or FDI, with associated linked companies. In such a landscape, educating for a global workplace is crucial, and as president of Trinity, I feel a responsibility to educate global citizens.

What do I mean by 'global citizens'? I mean people who are committed to their local community – their city region if you like - but always aware of the wider world; people who know about international standards of excellence and are ready to apply those standards wherever they live and work. Global citizens seek to make their communities internationally competitive.

In the past few decades the world has opened up so rapidly, with remarkable advances in travel, communications and trade. The opportunities are immense – but so is the learning curve. International research collaborations and industry link-ups do not just happen automatically, so when I say I feel a responsibility to educate global citizens, I mean that I have to embed this responsibility into the curriculum of the university.

The five internationalising actions

Our curricula must be proactive and designed to encourage an innovative and internationalist mindset. I have isolated five actions that I believe will do this:

- Increasing student diversity and a cosmopolitan campus: Pioneering and entrepreneurial students are flexible, open to other cultures, and able to think beyond their disciplines. The ideal campus has international students who are spending time on exchange programmes abroad, and who experience life outside the lecture room in student clubs and societies.
- Increasing research collaborations and staff exchanges: in this new century academic knowledge knows no national borders. As an example from my own university:
 - Trinity's research collaborations with China have tripled over the past ten years and;
 - China's position among Trinity's top international collaborators has moved from 19th in 2002 to 12th in 2012, as measured by citations
- Creating markets for new courses: in this increasingly global world, there may be need for new courses, jointly offered by two or more universities. These will be different than that offered by a single institution. To give an example: academics in Trinity and in Peking University are currently in talks to deliver a new philosophy course designed to teach elements of both Chinese and Western philosophy. On a different continent, Trinity has a Masters in Development Practice [MDP] in collaboration with the National University of Rwanda in Africa.
- Encouraging an innovative mindset in staff and students: creating an environment where staff and students release the commercial potential of their research by thinking about potential impacts of it outside their own country.
- Finally, internationalising a city's innovation ecosystem: The core mission of universities is in education and research, but there is also a critical role for the university in enabling and promoting the innovation ecosystem in its city region. And internationalising it by attracting in innovators from other regions as academic staff and postdoctoral researchers, and students, particularly PhD students.

So, these are my five actions. I haven't gone into them in too much detail because I know that when it comes to internationalisation and innovation, Beihang University thinks like Trinity College Dublin. You are cooperating with universities all round the world and you have a high proportion of international students. So rather than 'making the case' for these five actions, I would just reiterate that these outcomes don't happen automatically.

They need to be activated and formally incorporated in academic policy. We won't get global students, international research collaborations, industry projects, or a vibrant environment for spin-outs unless we design them into

our university system. This is the job of the university's leadership - the President and the President's team of officers, both academic and administrative.

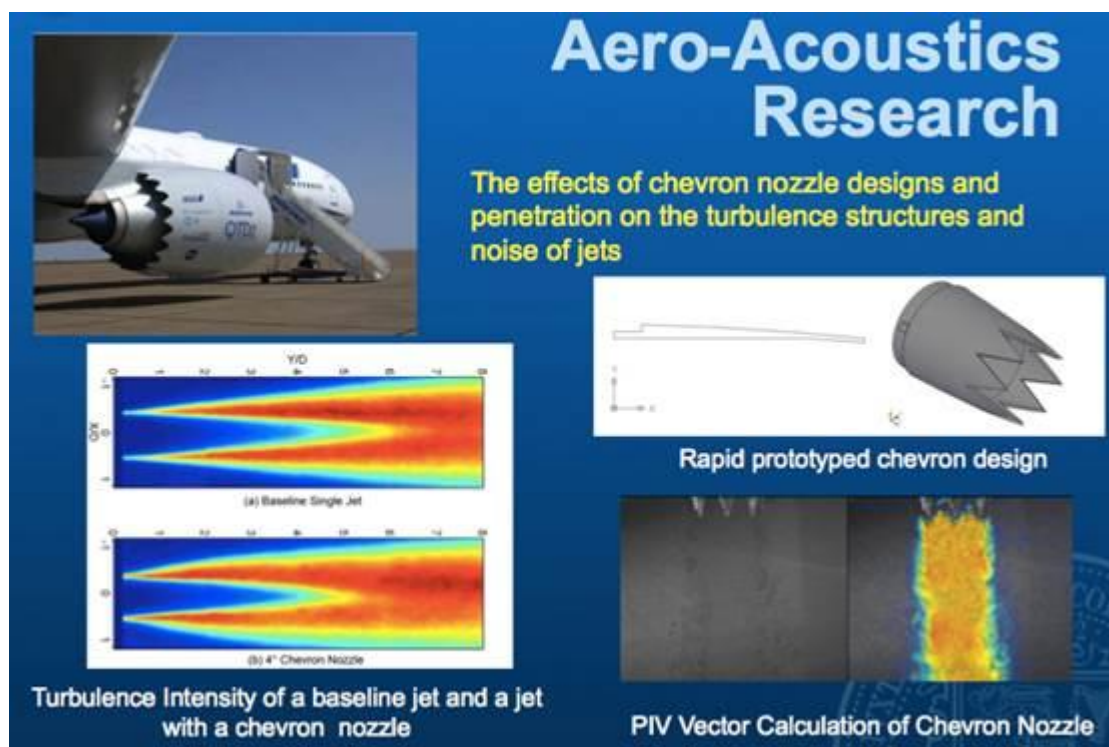
Education is a matter of government policy but the university must be sensitive to the international agenda of education, even in the context of immediate national policies. University presidents and their teams need to be vigilant persuaders for universities as actors on the world stage. In making the case for international education, we need the skills of politicians and diplomats. That may not be what we signed up for as academics, but history will judge us on our failure.

Engineering

I've been talking about education in general so let me turn now to engineering.

Of all the disciplines in Trinity – and we have very many, ranging from Humanities and Law to Medicine and Science – well of all these disciplines, engineering is a particularly good example of what we've been discussing: Trinity's School of Engineering is international in outlook and works closely with industry.

Our School was founded in 1847, which makes us one of the world's oldest Engineering Schools. I'll give you an example of our research - in aero-acoustics, because it's relevant to Beihang.

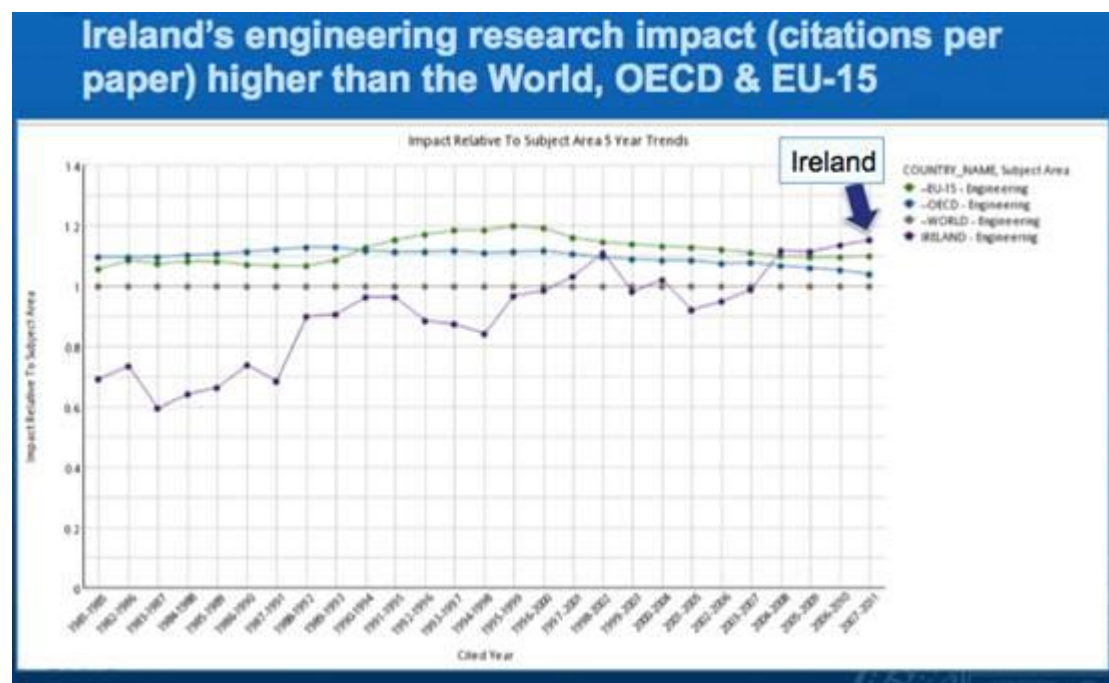


The aero-acoustics research activity in Trinity is led by Professor Henry Rice and Professor Craig Meskell. The group's projects include jet noise shielding

for installed configurations, optimal material design for cabin noise sound insulation, noise propagation in ducts through impeller systems. Looking at the slide here we see a jet engine with a chevron nozzle design. Experimental and computational work is done to minimise turbulence and noise. This is part of an EU funded research programme.

Another field, my own one, is bioengineering: Trinity Centre for Bioengineering. Fifteen Principal Investigators are working on areas from neural engineering to 'impact biomechanics', from tissue engineering to mechanobiology.

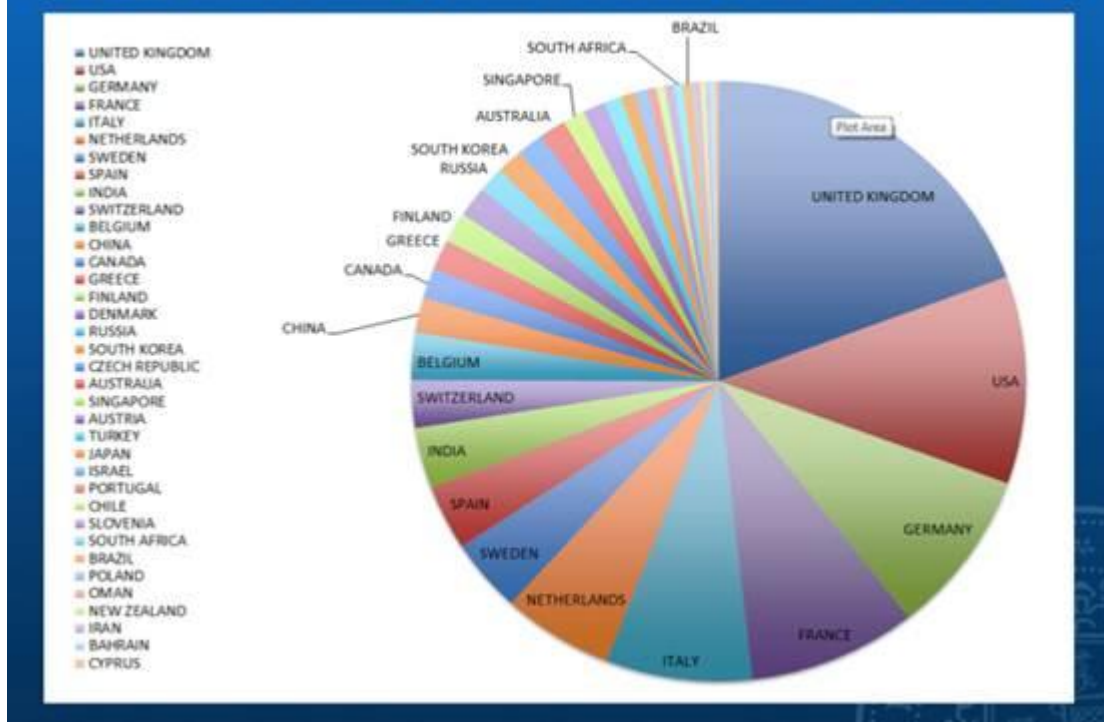
These are exciting projects, and ones which wouldn't be possible without industry interest and investment. The impact of engineering research in Ireland has grown massively in recent years, as this slide shows.



In terms of internationalisation, Trinity's School of Engineering seeks collaboration with peer institutes around the world.

This is a pie chart showing our top 20 collaborating countries in terms of co-authorship. China, as you see, is our third strongest non-European collaborator, after the US and India. I would like to see this grow in the future.

Top 20 Collaborating Countries in Engineering 2002-2011



Trinity is also a member of CLUSTER, which is a consortium of twelve elite European universities of science and technology, with associate members from round the world. In its policy statement, CLUSTER declares that “in a world facing unprecedented challenges... the well-being of our society cannot be founded by a single nation or single engineering discipline. Instead, these challenges call for truly international, multi-disciplinary collaboration and a new mindset.”

I’m delighted that Trinity and Beihang are seeking just such collaboration. Earlier this year our two universities signed a Memorandum of Understanding and Student Exchange Agreement, which pave the way for joint undergraduate and postgraduate programmes, for collaborative research programmes in joint centres, and for student and staff exchanges. This is a tremendous opportunity and it’s exactly the kind of proactive curriculum-designing that I’ve been talking about.

If we think back to sixty years ago, to the foundation of this University, no-one could have imagined then that Trinity and Beihang would one day be exploring these possibilities. This is thanks to technology developments, of course, but even more, it’s thanks to a new mindset.

A spirit of openness, of trust, curiosity and interest – a global spirit – is what we want and must educate for in the century. We have a saying in English “where there’s a will, there’s a way” and I do believe that willingness to co-operate is the crucial enabler, from which technology advances followed. But we know from history that periods of openness and trust don’t necessarily last forever. We have to be proactive about strengthening them. So we need to design cultural knowledge that engenders openness into our curricula. The

well-named memorandum of understanding between universities is one enabler of such a design.

I will close with a final point: Beihang has much to impart to Trinity, particularly in aeronautics and astronautics, and Trinity has much to give Beihang. I think where collaboration may prove particularly inspiring for you is in the area of interdisciplinarity. In Trinity we encourage cooperation and link-up between our different Schools. This has led to, for instance, our Department of Music linking up with the Department of Electronic and Electrical Engineering to offer a Masters programme in Music and Media Technologies. Engineering has such universal applications - I hope that through contact with our different Schools, you will help design new courses for this new century. Because I do feel that 'internationalisation' necessarily incorporates 'interdisciplinarity'. It may seem difficult. But sixty years ago when your university was founded no-one could have envisaged this kind of cooperation between us.

I conclude by congratulating again Beihang University on its 60th birthday, and on its international educational activities and emphasis on university-industry cooperation.

Thank you very much.

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Provost speaking in Beijing

Monday, 29th October 2012

Address at Signing Ceremony with Singapore Institute of Technology (SIT)

Nanyang Polytechnic (NYP), Singapore

Minister for Health of Singapore, Mr Gan Kim Yong; Ambassador Hayes; President of SIT, Professor Tan Chin Tiong; Principal of NYP, Mr Chan Lee Mun, distinguished guests, Ladies and Gentlemen, good afternoon.

I'm delighted to be here on this historic day marking the new collaboration between Trinity College Dublin and Singapore Institute of Technology.

Today we commence our partnership with the launch of two programmes in Physiotherapy and Occupational Therapy, with recognition of the three-year diplomas in these disciplines from Nanyang Polytechnic.

TRINITY COLLEGE DUBLIN AND THE GLOBAL RELATIONS STRATEGY

Trinity College Dublin is one of the oldest universities in the world; founded exactly 420 years ago this year, it is Ireland's highest ranked university. Trinity is a multi-disciplinary university with faculties of Medicine, Law, Engineering, Humanities, Science, Social Sciences, and others. We are Ireland's highest ranking university and ranked 19th in Europe, and in 18 fields we are ranked in the top 1 percent in the world. We have particular research scientific strengths in neuroscience, immunology, bioengineering, microbiology and molecular biology. In the humanities, our School of English is ranked 3rd in the Europe after Oxford and Cambridge, and 14th in the world.

According to the *Times Higher Education* rankings, Trinity is also positioned highly – 16th in the world – in “international outlook”. I am particularly pleased by this ranking, because as president I put a lot of work into developing the international outlook of staff, students, and research projects.

In Trinity, we believe in exchanging ideas, research, and people with peer institutions round the world. We believe in a world community of scholars, teachers, and innovators, constantly striving for excellence, and we are delighted that recent technology and communications advances enable such a community.

But we don't believe that excellence and internationalisation happen automatically. We know we have to be proactive about strategising. To this end we recently launched our Global Relations Strategy, which addresses a

number of headline actions for globalizing research and education. These 5 actions include:

- Increasing student diversity and creating a cosmopolitan campus;
- Increasing research collaborations and staff exchanges;
- Creating markets for new courses;
- Encouraging an international mindset in staff and students;
- Finally, internationalising a city's innovation ecosystem.

Today, as we sign this memorandum of understanding with SIT, we celebrate achievement within the framework of our Global Relations Strategy. And we also celebrate and build on our long-standing relationship with Singapore.

SINGAPORE, IRELAND, AND TRINITY'S SCHOOL OF MEDICINE

Singapore and Ireland share certain characteristics. We are both small countries with similar population sizes of around 5 million. We are both islands – or collections of islands – and we were both formerly part of the British Empire.

Trinity has a particular connection with Singapore because since the middle of the 19th century, many of our graduates have come to work and settle here. These graduates were principally civil servants, lawyers and doctors; today there are also many business people. The Trinity doctors who rose to prominence in the Singapore medical service helped form a connection between this country and their alma mater – Trinity's Medicine School has benefitted, for a number of generations, from excellent students from Singapore.

Among our distinguished medical graduates from Singapore, I'd like to mention in particular, Dr Stanley Quek who sits on the board of Trinity Foundation and the Tercentenary Board of the School of Medicine. Formerly an eminent family physician, Stanley was also Ireland's Honorary Consul General, serving Irish communities in Singapore, Brunei and Indonesia in the 1990s, before the Irish embassy was established in 2000. He continues to make a tremendous contribution to Trinity and Ireland, and I am very pleased to see him here with us today.

Trinity's Medicine School has a particularly international profile, and as such it is an example of what we wish all our Schools to be. So it's no surprise that today's historic partnership between Trinity and SIT should be within the field of Health Sciences.

PHYSIOTHERAPY AND OCCUPATIONAL THERAPY

Physiotherapy and Occupational Therapy were first introduced as degree programmes within the School of Medicine in 1986. In Ireland, there has been a shift, over the last few years, of resources and activity to the primary

health care sector, which has led to opportunities for physiotherapists and occupational therapists to develop new initiatives in triage, rehabilitation, and extended care.

Recent physiotherapy research in Trinity has focused on exercise in prevention and management of disease, while in occupational therapy, research has focused on service provision in conjunction with community partners.

These research areas proved of great interest in Singapore, where the Ministries of Health and Education identified a need for diploma graduates in Physiotherapy and Occupational Therapy, to develop services in all health areas, but particularly in Primary Care, Extended Care, and Chronic Disease Management and Rehabilitation.

In October 2010, SIT made an initial visit to Trinity and proposed a partnership for the delivery of courses in Physiotherapy and Occupational Therapy. The achievement of this proposal is what we are celebrating today.

THE ONE-YEAR PROGRAMMES

Today, we launch two one-year programmes in Physiotherapy and Occupational Therapy. Students of both programmes will come to Dublin. Physiotherapy students will complete a placement in an Irish clinical setting, and Occupational Therapy students will visit practice sites in the areas of Primary Care, Mental Health, Older Adults and Cognitive Rehabilitation. They will also have lectures from clinical specialists practising in these four areas.

Graduates of both programmes will be equipped with skills in critical analysis, service planning, leadership, and global health, all of which are important in driving both professions forward and meeting the healthcare needs of the people of Singapore, particularly in the management of chronic disease.

Both programmes have attracted excellent students. We look forward to working closely with SIT over the coming years and expanding the current student intake, as well as the programmes at both undergraduate and postgraduate levels.

CONCLUSION

To get to the signing ceremony today took an enormous amount of work on the parts of Trinity, SIT and NYP. I would like to thank:

- the President of SIT, Professor Tan Chin Tiong and
- the Vice-Presidents, Mr Tan Chek Ming, Professor Ting Seng Kiong and Mr Chen Wing Leong,

- as well as their departmental staff, particularly Jonathan Lim and Aloysius Goh.

We are delighted with the academic staff appointed by SIT and we look forward to working with Dr May Lim and Dr Alan Wong in the coming years. I acknowledge in particular all Alan has done in setting up the programmes.

In NYP, I would like to thank:

- the Principal, Mr Chan Lee Mun,
- and the head of the School of Health Sciences, Cheng Mun.

The heads of departments and the academic staff in Physiotherapy and Occupational Therapy also proved invaluable in their support. I also would like to record my appreciation for the leadership role played by my colleague Dr Juliette Hussey. Collegiality is one of the fundamental values of Trinity College, so may I say how pleased I've been by the level of warmth and collegiality shown by our three institutions, and the willingness on all sides to overcome obstacles and put these programmes in place. By so doing we have enhanced the educational offerings of Trinity, SIT and NYP - as well of course as improving access to health care for the people of Singapore. Trinity is proud to play this role on the world stage.

When I consider this partnership – and other partnerships which Trinity has been able to form with peer institutes in Asia and round the world – I'm struck by the level of engagement, which even two decades ago no-one would have believed possible. Such engagement is thanks to technology developments, of course, but even more, it's thanks to a new mindset on all our parts.

A spirit of openness, of trust, curiosity and interest – a global spirit – is what we want and must educate for in the century.

We have a saying in English “where there's a will, there's a way” and I do believe that willingness to co-operate is the crucial enabler, from which technology advances followed. This has created an historic opportunity to advance the cause of higher education worldwide, for us to do what universities are all about – that is, creating opportunity for our young people through education; the academic formation of each individual matters so that their life chances and their career can benefit as much as possible from the economic and social developments of our times.

I look forward to more links between Trinity and Singapore. I'm thinking particularly of 'Science Gallery Singapore'. Trinity's Science Gallery was opened four years ago in Dublin; the Science Gallery is a pioneering concept which marries science and art. Some of you may have attended our exhibition 'Biorhythm' which was in the Singapore's Science Centre in August. We're currently in advanced discussions to establish a Science Gallery in Singapore, and I look forward to the day when there is a further palpable connection between Trinity College Dublin and Singapore.

Thank you for your attention.

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(L-R) Provost, Dr Patrick Prendergast; Minister for Health of Singapore, Mr Gan Kim Yong; President of SIT, Professor Tan Chin Tiong; Ambassador of Ireland to Singapore, Mr Joe Hayes

Tuesday, 6th November 2012

**Address at Trinity College Institute of Neuroscience
(TCIN) 2012 Symposium**

The Lloyd Building, Trinity College

Colleagues, Ladies and Gentlemen, Distinguished Guests,

You're all very welcome to the 2012 symposium of the Trinity College Institute for Neuroscience – TCIN, Ireland's only dedicated neuroscience research institute.

We welcome particularly our plenary speakers –

- Professor Art Kramer from the Beckmann Institute in the University of Illinois;
- Professor Geraint Rees from UCL; and
- Professor Jeff Dalley from Cambridge

- as well as our own distinguished Trinity speakers from the Institute of Neuroscience and from the CRANN Institute for Nanotechnology.

In a particularly strong symposium today; seven talks and three plenary sessions, highlighting the developing understanding of brain science and its ability to improve human health and quality of life, especially in ageing populations.

Our speakers hail from diverse fields of expertise, ranging from cognitive and behavioural approaches through genetic, cellular and molecular approaches – from many different 'levels of analysis' of the core issue, if you like.

TCIN was founded a decade ago, in 2002, as an interdisciplinary research institute with Principal Investigators from a wide range of disciplines, including psychology, physiology, biochemistry, engineering, psychiatry and genetics, among others.

Given its diverse disciplinary origins, it's no surprise that interdisciplinarity is at the core of TCIN's research effort. This is true not just of neuroscience but of much of Trinity's research in general. Our values and our vision have convinced us of the proposition that problems are best solved, and inspiration best gained, by combining strengths across the many disciplines of this multi-disciplinary university, and within disciplines themselves by being ambitious about working across many levels of analysis within our research institutes.

The Neuroscience Institute currently has about 45 academic and clinician-scientist Principal Investigators. Over the past three years, these Principal

Investigators have produced over 450 articles in peer-reviewed international journals, and these articles have placed the Institute in the top 0.01% of neuroscience institutes in the world by citations.

We are very proud of this Institute, also for its commitment to raising public awareness of neuroscience. The Institute hosts a public lecture every Tuesday. There isn't one today because of this symposium, but otherwise through to the end of term, there are lectures on stem cells, neuro-imaging, pain processing and other areas of public interest.

The Institute also works closely with the Science Gallery. In 2009, the Gallery launched METROPOLIS, a virtual Dublin project bringing together computer graphics, engineering and cognitive neuroscience research. Next year the exhibition RISK LAB will feature experiments that span neuroscience, genetics, and mathematics, and will explore how we determine the probability of everything from a car crash to a coin toss.

ILLUSION will explore the neuroscience and physics of illusion, and investigate how perception underpins how we see, feel, think and understand the world. These exhibitions may someday tour the world as part of Science Gallery International.

Neuroscience is a core research area for Trinity. Another core Trinity research area is Ageing. Six years ago we established the ground-breaking Irish Longitudinal Study on Ageing, which we call TILDA. It has put this university at the forefront of cutting-edge research in ageing. TILDA researchers hail from a wide range of disciplines including epidemiology, geriatric medicine, demography, social policy, psychology, economics, and nursing.

Given these core strengths, it's no surprise to find that ageing is a particular focus for our neuroscience researchers. Ageing is a major theme of this symposium, and it's a major focus in TCIN's collaboration with industry partners.

Trinity puts great emphasis on innovation and the commercialisation of research, and neuroscience has proved particularly fruitful in this area. TCIN's collaboration with Intel and with General Electric has focused on the development of technologies to support independent living in old age, while collaboration with GlaxoSmithKline involves translational research to accelerate the development of novel therapies for Alzheimer's disease. Through these and other means, TCIN contributes substantially to the public good, showing the effectiveness of universities in advancing human health and welfare.

* * *

The brain and its inscrutable workings remains one of the great frontiers of human knowledge and of medicine. We know so much more than we knew fifty years ago, but nothing like as much as there is to know. True knowledge

proceeds in small steps, with occasional “giant steps”, often difficult to recognise at the time.

About forty years ago the English poet, Philip Larkin wrote a terrifying poem about old age, in which he starts off by asking:

“What do they think has happened, the old fools, to make them like this?” and he ends with the flat: “Well, we shall find out.”

That poem tapped into both the universal significance of old age – it happens to most of us and we want it to happen, the alternative being worse – and also into the fear of old age – we don’t know, we can’t know exactly what it will be like, and it can seem remote and frightening.

Academic research helps demystify this fear. Institutions like TCIN, and symposiums like this one, pour light onto the brain’s extraordinary workings - into creativity and also into ageing and mental disorders. In their scholarly way, neuroscientists present their findings, and slowly and subtly change the way people think.

Poets reflect, lead, or encapsulate the sensibilities of their eras. This century a poet may write something equally powerful but less terrified about the end-stage of life. Larkin said of ageing:

“we shall find out”,

meaning of course that we would become old ourselves. But we’re in the process of finding out before we reach that stage. Which in itself is a kind of miracle that has the potential to surprise us.

As researchers, we crave only the space and the investment to keep making discoveries. In yesterday’s *Irish Times* Professor Jim Heath had strong words to say about possible government cuts to science research. As you all know Heath was on the team that won the 1996 Nobel Prize for Chemistry and he was named by *Forbes* magazine in 2009 as one of the world’s top seven innovators. He is also on the advisory scientific board of Trinity’s CRANN Institute for Nanotechnology. In his words quoted yesterday:

“Do the science that supports the economy but also the science that is able to surprise.”

TCIN does both with excellence. I congratulate you on that and wish you well in the symposium today.

Thank you

* * *

Wednesday, 7th November 2012

**Address at Conference on North-South Experiences of
Doctoral Training for Development in Africa: The Impact
of Partnership**

Long Room Hub, Trinity College

Thank you Martina.

Colleagues, Ladies and Gentlemen, Distinguished Guests,

You're all very welcome to the Trinity Long Room Hub, and to the fourth annual Trinity College Development Research week.

As Martina has said, this is a week of modules, lectures, and public talks on development issues. Today we look at models of partnership in collaborative doctoral programmes between Trinity College and higher education institutions in six African countries.

I'm particularly pleased to be addressing you on this subject. During the summer I took the opportunity to visit the National University of Rwanda, NUR, which partners Trinity through the joint Trinity/UCD Masters in Development Practice – the MDP. It was a wonderful visit.

As it was outside term time I was able to take a week and tour round Rwanda, including two national parks. It was my longest official visit to a university and to a country, and it reinforced our strong commitment to Trinity's International Development Initiative and to our Global Relations Strategy.

Rwanda, as we know, has suffered horrifically, in ways that it's difficult to even contemplate, and which I'm certainly not qualified to comment on. I can only say that as an academic and the head of a university, I was impressed by what I saw of the National University of Rwanda and Kigali Institute of Science and Technology – their educational priorities, and these institutions opening up educational opportunities to young Rwandans. I enjoyed great discussions with the rectors and staff on innovation in universities, and the place of academic freedom, and the returns that can be obtained from it.

As we know, education is a priority of international development - countries which invest in education invest in their future. I was delighted to find Rwanda so committed to the third level sector and I'm really pleased that Trinity is partnering NUR, to the great mutual benefit of both our institutions.

Meeting Trinity students engaged on field work in Rwanda brought home the importance of inter-institutional collaborations and of student and staff exchanges.

Not all the studying nor all the virtual communications in the world can replace the experience of actually living, working and researching in another country. The students I met were gaining phenomenal experiences, and their perspectives were constantly being challenged. Their research projects were very interesting: I remember a stimulating discussion, for example, on the mechanism of setting prices in coffee bean cooperatives.

Academic collaboration between countries is about combining best practices, and learning from each other.

* * *

I'd like to talk briefly now about Trinity's commitment to international development, and about our global strategy.

The Trinity International Development Initiative, or TIDI as we call it, was established five years ago, in 2007. The need for this initiative arose from our understanding that Development should not be isolated as a separate discipline since it is relevant to numerous Schools and research interests.

Over a hundred Trinity staff members across eighteen Schools identify as having a research interest in International Development, including researchers in biodiversity, environment, IT, human rights, economics, and health. Development plays to Trinity's strengths as a multi-discipline university.

What this means is that international development has joined the growing number of areas that we, in Trinity, treat as multidisciplinary and cross-faculty. I think also of neuroscience and ageing, and also the research themes here in the Trinity Long Room Hub such as "The Human Condition". We have stated in our strategic plan that "we value the university as an interactive, multidisciplinary community with a passion for ideas and a love of learning". We believe that problems are best solved, and inspiration best gained, by combining strengths across disciplines and levels of analysis.

Combining strengths also means going beyond the college walls. As well as being multidisciplinary and cross-faculty, Development is also, by priority and design, inter-institutional. Researchers in Development have always forged links with colleagues in developing countries and students have undertaken field work abroad. This has been happening for very many years. In recent times such connections have been formalised and brought to a new level with, for instance, the memoranda of understanding signed with universities in Uganda, Rwanda and South Africa.

Last year International Development was named as a priority research theme for Trinity. We want all our research areas to show the level of inter-institutional engagement demonstrated by TIDI, and we want to further strengthen such engagements. Today we're comparing and contrasting three different models of partnership in collaborative programmes with higher education institutions in six African countries. And it's quite an achievement to be in a position to compare three different partnerships with six different countries.

Development is a proactive research area. It deals with vital issues such as global health, climate change, gender studies, biodiversity, and human rights. It's vital for research findings in these areas to inform national and international policy. As such it's important for development research centres, like TIDI, to have access to, and link-up with, government and international aid and development bodies. I'm delighted to say that TIDI's engagements on this front have been excellent.

In the context of the Doctoral Training in Development Programme under discussion today, and of Trinity's Development Research Week, I would like to acknowledge the support of Irish Aid and of the HEA. We look forward to Dr Vincent O'Neill from Irish Aid addressing us later. Irish Aid is recognised the world over for its remarkable work on poverty eradication, combating disease, empowering women and improving access to education in developing countries. Trinity is honoured to be assisting with the research that supports Irish Aid missions.

* * *

Building global networks through international research collaborations and jointly-delivered programmes, and improving the student educational experience through travel and cultural exchanges have been identified as key actions within the new Global Relations Strategy.

This strategy - which also looks to increase the number of international students in Trinity and to develop alumni networks - was approved by the Board in May of this year.

It is a new Strategy - but it formalises a mission and a philosophy as old as the College itself. Trinity has never been about splendid isolation. It has always reached out to the wider world and delivered an education that is open, explorative, flexible, questioning, and sceptical in the best sense.

So, our Global Relations Strategy represents no radical new direction. Being open to experience and to the world is a long-standing core educational principle.

What is new is that we're now being proactive about building global networks, and we recognise the great opportunity presented by improved travel and new revolutionary means of communication. In previous centuries, it simply

wasn't possible for Trinity, or any university in these islands, to offer joint programmes with universities in Africa or other continents. Now that travel and communications do allow this, international collaborations are not an optional extra, but an imperative. To fail to build global educational networks would be to go against our core principles.

We recognise that while we're fortunate in Trinity's international heritage, if we want to maximise potential, we have to strategise, prioritise and allocate resources. We must improve our messaging abroad and focus global interest on Trinity.

We have to co-ordinate all activities towards this core aim of making Trinity a university of global consequence. We will do this through collaborative research, through internationalising staff and students, through establishing new jointly-delivered courses, and through building on the great resource of our alumni – of which there are now 90,000, living in over 130 countries around the world.

We launched the Global Relations Strategy just two months ago. It is a key priority of my provostship. But I don't need to lecture the International Development Initiative about global relations.

Indeed, TIDI leads the way on this and provides an example to the whole College about best practice in developing global networks and improving the student educational experience.

So, in conclusion, I congratulate all involved in making TIDI a success. The findings of today's conference on the assessments of different models of partnership will have relevance not only for Doctoral Training in Development but for future collaborative programmes in other college research areas.

Thank you for your attention.

* * *

Thursday, 8th November 2012

Speech at the Retirement of Anne Fitzgerald, Secretary to the College

Senior Common Room, Trinity College

Anne FitzGerald, on behalf of Trinity College, I'd like to pay tribute to you and thank you for your service to this university. We're here to recognise your outstanding university career, and in particular the last three years when you served with such distinction as College Secretary. You've left an important legacy, which it's my pleasure to talk about this evening.

But allow me first to welcome everyone here tonight. What a great turn out this is! It's a tribute to your popularity and the esteem in which you're held. We welcome, in particular, your husband Ronnie. We know how delighted he is to get you back from us!

I'm not surprised by the turn-out. You have held such a key role within the College, and you have had responsibility for such a wide range of portfolios; you have come in contact with a huge number of people, and have been instrumental in helping them in their work. Always in that firm way you have of sorting things out and, of solving problems.

From when I was Dean of Graduate Studies, and then later Vice-Provost, and now as Provost, I have been the great beneficiary of your sound advice, your insights and good sense, your formidable organisational skills and your remarkable knowledge of the workings of this College. You'll be glad to know that we've had one Board meeting since your departure and your successor has done very well - we didn't keel over - but it will be strange not to have your reassuring presence at Board.

At times I must admit, as a fledgling Provost, that I felt like the hapless star of 'Yes, Minister' as my enthusiastic but naïve proposals were diplomatically reduced to least-best options before eventually being set aside. "*That would be unnecessarily brave*" I think was one diplomatic response - "*That wouldn't be the right move*" was another, sterner one. But I always knew just how lucky I was to have someone of your experience and humour to try out my proposals on. And I always knew that if an idea did pass, then the ground was safe.

* * *

You're a Trinity Graduate – "Trinity by the grace of God" as Denis Burkitt would say. A graduate in science and geography, but your career has been diverse, and much of it outside these walls. You worked in RTE and Forfás, then called the National Board of Science and Technology. When you returned to Trinity in 1997 as Assistant Secretary to the College, you brought

a portfolio of skills and experiences gained from working in state and semi-state bodies - an understanding of budgets, legal frameworks, governance and compliance. All these skills were placed at the service of this College, and in your time here you helped effect necessary change and equip us for the challenges we'll face in the future.

Your fifteen years with us spanned an extraordinary period. You arrived in 1997 just as the boom years were taking off, and you shared our pride at seeing the work and vision of this great university rewarded as Trinity took advantage of the economic vitality of the times to expand and modernize.

You then took over as Secretary in 2009, when the recession was starting to bite. For the past four years we have all had to deal with much reduced budgets and with the massive pressures on the Irish higher education system. The change between boom and bust has been dramatic, for Trinity as for the rest of the country.

It has not been easy, but, - and I know everyone here will agree with me on this Anne - had it not been for you, it would have been much harder again. Your calmness, restraint, accountability and humour; that willingness to engage in even the knottiest of political problems; that sure sense of what is possible and how to achieve it, has helped see us through.

In Trinity we like to point out that we behaved responsibly during the now-notorious boom years. The way I put it in my inaugural address last year was:

"We didn't lose the run of ourselves. We adhered to our age-old values of prudence and vigilance."

Now some may recall that originally I worded this a bit differently. A bit more flamboyantly. I wanted to say:

"There were no decadent Gatsby parties; staff didn't whisk from first class flights to waiting limousines".

Or another version which went: *"There were no season tickets for the big matches".*

Well, Anne you stopped me from saying any of those things for reasons it's perhaps best not to dwell on. But rightly, in retrospect!

Your timely intervention on that occasion shows just how much you embody those ageless Trinity values of prudence and vigilance. It is vital for the Secretary to set the standard for trust, integrity and accountability, and that is what you did. In boom and bust you steered an admirably even course. More than most people I know, you live up to Kipling's entreaty "to meet with triumph and disaster, and treat those two imposters just the same".

We all know how the end of that poem goes: "then you'll be a Man, my son!". Well I dare him to say it to Anne!

Yours was an historic Secretaryship: you were the first female College Secretary. Margaret Thatcher was accused, in her historic position as first female British Prime Minister, of doing little to encourage women's rights or equality. That accusation could never be hurled at you.

You had responsibility for College Equality, and in 2004 you oversaw the Women's Centenary Celebrations marking the admission of women to Trinity in 1904. The culmination of the events was an all-women's dinner in the Dining Hall. Twenty years on from when Mrs Thatcher left office, she remains the only female Prime Minister, and with no contenders in sight. I don't expect you to hold your lonely distinction for any sustained period. It is not what you would wish and not what you have worked to achieve.

As well as overseeing the organisation of an impressive 249 Board meetings since joining Trinity, and providing advice, guidance and leadership on governance, compliance and legal matters – which duties might be summed up as 'keeping the Provost out of scrapes!' – you have also held responsibility for diverse portfolios including Communications, Web Design, College Equality, Irish Language and Information Compliance offices, and indeed most strangely of all, the College Art Collections.

Your personal support for these areas has helped form them into the well run offices we see today. And your support was never merely dutiful. Last month we proudly opened Seomra na Gaeilge – a room for Irish language speakers. This you had been working on behind the scenes for some time - scheming as only College Secretaries can do - and when the opportunity of an unused common room emerged, you closed the deal, refurbishment and all, before anyone noticed. You then persuaded me to make a speech in Irish at its opening - which I did my best to.....

I'm not sure if you're planning on writing your memoirs – I suspect you might think it imprudent – but as I say you were with us during an extraordinary period and you were at the heart of great events. Within two years of your returning to the College, you were faced with the Y2K scare. Your motto being, then as now, "Fail to prepare, prepare to fail", you made preparations to save us from impending doom, which fortunately as it turned out, we did not need to call upon.

The following year came the Anthrax scare. A suspicious substance arrived in the post. You took steps. The Director of Buildings office was placed under quarantine, and a fire brigade sent down a "decontamination" unit. After decontamination, you and about six other staff members were given lovely blue overalls to wear and transported off to St James's Hospital for further examination. Seven members of Trinity College staff in blue overalls was a strange sight. On being asked where you were from, I believe it was Noel McCann who replied – "We're from the Joy!!"

And in 2011 the eyes of the world were on Trinity College, first for the Queen Elizabeth's historic visit in May and then for President Obama's visit to College Green.

There probably aren't two people in the world more carefully guarded and closely scheduled than the Queen and the President [of the United States]. I know that there were months and months of security checks, scheduling, organization, and protocols. I can only imagine how relieved the British and American organisers must have been to be dealing with you. I know how many hours you put in to ensure that these visits came off, particularly the Queen's visit which took place on College grounds.

After all your hard work, you were rewarded by appearing on the televised coverage of the Queen's visit. It wasn't quite Andy Warhol's fifteen minutes of fame, but it was certainly a good few seconds! But I know of course that your true reward came from seeing the visit go off so smoothly and in such style.

There was never any doubt in my mind in all my dealings with you, but that you were always motivated by what was best for Trinity. Your loyalty to the College is reflected by your staff's loyalty to you. Of course many of the anecdotes in this speech were given to me by your staff, and I have been struck by the warmth and regard in which you're held. On behalf of the College may I thank you for fifteen years of remarkable service. On my own behalf, may I say that I will never forget how you steered me through my first year as Provost, and that I shall miss you.

I wish you a well-earned and wonderful retirement. I will endeavour to be unselfishly delighted for Ronnie that he will get to see so much more of you, and also for the Leinster Rugby team that you will see much more of them.

* * *

Friday, 9th November 2012

Opening Address to the 15th Annual Meeting of the Institute of Molecular Medicine

Durkan Theatre, Trinity Centre for Health Sciences, St James's Hospital, Dublin

Colleagues, Distinguished Guests, Ladies and Gentlemen,

You're all most welcome to the 15th Annual meeting of the Institute of Molecular Medicine here in the Trinity Centre for Health Sciences in St James's Hospital.

It is, of course, an exciting time for St James's. Those of our visitors coming from abroad may not be aware that St James's has just been named as the site of a new children's hospital.

The National Children's Hospital, which is to be developed on a 16 acre site on this campus, will complement St James's existing services. Trinity has long been associated with St James's, opening the Trinity Centre for Health Sciences here in 1994. We're delighted that the National Children's Hospital is to be located here and that Irish medical schools will now have a first-rate academic teaching and research hospital for the associated disciplines. We look forward to developing a strong relationship with the National Children's Hospital.

Professor Padraic Fallon, Interim Director of IMM is Professor in Translational Immunology who works with the National Children's Research Centre, in the area of inflammatory disease in children.

I know that Professor Carlos Blanco, who is Director of that Centre, is here today and I welcome him to this meeting. On the eve of the Children's referendum, it's exciting to think of how Padraic and other IMM researchers will co-ordinate with the National Children's Research Centre and with the new National Children's Hospital to deliver better services and improve the health of our children.

Today's conference is on the theme of inflammation and immunity. On behalf of IMM, I'd like to extend a welcome to all of today's speakers and chairpersons, and a particular welcome to the speakers from abroad, Professor Ken Smith, a world leader in auto-immunity from the University of Cambridge, and Professor Anne O'Garra, from the MRC National Institute for Medical Research, who is a leading authority on immunity to tuberculosis. You can look forward to some great papers.

* * *

I'd like to talk briefly now about the Institute for Molecular Medicine, and about Trinity's general approach to health science education and research.

The Institute for Molecular Medicine, or the IMM, was officially opened in 2003. It grew out of the MSc in Molecular Medicine which has been running for sixteen years now, and out of a PhD programme. Today, the IMM also offers a Diploma in Molecular Medicine.

IMM is funded by the Higher Education Authority and has also received considerable philanthropic support. We are today in the John Durkan Memorial Lecture theatre. This is part of the John Durkan Leukemia Research Laboratories, which were funded by Bill and Beatrice Durkan in memory of their son John who died from complications following bone marrow transplantation while being treated here in St James's.

John was a noted horse trainer, and outside this lecture theatre are the racing silks from the jockey who rode his most famous horse, Istabraq.

IMM was founded as a Centre for Excellence to permit the rapid translation of bioscience from the lab bench to the patient in the hospital bed. Today it houses over forty Principal Investigators and 150 scientists.

A unique feature of IMM is that it is an environment of basic and clinical scientists. Clinician scientists from both St James's Hospital and Tallaght Hospital run active research groups in IMM to great effect.

Indeed Professor Mark Little of IMM and Tallaght Hospital was the recipient of a prestigious SFI President of Ireland Young Researcher Award. This is only the second time a clinician has received this award, and the first clinician awardee, Professor James O'Donnell, is also an IMM Principal Investigator. Two other IMM clinicians, Professor Joe Keane and Professor John O'Leary, were recently awarded Health Research Board awards.

You get the picture: we're very proud of this Institute, its researchers, and the work they do. Research in IMM encompasses six of Trinity's 18 multidisciplinary thematic research areas:

- Next Generation Medical Devices,
- Cancer,
- Neurosciences,
- Infection and Immunity,
- Nano-medicine, and
- Ageing.

Interdisciplinarity is a hallmark of Trinity research. Our animating ethos rests on the belief that problems are best solved, and inspiration best gained, by combining strengths across disciplines and levels of analysis.

One of my pledges when I took office as Provost last year was that Trinity would “play for Ireland on the world stage”. What I was hoping to get across with this statement, was that Trinity is proud of its position as Ireland’s highest ranking university, and that we accept the responsibility which comes with being in receipt of both public and private funds.

Trinity’s accountability, excellence in research, and international standing, is a key component of how we tackle the challenge of economic and social regeneration in this country. In Trinity we are used to strategizing around the idea that what’s good for the university is good for the country, and vice versa.

We know that the location of the Trinity Centre for Health Science here in St James’s has been good for the hospital, and therefore for the people of Dublin and Ireland. I have no doubt that IMM will remain at the epicentre of future developments on the St James’s Hospital campus.

Such developments will include not only the new National Children’s Hospital, but the Wellcome Trust/Health Research Board clinical research facility. We all look forward to the opening in Spring 2013 of this facility, under the directorship of Professor Michael Gill.

And the next phase of IMM’s development is already underway: it will involve the creation of a new institute, the Trinity Translational Medical Institute, or TTMI. This new institute will help our researchers to “translate” rapidly from major discoveries to the development and use of new drugs and devices for patients.

By the way, if you want further elucidation on this term ‘translational’ in connection with medicine, you can ask the only person with the work ‘translational’ in his job title: Professor of Translational Immunology, Padraic Fallon, who is today delivering the 9th IMM lecture, which is in fact entitled “Translational inflammation from mice to men”.

This year saw the formal launch of Trinity Health Ireland, a collaborative initiative between Trinity College Dublin, St James’s Hospital and Tallaght Hospital.

Trinity Health Ireland’s vision is: “to measurably improve the quality of life of our patients by delivering a world-class healthcare system, which seamlessly integrates community, primary and social care with specialist hospital care, and rapidly delivers the benefits of new research and therapies to the healthcare system”.

Thus research in our new Trinity Biomedical Sciences Institute on Pearse Street will progress via IMM and the future Translational Medical Institute, through the new Wellcome Trust/HRB Clinical Research Facility, to the patients in our associated teaching hospitals of St James’s and Tallaght.

And I hope someone will draw me up a flow-chart of that!

On a more serious note, we know the shortcomings in the Irish healthcare system – we read about them on a daily basis and some of us have experienced them. There are few jobs more vital in government than improving healthcare –President's Obama recent re-election is testimony to dealing resolutely with issues surrounding healthcare systems. Trinity is committed to playing its part in making this country's healthcare system world-class.

Thank you very much.

* * *

Friday, 9th November 2012

Address to the TCD Association of Northern Ireland

Malone Golf Club, Belfast

Ladies and Gentlemen,

What a pleasure and privilege it is to be here tonight in this fine club. And how wonderful to see so many of you gathered.

Tonight we celebrate your connection with Trinity College. As Provost I've had the pleasure of attending a number of alumni dinners, because of course Trinity has alumni all over the world – On the last count, 92,000 alumni living in 130 countries. Two weeks ago I was in Singapore, which I found a veritable hotspot of Trinity people. A lot of doctors, not unsurprisingly, but also lawyers, business people, and even a former Honorary Consul for Ireland.

But it's particularly special to be in Belfast because Trinity, which is also known as the University of Dublin, has never been merely a University for Dublin; or indeed for Leinster. It never was a regional university. Trinity has always drawn students from around the country, North and South. Today it admits students from all over the world – and I'll talk later about our global strategy.

It is an epicentre for students from around Ireland and the UK. On graduation, some remain in Dublin and Ireland. Many go to London, Belfast, and further afield. All retain, as do all here tonight, a profound attachment to their alma mater. Countless silken ties of love and thought, as Robert Frost put it.

Trinity has been particularly fortunate in the talent it has attracted from the North. I think, in the 19th Century, of the politician Isaac Butt and the physicist Thomas Andrews.

In the 20th Century:

- the judges Sir James Andrews, Lord Chief Justice of Northern Ireland, and Sir Donnell Deeny of the High Court;
- the poets Michael Longley and Derek Mahon;
- the journalist and BBC governor Lucy Faulkner, who was wife of the Prime Minister Brian Faulkner;
- And of course our former President, Mary McAleese, who was Trinity's Reid Professor of Criminal Law;

- the great Denis Burkitt who gave his name to the childhood cancer Burkitt's lymphoma; and the late lamented historian R.B. McDowell.

Indeed I always think of Burkitt and McDowell as the quintessential Trinity graduates. Burkitt, who was born in Enniskillen and attended Portora School, coined that line which I'm always quoting in speeches: "Irish by birth, Trinity by the grace of God".

R.B. McDowell, who was educated at the Royal Belfast Academical Institute, was a Trinity fixture. He entered College as an undergraduate in 1932 and he resided there until he was 94. He never retired. He wrote two histories of the College and every undergraduate, certainly every arts undergraduate, has an R.B. story.

Mention of Portora reminds me that this great Enniskillen institution was something of a feeder school for Trinity. I think of Oscar Wilde and Samuel Beckett.

But I guess I've made my point! Trinity is not just the University of Dublin, but of Ireland, and Trinity without its Northern Irish alumni would quite simply not be the same place.

Some of the 1960s Northern Irish students have left their inimitable recollections of life in Trinity as undergraduates. Michael Longley wrote of "inhaling poetry with our Sweet Afton cigarettes. We smoked and drank like troopers. We read our poems in public for the first time." Derek Mahon wrote: "Trinity in those days wasn't much about work, although quite a lot of reading got done." I must say I think that's a quite wonderful distinction between work and reading. In Trinity we aim to produce creative, innovative students who think outside the curriculum. Ideally I'd like them to work and read. But if they can't do both, I'd take the reading. Certainly if it produces poets like Mahon.

Memories like these provide the beautiful social history of the college, which is missing in more official accounts. Everyone here tonight has their own memories of student life in Trinity.

In the bad old days of Archbishop McQuaid in the 1950s and 1960s when Catholics were forbidden to attend Trinity College, there were as many Northern accents heard in Trinity as Dublin ones, possibly more. That's part of our social history.

The situation today is a bit different. McQuaid's ban was lifted forty years ago and there is now no shortage of Dublin accents. But as many of you are aware, in recent years the number of students coming to Trinity from Northern Ireland has fallen dramatically. There are complex reasons for this, which I'd like to go into tonight because this is a crucial issue.

Trinity recently launched its new global relations strategy. You may have heard, or seen reported in the media, our ambition: "to be Ireland's university

on the world stage.” A key action towards achieving that ambition is to encourage more international students and more student exchanges.

By bringing together a community of scholars and staff of all religions, and none; of all political beliefs and none; we help challenge fixed ideas and generate new ideas. One of my predecessors as Provost called Trinity “a small republic of letters”, and we take pride in living up to that ideal. A rich learning environment means diversity in the College. And that includes, of course, Irish diversity. To play on the world stage, we need to inhabit the home stage. A Trinity College taking in students from Africa, Asia and America, but few from Northern Ireland? That’s not what I want. That’s a betrayal of our traditions and roots. To be international is, first, to be local. Ireland has a particular talent at making the local international; how do we take advantage of this? Well, before I consider this question, I guess I should introduce myself properly, since after just a year in office, I’m still something of a neophyte Provost.

****PERSONAL CONTEXT****

I’m an engineer - BAI 1987 - from Wexford, from a small place called Oulart, known only to sporting enthusiasts and historians of 1798. My father was a haulage contractor and my mother a nurse at St Loman’s Hospital, Dublin, who became what we now call a homemaker when she married.

I’ve spent most of my career at Trinity because I fell in love with it as an undergraduate, but I had two long stints abroad, doing post-doctoral work in Bologna and the University of Nijmegen in the Netherlands, and I’ve also held visiting professorships in Warsaw, Delft, and Barcelona.

My experience abroad left me with more than just a smattering of some European languages, but with an absolute zeal that all Trinity students get to have a similar experience of living and studying abroad. At the moment the proportion of students who spend time abroad is about one in twenty. One of the goals of my provostship is to improve that figure.

My own research, since the late 1980s, has been in the area of medical devices. This has been most rewarding, not only because Trinity is at the forefront of next generation medical device research and the sector is one of the growth areas for Ireland’s economic recovery, but also because this research is interdisciplinary, combining the strengths of engineering and medicine.

Interdisciplinarity is one of the key strengths of a Trinity education. I know there are those here who graduated decades ago and I think you would agree that your education was broad and wide-ranging, but in recent years the emphasis on interdisciplinarity has been deepened and formalised across all schools.

The Trinity College Institute of Neuroscience for instance has Principal Investigators from Psychology, Physiology, Biochemistry, Engineering, Psychiatry and Genetics. While our Centre for Nanoscience brings together researchers from Physics, Chemistry, Medicine, Engineering, Pharmacology, and Chemistry.

When it comes to these and other interdisciplinary research areas like Immunology and Clinical Medicine, Trinity is ranked among the top research institutes worldwide, so we know interdisciplinarity is working.

Just over a year ago I put myself forward as Provost – having served as Vice-Provost & Chief Academic Officer – because I was excited about some of the changes I saw in College which pointed to what Trinity could achieve. I was also apprehensive about potentially less desirable outcomes and wanted to be in a position to influence things for the better.

These are difficult times, but also times of potential radical change. People can be more inclined to take risks during crises because they've invested less in the status quo. So it's an "interesting" period to be taking up the provostship – although I know that's also a Chinese curse!

When I consider the intractable issue of funding and student fees, currently tormenting the government and the third level sector in Ireland, the word 'cursed' certainly comes to mind! But I'm not going to go into funding tonight, you'll be glad to know.

I would say just two things: first, Irish universities are falling down in the rankings and everyone accepts that this is due to under-funding; and second, let's have a discussion with all options on the table and nothing "off limits". We will only find a solution if we're calm, flexible and realistic.

ADMISSIONS

Let me turn now to the other issue currently perplexing us: the issue of admissions, which I touched on earlier when I spoke of our distress at falling numbers of students from Northern Ireland.

As I've said, there are complex reasons for this, and the reasons vary round the island. Certain counties in Ireland have strong links with UCD, NUI Galway, or UCC, and little past tradition of sending students to Trinity. In these counties we want to go on a recruitment drive but we're not, as it were, reclaiming. However when it comes to Northern Ireland, well I guess I feel a bit like President Obama would if New York and Massachusetts were suddenly to vote red! What did we do wrong? How can we reverse this?

Let me outline for you some of the biggest problems and the steps we are taking to address them:

One major obstacle is that Northern Irish applicants know little about the CAO system we use to admit students, and some schools actively discourage their students from applying through the CAO. We have not helped matters in recent years by taking no active steps to encourage applications from Northern Ireland.

Under my Provostship, all of that is starting to change. We know the importance of peer influence, so one of my initiatives has been to recruit student ambassadors from every county in Ireland, who will challenge misconceptions in potential students.

So far 174 students from all 32 counties have applied to become ambassadors. 21 of these are from Northern Ireland. Let me read you a selection of things they've said because their love of Trinity has inspired me, and I hope it will inspire you.

A student from Antrim had her bags packed to go to university in England, before accepting a place in Trinity to study Law. She told us that, in her school, students were encouraged to apply through the UCAS system, and that information about the CAO system was discouraged.

Now that she's in Trinity, she is actively involved in our clubs and societies and is currently doing an Erasmus exchange programme, studying at Leiden University in the Netherlands. So a student after my own heart! She says:

"Little is known in my home county about what a special place Trinity is - the unique campus atmosphere, the overwhelming variety of societies. The courses available at Trinity are diverse, and immersed in the experience and enthusiasm of excellent lecturers. Even more than that, the prestige and long history of excellence emanating from the College make an education from Trinity stand out."

Another student from Donegal reported that he was initially concerned about fitting in given his strong northern accent and farming background, but he quickly came to see Trinity as a 'hidden paradise', where 'diversity, in all shapes and forms is accepted and celebrated'. According to him: "Trinity often feels like Hogwarts, except here the magic really happens!"

These ambassadors will be telling their stories on a new *Trinity Explore* website, and we hope in the next phase to have them return to schools nearby where they're from, share their experiences, and inspire the next generation to follow in their footsteps.

There are, unfortunately, other obstacles to Northern Ireland recruitment, and some of these are more systematic. The value of A-levels compared to Leaving Certificate results has been downgraded in the CAO system, and unless students are studying four A-levels then entry into our most sought-after courses is almost impossible.

Our solution here is a radical one.

We believe the entire Irish university admission system is in need of reform. Trinity has approved a feasibility study to see if we can adopt a more holistic approach in admitting students with the academic ability and potential to thrive at third level, and this is our contribution to informing national policy in the area.

The study will be launched in December, and in 2013 we will be admitting students onto three of our courses, including Law, using a number of different scales to evaluate applicants. One benefit of this approach is that Northern Ireland applicants will no longer lose out when their A-level results are evaluated.

We are making this radical move because we believe it's not good enough to just spend our time talking about leadership. We have to lead. And this is one area where we're determined to play our part.

*****GLOBAL STRATEGY*****

When we invite students from all round Ireland to Trinity, we're inviting them into a truly international environment.

Higher education today is increasingly a globally traded and borderless activity. Staff, students, and research projects switch between countries and institutions, going to where the money and expertise is. People and projects no longer belong exclusively to one institution, but are truly international.

A world-class university in the 21st century has a multicultural campus, with staff and students hailing from round the world. Both staff and students refresh their ideas and perspectives by taking frequent sabbaticals and exchange programmes abroad. Research is collaborative and inter-institutional, taking advantage of global academic networks.

Trinity is positioning itself to be just such a world-class university. In the last few weeks alone I've signed memoranda of understanding in China and Singapore to deliver joint student training programmes. And the winners of the 2011 Nobel Prize in Physiology or Medicine, Bruce Beutler, Jules Hoffmann and Ralph Steinman, are close collaborators of Trinity's School of Biochemistry and Immunology. I could give you hundreds of other examples of the moves Trinity is making towards globalization, but I'm aware of having already held your attention long enough.

So I'll just say that this is not something I leave to chance. I'm aware of the need for a co-ordinated, targeted approach to globalization. I recently created an entirely new post: the Vice-President for Global Relations, to which I appointed Professor Jane Ohlmeyer from the School of Histories and Humanities. Her goal is to improve our messaging abroad and focus global

interest on Trinity. By creating such a post we are seeking to co-ordinate our activities towards the aim of opening Trinity to the wider world.

Again, I don't have time to go through all these activities. But in sum, Professor Ohlmeyer's role is to precisely articulate our core message.

What is our core message? Simply that our education and research are world-class and we want to share them. Articulating this will involve telling the story of Trinity's excellence in a vivid, accessible way, and telling it strategically in places where we most want to be heard, and where we can have most effect.

ALUMNI

When it comes to spreading the message, of course we seek to enlist the support of our alumni. Indeed one of four key actions of the new Global Relations Strategy is "to further connect with our global alumni."

The reason why so many students from Asia come to Ireland to study medicine is because when the newly qualified doctors go back to their own countries, they spread the word.

And back in the 1960s when Kathy Gilfillan from Eglinton, just outside Derry City, was planning to go to Edinburgh or Sussex she was persuaded by her "inspirational English teacher", who was one of our graduates, to apply to Trinity instead. When Kathy arrived to start her course, she had to ask directions to Trinity, because she'd never been in Dublin before, although she'd hitchhiked across Europe. Kathy is now editor with Lilliput Press, one of the best small presses in the country. She is married to U2 manager, Paul McGuinness, whom she met at Trinity. And she has helped greatly with Trinity's fund-raising initiatives, including recently the fund for the Long Room.

If her teacher hadn't encouraged her, Kathy's and Trinity's trajectory would have been so different.

So, to you, our alumni, I thank you for your wonderful support for Trinity College. Alumni networks are key to the success of the contemporary university, and I'm delighted at the willingness of Trinity alumni around the world to get involved. I'm also happy that the perception that one can only help one's alma mater by, say, endowing a building, is being temporised into something more realistic and sustainable. And of course support does not only mean financial; the contribution alumni make in speaking up for Trinity is most valuable and important for us. Kathy's teacher gave support by spreading the word. Everyone here can do the same.

Trinity is more than just our alma mater. It represents an idea that we believe in. An ideal that higher education can change lives, and that in our "small republic of letters", in the centre of Dublin city, we can bring together

students from all around the world and play our part in transforming the world. It is why Trinity means so much to all of us.

And it is why we are all here tonight.

Thank you very much.

* * *

Monday, 12th November 2012

Opening Address at the Launch of the Loyola Institute

Long Room Hub, Trinity College

Ladies and Gentlemen,

Welcome to the Trinity College Dublin for this truly historic occasion.

Today we launch the Loyola Institute and its academic programme in Catholic theology.

It is 420 years since the foundation of Trinity College, or to give our university its full title, the 'College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin'. Catholic students were welcome to study at the new university from the start – but they were not, initially, welcome to study Catholic theology.

It is also – and it's not exactly a coincidence – almost exactly 420 years since the followers of Ignatius of Loyola established the great Irish Jesuit Colleges in Salamanca and Lisbon to educate Catholics from Ireland in their own religion. Because they could not receive such an education at home.

On the one side, Trinity and the Reformation. On the other, Salamanca, Lisbon, and the Counter Reformation. We don't always find it easy to contemplate that difficult century and circumstances in which our university was founded.

But today we can look equably at the past and at our foundations, because today we move confidently into a new engagement. Today we launch, in Trinity College, the Loyola Institute for education and research in theology in the Catholic tradition.

With today's launch we significantly extend the range of theology teaching in the university. Theology is, together with Philosophy, the oldest School in Trinity, dating back to the foundation of the college. Originally called Divinity, theology was initially only concerned with the education and training of clergy of the Church of Ireland. Today the College maintains that educational link with training for the Church of Ireland through the current 'Masters in Theological Studies'.

In the past half century, the study of Theology in this university has been greatly extended. This is reflected in our nomenclature: Divinity became Biblical Studies, and then, after 1978, the non-denominational 'School of Hebrew, Biblical and Theological Studies'. In recent years the Department of

Religion and Theology joined together with the Irish School of Ecumenics to become our current 'School of Religions, Theology and Ecumenics'.

This School provides teaching in the third monotheistic religion, Islam, and offers modules in world religions, as well as teaching theoretical approaches to the study of religion. The study of theology in Trinity now embraces the multidisciplinary studies of Ecumenics and International Peace and Reconciliation Studies.

And now the Loyola institute is to be incorporated into this confederal School, to expand and complement the College's teachings on theology. The Loyola Institute's aim is to engage in critical reflections on the Christian faith, social justice and contemporary culture, using the intellectual resources of the Catholic tradition.

It is, as I have said, an historic occasion in light of the college's history, and it's a tremendously exciting opportunity in view of our aim to become an international centre of excellence in teaching and research in religion and theology. Trinity now joins other universities, such as the Universities of Harvard, Chicago and Durham, which have established professorships of Catholic theology.

* * *

The Loyola Institute came about as the result of discussions, over the past number of years between representatives of eight Catholic congregations associated with the Milltown Institute of Catholic Theology, and with Trinity College Dublin.

These Congregations have established an independent trust, the Loyola Institute Trust, which will work with Trinity, to support and facilitate the development of the new Institute, funding both teaching positions and academic activities such as conferences and scholarships.

I know that the chair of the new trust, Fr Thomas Layden, SJ, and the Director of the new Institute, Dr Con Casey, will be addressing you shortly so I will leave it to them to take you through their vision for the institute and their approach to education and research.

This Institute is committed to dialogue with other religious traditions and to mutually enriching collaborations with other schools and institutes in the College. Benefitting from such collaborations, students in this Institute will take a pluralistic approach when it comes to analysing the role of religion in our culture today, and analysing the challenges facing societies in an age of globalisation and technological advances.

Hence this Institute will participate in, and strengthen, the interdisciplinary approach which is, increasingly, a hallmark of a Trinity education.

Trinity is recognised as having particular strengths in a number of interdisciplinary research areas. As an example, our Institute of Neuroscience has Principal Investigators hailing from Psychology, Physiology, Biochemistry, Engineering, Psychiatry and Genetics.

And our longitudinal study on Ageing, which we call TILDA, has made Trinity a first port of call for researchers from anywhere in the world seeking information on ageing. TILDA researchers come from a range of disciplines including Epidemiology, Geriatric Medicine, Demography, Social Policy, Psychology, Economics, and Nursing.

Other interdisciplinary research areas include sustainable environment, digital humanities, cultural heritage and arts, international development, and themes led by the Trinity Long Room Hub Arts and Humanities Research Institute such as “Identities in Transformation”. I await with great anticipation the contribution of the Loyola Institute to these research areas.

It’s not hard to envisage how the great Catholic intellectual tradition, drawing on thinkers from Aquinas to Newman to Bernard Lonergan, will illuminate our understanding of all these areas, and more.

Indeed, in the realm of Catholic debate and international development, I am reminded of John Paul II’s interventions in the lead up to the invasion of Iraq in 2003. He had strong words:

“War is not always inevitable. It is always a defeat for humanity. War is never just another means that one can choose to employ for settling differences between nations. War cannot be decided upon... except as the very last option and in accordance with very strict conditions.”

In his opinion, the invasion of Iraq did not satisfy strict conditions, was not the last option. The US State Department dispatched a mission to the Vatican to explain why the invasion of Iraq would be a “just war” of self-defense. The Pope rejected their arguments. In America hawkish commentators tried to minimise his rejection by saying blandly that the pope was “a man of peace”. But John Paul II, while ardently anti-war, understood the need for a nation to act in self-defense, and had invoked Thomas Aquinas to uphold “legitimate defense” in certain circumstances. His point was that the invasion of Iraq did not fall into this category. He had behind him not only his own immense moral stature but centuries of Catholic teaching.

I would like to thank all those who have helped with the establishment of this Institute. From Trinity - Professor Jürgen Barkhoff, former Registrar, Professor Shane Allwright, current Registrar and Mr Michael Gleeson, former College Secretary; from the Jesuit Province in Ireland - Fr John Dardis SJ and Fr Tom Layden SJ. Mr John Hayden & Mr Chris Curran who worked through the discussions on their behalf - and everyone else who has given of their time, effort, and insight, and of course Dr Con Casey, Inaugural Director.

I'll end with Ignatius of Loyola: "Go forth and set the world on fire"

Thank you very much.

* * *

Tuesday, 20th November 2012

Speech to the Trinity Clubs and Societies

Saloon, Provost's House, Trinity College

Good evening and welcome,

What a pleasure to be here, and to have this opportunity to speak to you all. By my calculation there could be more than 160 people present – the captains and heads of Trinity's clubs and societies, of which there are now 49 sports clubs and 112 societies. That's more than last year as the number of clubs and societies just keeps growing; collectively represents a vast range of sports and interests - from Debating to Knitting to Sci-Fi to Digital Arts, and from Aikido to Gaelic Football to Rugby to Ultimate Frisbee. And many, many more.

If I had time it would be a marvellous experiment to talk to each of you for a few minutes and then try and guess who belongs to which club or society.

But I haven't brought you here to see if I can sort the Neuroscientists from the Boxers, or the Pirates from the Cricketers. I've brought you here because frankly, the College owes you, and I want to thank you personally. I've been Provost now for a year and from my very first speeches - from my inaugural speech last September through to my speech last Friday to the Graduates Association of Northern Ireland in Belfast - I've been lauding the quality and diversity of Trinity's clubs and societies.

When I talk about Trinity and what a great university it is, I invariably mention three things:

1. I talk about our research-based education – the fact that, at some stage in their studies, students engage in an original piece of scholarship or research. Because we want critical and independent-minded students with the initiative to go beyond the curriculum.
2. I talk about interdisciplinarity – the fact that we're a broad-based university of 24 Schools and that we encourage research collaborations and exchanges of ideas between Schools and Departments. Because we want students who are willing to think outside their disciplines and learn others ways of doing things.
3. And then I talk about our emphasis on learning outside the classroom, on extracurricular activities – the fact that we have all these clubs and societies which we encourage students to get involved with. Of course clubs and societies are for enjoyment first and foremost, but a lot of learning goes on as well; we recognise and value this. Because we want students who develop their interests outside the lecture room and laboratory and who can handle the responsibility that comes with

holding positions of authority and leadership; the responsibility that comes with competing, with fund-raising, with event-organising, and all the other activities that go into running clubs and societies.

When I talk about these three facets of the Trinity education – research, interdisciplinarity and the extracurricular – I don't prioritise one over the other because collectively they characterise the Trinity education. So many speeches this year have focused on the extracurricular – I'm thinking of the speech for Trinity Olympians, for the 250th anniversary of the Chapel Choir, for social entrepreneurship, for the Science Gallery, for sports scholarships, and many more.

When I go abroad on missions to seek peer institutes for research collaborations and to spread the message about what a great education we deliver, I always emphasize our clubs and societies and the extracurricular activities which form such an essential part of what a Trinity education is about.

So since our clubs and societies are a cornerstone of our education policy, and since it's your talent, energy, and ingenuity which keeps these clubs and societies so successful, dynamic and popular – well, as I said, I really need to thank you, and to open up a continuing dialogue about how the College can facilitate and enhance your activities. The Dean of Students, Dr Amanda Piesse, needs special thanking for her role in opening up this dialogue – it's a pleasure to see her here this evening.

Clubs and societies are not an optional add-on. They are not merely leisure and downtime. They are intrinsic to the education we offer. According to a recent survey of employer expectations, employers of our graduates value:

- critical and independent thinking;
- excellent communication skills;
- and students who have developed a capacity for responsibility and initiative through extra-curricular activities.

So, your needs and requirements as captains and heads of clubs and societies, are a priority for us, and we want to do all we can to help you to deliver for your fellow students.

University life – like life in general – is a matter of balancing all the different demands on our time, and making room for all our interests. In Trinity we aim at constructing a rigorous yet flexible curriculum, that allows the student space to develop in the lecture room, in the laboratory, on the playing fields, on court, in the debating hall, in fund-raising, online and offline...

We don't always get the balance right. In my inaugural speech last year I referred to a letter from a student who had written to me complaining that his class scheduling conflicted with his sports training. That situation is one we want absolutely to avoid, but of course with so many needs and demands, it's not always straightforward.

What we do want to ensure is that the line of dialogue is always open. That you know how intrinsic you are to the College. That you feel confident that when you speak, you'll be heard, and that we will do our best to solve any problems.

I also think it's important for you to get to know each other. This event isn't just about me getting to know you, but about you engaging with each other, and exchanging ideas and best practise. The college emphasis on interdisciplinarity isn't only about the Schools and Departments. Ideally it extends to all campus exchanges. We seek to generate a dynamic flow of energy, enthusiasm and inspiration. We don't want any group locked in its silo, failing to communicate.

This is the first such event but we intend to make it annual. It's vital for me, as Provost, and for my successors, to have this contact with you, the captains and heads of our clubs and societies. And it's vital for you to have this forum to meet each other. Trinity College is a community of scholars, and also a community of clubs and societies.

This event gives us the chance to meet and take stock of how the 'extracurricular branch'. Allow me to mention a few anniversaries and inaugurals. In the 2011/2012 past academic year:

- The Pavilion Bar, social centre of so many clubs, celebrated its Golden Jubilee, as did the Rifle Club;
- The Chapel Choir celebrated its 250th anniversary, and the Choral society its 175th anniversary;
- The French Society celebrated its second birthday
- The Horse Racing Society celebrated its first birthday
- And last month I opened Seomra na Gaeilge, a social room for Irish language speakers to chat informally.

We could say that 2012 wasn't half soon enough for a Seomra na Gaeilge in college. At the same time, 250 years of the Chapel Choir gives a wonderful sense of tradition and continuity.

In our clubs and societies, as in all aspects of college life, we celebrate tradition and innovation, continuity and commencements. I look forward, in the next nine years of my provostship, to meeting you regularly, to celebrating anniversaries, and to launching new clubs and societies representing new sports and interests.

To rephrase Patrick Kavanagh on Irish poets: "May the standing army of Trinity clubs and societies never fall below a thousand".

Thank you very much.



Provost with Captains and Heads of Clubs and Societies

Tuesday, 27th November 2012

Speech at the Future Skills and Innovation Symposium

Hotel Sofitel, Mumbai, India

Minister, Ambassador, Honorary Consul, Ladies and Gentlemen. It's a great pleasure to be here. Thank you for inviting me.

I'm here in two capacities – firstly, as Provost of Trinity College Dublin, which is Ireland's highest-ranking university, and ranked 67th in the world according to QS. Trinity is committed to innovation, which is often referred to as the third pillar of university activity, together with research and innovation.

Personally, I prefer to think of innovation not as a separate pillar, but as permeating the university's mission in both education and research.

I'm also addressing you in my capacity as a member of the governing board of the European Institute of Innovation and Technology (EIT), a body of the European Union whose mission is to increase Europe's growth and competitiveness by reinforcing innovation capacity. The EIT governing board has 22 members, representing a balance of individuals active across education, research, and business. It was a great honour for me to be appointed to this board - I take it as a tribute to both Ireland's and Trinity's commitment to innovation.

So today I'd like to talk to you about three things:

- First, I'll tell you a bit about EIT and how it proposes to reinforce European innovation;
- Leading on from this, I'll look at how we encourage the skills necessary for innovation in Trinity;
- And from Trinity, I'll take a brief look at what innovation in Ireland might look like, if we get it right.

(1) E.I.T.

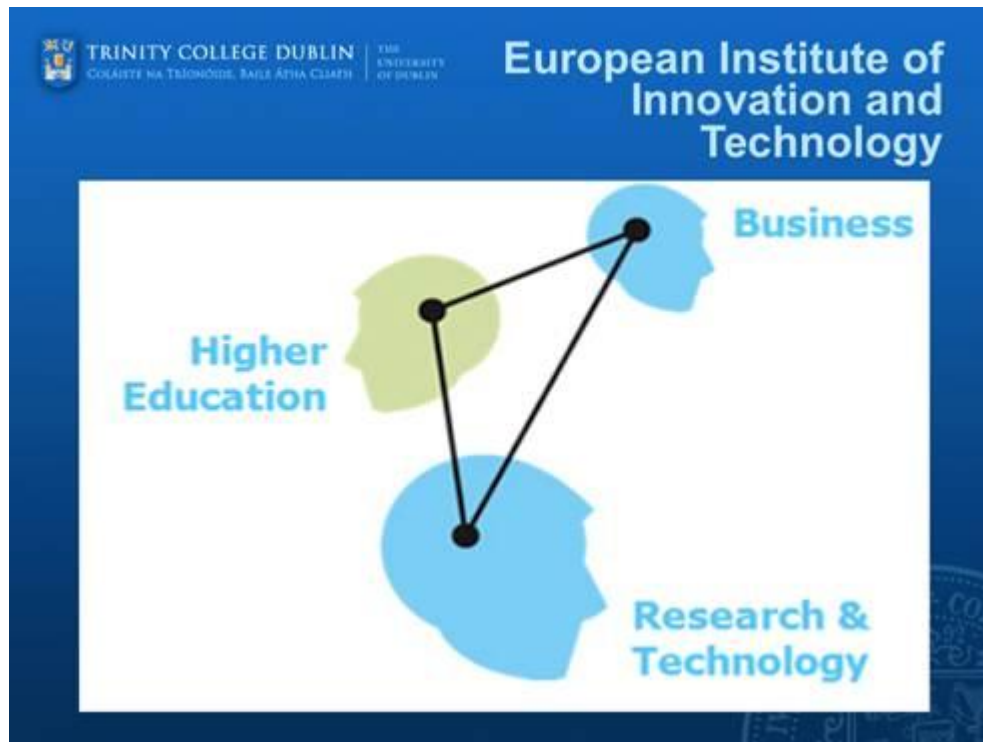
EIT's mission is to foster a new generation of entrepreneurs and innovators. We recognise that Europe, like India, is teeming with ideas and with gifted people, but that too often ideas remain abstract, and people's potential remains unrealised. So we need to create pathways, new opportunities, for people to move from the ideas phase into something concrete and profitable. In short, we want to facilitate the transitions

- from idea to product,

- from lab to market,
- and from student to entrepreneur.

How do we do this? By greatly facilitating common working between education, the business community, and research and technology.

The EIT views these three sectors as a “Knowledge Triangle”, as on this slide.



Higher Education is of course universities; Business is the private commercial sector; and Research and Technology are State funded research institutes such as the Max Planck scientific research organisation in Germany, or in Ireland, Teagasc, the Agriculture and Food Development authority.

EIT has created structures, which we call Knowledge and Innovation Communities, or KICs, to integrate the three sides of the Knowledge Triangle.

(2) INNOVATION SKILLS IN TRINITY

That, broadly, is the EIT’s framework for fostering innovation in the EU.

In Trinity College Dublin, we understand the role we play within the Knowledge Triangle. We recognise that in the past twenty years a revolution has taken place in universities around the world – staff and students are now encouraged to use their research to directly grow the economy and serve society.

This new focus on academic entrepreneurship promotes a wonderful sense of excitement around, and responsibility towards, research. It has meant that

spin-out companies are now a normal, valued output of university activities. And it has meant more international research collaborations to ensure that the best global research goes into creating the products and services. Research today is only commercially valuable if it excels on the world stage – impact cannot be achieved behind national borders anymore.

I want to look at how these two innovation pathways – campus companies and international research collaborations – work in Trinity. But first, allow me to look briefly at the type of education we offer in Trinity – because of course the type of research and education influences the type of innovation.

Trinity innovation: interdisciplinary and global

Certain things characterise the Trinity innovation. I want to highlight two: interdisciplinarity and global connectivity.

Trinity is a large, multidisciplinary university of 24 Schools, ranging from Business, Drama, and Law, to Chemistry, Engineering, and Medicine. We encourage research collaborations and joint programmes between Schools and Departments, and we now have five multidisciplinary Trinity Research Institutes – for:

- Biomedical Sciences,
- Nanoscience,
- International Integration,
- Neuroscience, and
- Arts and Humanities.

These research institutes combine the strengths of several different Schools. For instance, Principal Investigators in our Neuroscience Institute hail from a wide range of disciplines, including Psychology, Biochemistry, Engineering, Psychiatry and Genetics.

What this means, in terms of innovation, is that products and services arising from Trinity research tend to be interdisciplinary, and that Trinity researchers seek industry partners in diverse fields.

Another of Trinity's core, traditional strengths lies in our international identity and global connectivity. Since our foundation, 420 years ago, we have always been outward-looking. Trinity's engagement with Asia began in 1762 with the appointment of Mir Aulad Ali, an Indian Muslim known as 'The Mir', as Professor of Arabic, Hindustani, and Persian. During the nineteenth century, Trinity - together with Oxford, Cambridge and Edinburgh - trained generations of young men for the Indian Civil Service.

And in the twentieth century, Trinity had a truly international student profile, with the medical and engineering Schools in particular boasting numerous students from Asia and Africa.

We're proud of our international heritage, and this year we decided to formalise it. Last month we launched our global relations strategy, which addresses a number of key actions, including:

- increasing the number of international students coming to Trinity;
- creating more student exchanges programmes, particularly for undergraduates so they can learn global citizenship; and
- further connecting with our global alumni.

What all this means in terms of innovation - is that products and services arising from our research are likely to have an international dimension.

Trinity Innovation Pathways

Now I want to look at how we move from our interdisciplinary, international research to products and services. All good universities are incubation centres for ideas – creative spaces if you like - but what distinguishes world-class ‘innovation universities’ is the ability to build “innovation pathways” so that staff and students can move beyond the ideas phase. Let’s look at some of the innovation pathways we’ve built in Trinity:

International research collaborations

Our emphasis on global excellence means that we actively seek research partners abroad. I'll take one example – a bioengineering project between Trinity and the Indian Institute of Technology in Kanpur.

The project – as can be seen on this slide – is titled “Mechano-regulation of gene expression in articular cartilage development”. It concerns the bioengineering of cartilage for transplantation into humans.

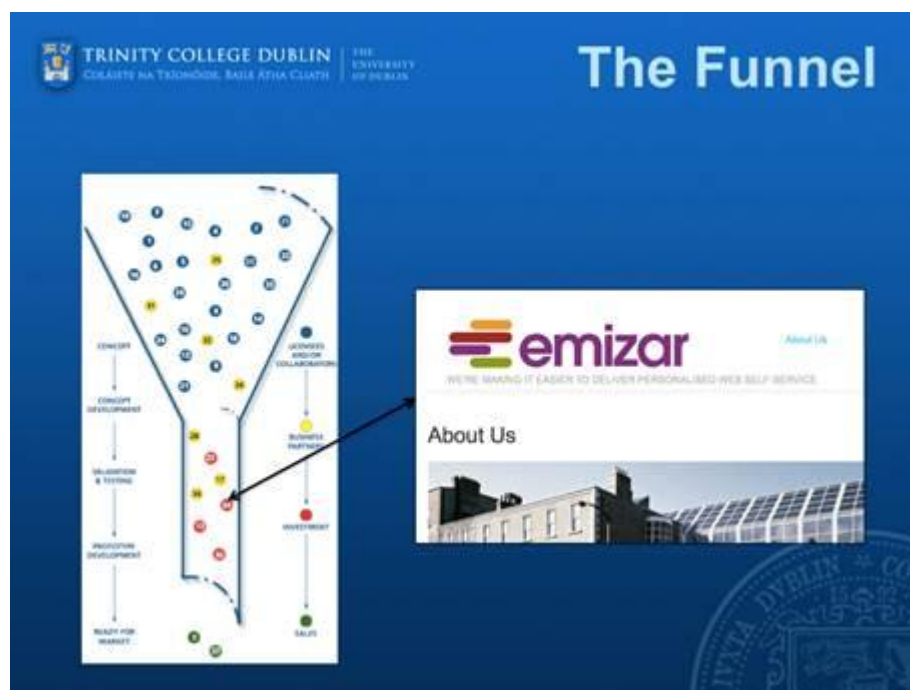
The slide is a blue presentation slide with white text and images. At the top left is the Trinity College Dublin logo. At the top right is the text 'Trinity College Dublin & IIT Kanpur'. The main title is 'Mechano-regulation of gene expression in articular cartilage development'. Below the title is a microscopic image of cartilage. To the right of the image is a list of bullet points: 'Funding reciprocal visits by the PIs & PhD students', 'Professor Pratik Singh from IIT Kanpur to TCD', and 'Professor Paula Murphy from TCD to IIT Kanpur'. Below this is another list of bullet points: 'TCD/India postgraduate student scholarship', 'Anurati Saha, Bachelor of Technology, Vellore Institute of Technology', and 'PhD research at TCD, since Sept 2012'. To the right of this second list is a small photo of a woman, Anurati Saha.

It's a crucial project with obvious societal impact, it's jointly funded by Trinity and by India's Ministry of Science and Technology, under the India-Ireland cooperative science programme, and it's a great example of scientific collaboration between our two institutes and two countries. Recently this student Anurati Saha has been employed as a PhD researcher on the project.

Innovation and Technology showcase: the funnel

Once a research project has reached a level where it is ready to find business partners for licensing or further investment, it can be showcased by the university.

This slide is from Trinity's annual Innovation and Technology showcase (http://www.tcd.ie/research_innovation/assets/PDF%20Open%20Access/TC D%20Showcase%202012%20brochure.pdf). The slide shows 36 research ideas ready for commercialization. The ideas then enter into what we think of as "a funnel", where they progress from licenses, to business partners, to investments to sales, each development stage classified in the 'funnel'. We track these to ensure as many as possible get investment and create jobs. For example, Emizar, number 34 here in the funnel, is at the investment stage.



This funnel is created by Trinity staff, with financial support from Enterprise Ireland, which is the government agency for development and growth of Irish enterprises in world markets.

With reference to the EIT and its 'Knowledge Triangle' between higher education, business, and research and technology – well, I see a kind of triangle in Trinity between our:

- entrepreneurship education,

- our interdisciplinary international research collaborations,
- and the funnel which creates campus companies.

In the academic year just gone by, 13 campus companies were founded, so we know we're getting something right, but we constantly seek to improve.



My ambition is to strengthen all three and to get them working in dynamic synergy, so that staff and students, collaborating with partners around the world, emerge with viable ideas that find investment and industrial partners, thus helping to grow the economy and improve society.

(3) TRINITY AND IRELAND

In conclusion, I'd like to lead on from Trinity to Ireland.

Trinity's strengths in interdisciplinarity and internationalisation are reflected in Ireland's strengths. Ireland is a country of deep cultural strengths, particularly in the fields of literature and music, for which we are known around the world. Recent investments have made us increasingly strong in biosciences and ICT, and in logistics and advanced manufacturing. So, our national strengths are also multidisciplinary.

We're an outward looking country with a long tradition of emigration and a huge global diaspora. There are Irish communities in most countries in the world, including, of course, India. And many multinational companies today base their European operations in Ireland.

I think it's important in Ireland, like in Trinity, we play to our strengths. I don't think we should put all our eggs in one basket. We shouldn't focus solely on a number of areas but should retain interdisciplinarity so as to be

adaptable to technological and cultural changes. Specialisation may work for some universities and some countries but I don't think it's the best use of Ireland's or Trinity's strengths.

It's early days yet and Irish innovation is not at the level of, say, California, so we don't yet know what our 'Valley' will look like. But my hunch is that it will be broad-based innovation, which will involve partnering with institutes and industries round the world, and which will, I hope, make surprising connections between different disciplines and different areas. I foresee many knowledge triangles around the globe which will overlap in Dublin to create a 'pyramid' that is vibrant and unique.

As I hope has been clear from my talk, we very much want Indian universities, Indian businesses and Indian entrepreneurs in all their great diversity to be part of that pyramid.

Thank you very much.

* * *

Thursday, 29th November 2012

Speech at the Bengal Club, Calcutta

Bengal Club, Calcutta, India

Honorary Consul of Ireland in Calcutta, Mr M.K. Jalan; Vice-Chancellor of Presidency University, Professor Malabika Sarkar; Distinguished Guests; Ladies and Gentlemen.

It's great to be here on my first visit to India as Provost, and my first ever visit to Calcutta. I thank Mr Jalan for hosting us in this famous club this evening.

I am delighted to see so many school principals here and other academics that we are engaging with all over Calcutta. I also have the pleasure of recognizing the presence of our own Dr Siddhartha Sen, Emeritus Professor in Mathematics who has kept alive the connections between Trinity and Calcutta over so many years.

Earlier today Trinity signed a Memorandum of Understanding with Presidency University, and announced the funding of scholarships to the amount of €250,000 by Keventer group for postgraduate study by Presidency University students at Trinity College Dublin. We thank Mr Jalan for his generosity in funding these scholarships; they are a tangible manifestation of the developing ties between our two universities.

These scholarships are the culmination of a series of events, signings and relationship developments over the past week between Trinity College Dublin and our partners in India.

Beginning in Bangalore, one event was the signing of an agreement with the Karnataka State Government to carry out a feasibility study about opening a Science Gallery in the city. Another was the launch of the Biocon scholarships for postgraduate study in genetics.

In Delhi, we signed a Memorandum of Understanding with Lady Sri Ram College.

In Mumbai, we further developed our relationship with the Tata Institute for Fundamental Research (TIFR), and with St Xavier's College of the University of Mumbai.

But most exciting of all has been to launch the new relationship between Trinity College Dublin and Presidency University here in Calcutta. Of course the connections between Trinity College Dublin and Calcutta go back a long way. As you know, in earlier times, the Universities of Oxford, Cambridge, Edinburgh, and Trinity College Dublin educated the majority of those who

came to work in the Indian Civil Service. Among these were two Trinity men who later became famous for their scholarly work in India: George Grierson for his linguistic survey and Thomas Oldham for his geological survey. Their busts are currently displayed in the Asiatic Society here in Calcutta and I hope to see them before I leave tomorrow. Links are about a commitment and a desire to learn from each other, and I am very pleased that the deep and historic ties between us are now being enlivened again. Professor Jane Ohlmeyer, Vice-President for Global Relations, and her global relations team have brought great energy to this task for which they are to be congratulated.

I conclude by expressing again our appreciation to our host Mr Jalan, and thanking you all for coming here this evening.

* * *

Tuesday, 4th December 2012

Speech at the Launch of the Book of Kells iPad App

Long Room, Trinity College

Ladies and Gentlemen,

Welcome to the Long Room. Today we celebrate the old and the new – the college’s most venerable treasure, and the College’s latest technology, developed by one of our spin-out companies.

Today in this 300 year old “cathedral of books”, as a former student so memorably described the Long Room, we celebrate one of the world’s earliest and most valuable books, and we celebrate the technology which now enables people everywhere to access, in its entirety, a book, which has, for centuries, been confined to this one place - the Long Room.

Previously if you had wanted to view the Book of Kells in its entirety, you would have had to travel to Dublin, and you would have had to stay for two years, while the 680 pages were slowly turned. As of today, you can zap around all these pages from your living room - or from the bus - or wherever you happen to be. What a stupendous advance!

Today we also celebrate the related publication two weeks ago of Bernard Meehan’s *Book of Kells* for Thames & Hudson. This was a landmark publication. John Banville, writing in the *Financial Times*, called the full-colour reproductions “sumptuous and ravishing” and he termed the accompanying essays “a triumph of scholarly investigation and interpretation”.

Andrew O’Hagan, in the *Irish Times*, called it:

“for me the book of the year, a deep beautiful and essential guide to what the great Celtic text is about”.

In his article, Banville wrote of the Book of Kells that:

“few emblems of medieval European civilisation have caught the imagination of the international public to the same degree. Every year tens of thousands of visitors to Dublin file through the Long Room of Trinity College to view its intricately decorated pages.”

That is indeed the case, and will continue to be - a visit to the Book of Kells is, like a visit to the Yeats Room in the National Gallery, or the GPO, or the Guinness Storehouse, a quintessential Dublin visitor experience.

But 2012 is indeed a historic year because we have now diversified this experience. You can now own a 'sumptuous, ravishing, scholarly' copy of the book, with 80 full-colour pages from the manuscript, or for €11.99, you can upload the app to your phones or iPad, with all 680 pages.

These three experiences – visiting the original manuscript, buying Meehan's large-format book, or uploading the app – are complementary. Each brings its own particular pleasure, and anyone whose imagination is truly caught by this great book will wish to immerse themselves by experiencing all three.

I am absolutely delighted that Trinity is in the position to showcase its greatest treasure through smart use of the latest technology. For this I thank X Communications, Trinity College Library, and all involved in creating this wonderful app.

X Communications is one of our earliest campus companies. It was founded in 1994, by Marie Redmond from Computer Science. She understood, early, the extraordinary potential of web communication and her company was one of Ireland's very first digital media agencies. From this early start, X Communications has consolidated its leading position and today it designs and develops web applications for delivery on all digital platforms, including mobile devices.

It has produced interactive installations for the National Museum, the National Library, the Hugh Lane Gallery, and the National Gallery, and it is the recipient of numerous awards, including, last year, Web Agency of the Year from the Irish Web Awards.

The Book of Kells is X Communications' first app. It means a lot that this important app was developed by a Trinity spin-out. The app took six months to complete, with Stephanie Francis as designer and Killian Walsh as programmer. The images were digitised by the Digital Resources & Imaging Services in Trinity College Library from transparencies provided by Faksimile-Verlag Luzern, so this is very much a collaborative production.

I congratulate X Communications for taking on the challenge of the Book of Kells for their first app. This app, and Bernard's book, is testament to the range of interdisciplinary skills in Trinity. Historical and textual scholarship, design, imaging and digital computing have gone into the creation of these two new Book of Kells' experiences.

The world of apps is really exciting, from a scholarly and from a communications point of view. Apps allow for a whole new way of presenting and evaluating information for large audiences, both specialised and general. The potential is enormous. I know that there are many more Trinity College apps currently out there – including Mike Brady, Triazzle: a game app for the iPhone; Mads Haahr's Haunted Planet: an augmented reality cultural app; and MobiMaths developed by Brendan Tangney - a suite of tools to help teach maths according to the problem solving approach of the new secondary

school Project Maths syllabus. Ultimately, so many areas of college activity and research will be communicated through apps.

It's fitting that one of the first Trinity apps should be the Book of Kells and it's wonderful that it should be such a showcase app. I congratulate Stephanie, Killian, Marie, and all involved in X Communications. And I congratulate Robin Adams, Bernard Meehan and all in Trinity College Library. Both book and app have arrived at a timely moment – and there are now a few ways of giving the Book of Kells this Christmas.

Thank you

* * *

Friday, 7th December 2012

Speech at the Winter Commencements Dinner

The 1592 Restaurant, Trinity College

Chancellor, Pro-Chancellors, Honorary Graduates, Ladies and Gentlemen;

As we come to the end of the calendar year, and the end of the Micheltas term, and, indeed, the end of Trinity's 420th anniversary, it's a great pleasure to be here with you tonight, on the occasion of the Winter Commencements Dinner.

Tonight we honour four exceptional individuals who, in their different but equally powerful ways, have deepened human knowledge and enhanced the lives of those around them. Tonight we honour great achievement, and the difference that people can make.

It's one of the privileges of universities that we're able to honour people in this way - that we have a formal, traditional means of recognising achievement.

Universities, since the Middle Ages, have had this right to grant degrees '*honoris causa*' on individuals anywhere in the world who are judged of merit. It's a right somewhat akin to that of governments and states granting 'the freedom of the city' or other such honours.

It's a right, which in Trinity, as I'm sure in other universities, we respect too much to ever hand it out except with the deepest consideration. You might say we're quite stingy about conferring our honorary degrees because we don't want them devalued.

Why do universities have this traditional right to reward excellence, almost as if we were mini-states? It has to do, I think, with universities' work in the public good. Universities confer a private benefit on the individual, who receives an education enabling a successful career and interesting life; and universities confer a public good by educating the doctors, engineers, teachers, scientists, writers, entrepreneurs, and reformers that society needs, as well as yielding the research which ultimately improves our way of being in the world.

That's why universities are entitled to reward individuals who, in their view, have also served the public good.

So, as we come to the end of this calendar year, I'd like to look very briefly at the ways in which Trinity served the public good in 2012. Because this reminds all of us here today of our core mission as educators.

It's the 420th year since Trinity's foundation and it hasn't been the easiest year in our long history. Mind, it hasn't been the hardest either! But these are not easy times – something I don't have to remind you of the day after the Budget! All businesses and institutions in Ireland are feeling the pinch, and Trinity, being both privately and publicly funded as befits our dual role, is certainly feeling the cold wind of austerity.

Nevertheless this has also been a greatly positive year and, as Provost, I've been delighted with the energy, talent, and commitment, of staff and students. Unfortunately I don't have time to list all Trinity's achievements, but in terms of serving the public good, let me give three:

- In November we heard that the new children's hospital is to be developed in a 16 acre site in St James's Hospital. Trinity has been associated with St James's since 1994 when we opened our Centre for Health Sciences there. It's immensely exciting to think that our academics will now have a central role in developing Ireland's National Children's Hospital to deliver better services and improve the health of our children.
- This year saw the launch of two remarkable online digital resources for Irish history: 'A calendar of Chancery Letters' which brings together all known letters of the medieval Irish chancery; and 'A Family at War: the Mary Martin Diary', which is the diary of a Dublin housewife, spanning the six months from January to May 1916, and telling us much about how Easter 1916 appeared to ordinary, middle-class Dublin people. These two digital projects, together with the '1641 Depositions project', have opened the way for new understandings of Irish history. Access is free, because contributing to the public good through research is part of our core philosophy.
- And just in the past few weeks, we have seen not only the publication of Bernard Meehan's wonderful Book of Kells, which has been justly praised round the world, but the launch of the Book of Kells iPad app, created by a Trinity campus company, X Communications, working with the Library here. This app allows you explore all 680 pages of the manuscript. X Communications have managed to handle a huge amount of content without dissipating the quality of the image. Viewers can get close-up details for 21 particular pages, available at six times their actual size. Through such close-ups, viewers gain new understanding of the astonishing intricacy of the Book of Kells.

In Trinity we want to make a difference and serve the public good. We want to do this through medicine, history, computer science, and all our disciplines. Indeed, one of the ways we seek to serve the public good is to emphasize the strength of interdisciplinarity, collaboration, making connections, and crossing boundaries.

Because interdisciplinarity goes to the heart of what we do in Trinity, I'm particularly pleased that today's recipients of honorary degrees represent such a range of disciplines and talents. Between them, they have illuminated the diverse fields of education, librarianship, literature, and human rights.

They have excelled in their fields and they are remarkable for their ability to communicate the vital importance of their work.

They serve as role models and reminders for us of how we can use your talents to serve the society in which we live.

Valerie Coghlan [Doctor in Education (D.Ed.)]

Valerie Coghlan is a driving force behind the current vitality of both Irish and international children's literature. She helped found many of the most important professional bodies pertaining to children's literature, both nationally and internationally. She has published widely in her own area of expertise, and has tirelessly facilitated and promoted children's authors and illustrators. She served as Librarian and lecturer in the Church of Ireland College of Education, and has played a key role in building up and archiving their collection, as well as Trinity's Pollard collection, and cognate collections internationally. She is the face of Irish expertise and innovation on the international children's literature circuit.

Dame Lynne Brindley [Doctor in Literature (Litt.D.)]

Dame Lynne Brindley has enjoyed a most illustrious career in British university libraries and has been instrumental in transforming the concept of library from passive archive to dynamic contributor to research and the wider education environment, as well as helping realise the potential of digital formats. For over a decade, from 2000-2011, she was chief executive of the British Library. She is currently visiting Professor of Knowledge Management in University of Leeds. Her contributions were recognised in 2008 by the award of the DBE. She has offered continuing support for our Library's role as a Legal Deposit Library for the UK.

Sam Shepard [Doctor in Literature (Litt.D.)]

Sam Shepard is one of the most influential figures in world of drama, with an extraordinary body of work which has inspired a generation of writers, film-makers and theatre practitioners the world over. A remarkable experimenter with form and structure, few American playwrights have exerted as much influence on the contemporary stage. He is not only playwright, but also screenwriter, short story writer, actor, and director. He has a deep connection to Irish theatre, expressed recently in artistic collaboration with the Abbey, and he has given a new play to the revived Field Day Company which will be performed next year, as one of the stand-out events for Derry City of Culture.

Christine Buckley [Doctor in Laws (LL.D.)]

A tireless campaigner for victims of institutional abuse, Christine Buckley is a co-founder and director of the Aislinn Centre in Dublin which provides educational and support services for survivors. The 1996 documentary, 'Dear Daughter', which she worked on with director, Louis Lenten, was a ground-breaking exposé of the abuse that went on in institutional homes, and helped create the public outcry which led to commissions of inquiry. President Mary McAleese described her as a woman who has changed the course of history through her voluntary efforts. In 2010, she was selected as Irish Volunteer of the Year and went on to be awarded the title "European Volunteer of the

Year” on International Volunteer Day. Christine told me earlier today that it is 66 years since her father graduated from Trinity College as a medical doctor.

* * *

I congratulate our new Honorary Doctors, and I welcome them to the roll of graduates of the University of Dublin.

I am going to ask Dame Lynne Brindley to reply on behalf of the new graduates. But before I do so, I would like to propose a toast to our four new Honorary Doctors.

I ask you all to rise to toast the new Honorary Graduates.

I now ask Dame Lynne Brindley to reply on behalf of the new graduates.



(L-R) Dr Valerie Coghlan; Dr Sam Shepard; Dr Christine Buckley; Chancellor Mary Robinson; Dame Lynn Brindley; Provost, Dr Patrick Prendergast

Friday, 14th December 2012

**Speech at the SUAS Education Development Report
Launch: National Survey of Third Level Students on
Global Development**

Saloon, Provost's House, Trinity College

Ladies and Gentlemen,

You're all very welcome to the Saloon of the Provost's House on this rainy December morning. I'm delighted to see so many colleagues from higher education, as well as representatives from NGOs, the media, and government bodies. We welcome, in particular, representatives from SUAS Educational Development, which commissioned today's survey, representatives from Amárach, which carried out the survey, and from Irish Aid, which funded it.

The presence of so many of you, from so many different sectors, is testament to the wide-ranging importance of the survey whose results we are launching today. It's a national survey of attitudes, activism, and learning on global development among third level students in Ireland.

A thousand students were asked, through an online questionnaire, about their attitudes towards developing countries and Ireland's development commitments; they were asked about their own roles and confidence to take action, and about their current engagement with development organisations.

The results are fascinating - sometimes unexpected, sometimes inspiring. Martin Tomlinson of SUAS Educational Development and Mark Nolan of Amárach Research will shortly take you through the key results, methodology, and implications.

The survey is of great importance to the education and development sectors. As an educator, I'd like to say a few words now about my understanding of the survey's importance.

International Development is a priority research area for Trinity. The Trinity International Development Initiative, or TIDI as we call it, was established five years ago to coordinate the College's approach. More than a hundred Trinity staff members across eighteen Schools identify as having a research interest in Development, including researchers in biodiversity, environment, computer science, human rights, economics, and health. We currently have over seventy research projects on development, and over forty courses with development content on offer at undergraduate and postgraduate level.

International development has joined the growing number of areas which we, in Trinity, treat as multidisciplinary and cross-faculty. Other examples are

neuroscience and ageing. Interdisciplinarity is one of our core education principles. We believe that problems are best solved, and inspiration best gained, by combining strengths across disciplines and levels of analysis.

Combining strengths means going beyond the college walls, so TIDI also facilitates and supports collaborations with development partners, both nationally and internationally. SUAS is an important partner with a long history of collaboration with Trinity, including the delivery of non-formal development programmes for our students.

Central to our approach is our recognition that international development is a research area of global importance, and one which students seek to engage with on many levels, both through academic learning and directly through extracurricular activity. But how exactly do they seek to engage? What is their current level of knowledge? When approaching global development issues, do they feel empowered or challenged?

If we don't know the answers to such questions we can't design the right courses, nor find the right ways to empower students through volunteering. Thanks to this survey, we can now begin to replace assumption and correlation with concrete data.

I suspect that anyone – in education or development – reading this survey is going to come up against surprises. That alone indicates its importance. Overall, the findings here are encouraging in that they confirm the appetite for development education among students, and the willingness to take action through volunteering. But there are causes for concern. Personally, I was concerned that while two thirds of students said they “wanted to learn more about development issues”, only 18 percent had actually taken a development course. Of those who hadn't taken a course, 41 percent said that they weren't aware of any.

So a student body with a large appetite for learning about development lacks information. Development, in Trinity and I'm sure in other universities, is multidisciplinary, so whether a student is studying medicine, IT, law, or economics, there are opportunities to incorporate development into the programme - but apparently students don't know this. I'm going to ask the Dean of Undergraduate Studies here in Trinity to consider what action should be taken about this.

Insofar as it relates to volunteering, Development is not only academic but extracurricular. Students who never take a course on development will often familiarise themselves on key issues through volunteering.

Extracurricular is a core component of a Trinity education. We know, from employer surveys and from our own experience, that what goes on outside the classroom is crucial for the whole development of the student. Volunteering is particularly valuable since it develops initiative, organisation skills, event management, altruism, and engagement with other cultures. Volunteering and fund-raising are potentially great ways for students to feel they can “make a difference” in the world.

I was delighted to find that 63 percent of students in this survey have volunteered at least once in the last year, and an impressive 19 percent volunteer every week. However the survey also found that students' confidence in their ability to bring about change is relatively low. Only a third is confident about influencing decisions in their local area, and only 20 percent about influencing decisions in the rest of the world.

This is a wake-up-call finding. Such lack of confidence can lead to political, social and civic apathy, and when that happens, we have failed in our core duty as educators, which is to provide engaged and proactive citizens ready to effect change, confident that they have the knowledge and the skills to do so.

So I'm extremely grateful to SUAS, Amárach, and Irish aid for commissioning, conducting and funding this important survey. I look forward to the elucidation of the various findings, and I hope that all of us, within the education and development sectors, will use these findings to inform our approach, so that we can deliver improved services and genuinely inspire citizens with their ability to make a difference.

Thank you very much.

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(L-R) Ms Joanne Malone, SUAS; Mr Mark Tomlinson, SUAS; Provost, Dr Patrick Prendergast; Mr Mark Nolan, Amárach

Monday, 17th December 2012

Speech at the National Institute for Intellectual Disability (NIID) – The Margaret McLoughlin Art Exhibition

The Printing House, Trinity College

Ladies and Gentlemen, Good evening,

It's my great pleasure to welcome you here today. I cannot think of a better end to the Michémas term nor better advent to Christmas, than this wonderful art exhibition, which celebrates the talents of our students, and which has been enabled by the generosity of the McLoughlin family and friends.

In 1998 the National Institute of Intellectual Disability opened in Trinity College, pioneering the rights of people with intellectual disability to a third level education. And not before time! We are now so used to students with physical disabilities in college, that we contemplate in dismay the 'dark ages' when there wasn't universal access in universities nor suitable technology and special assistants to help.

The situation for those with physical disability began to improve, slowly, from the 1960s onwards. But it was not until very recently that a few forward-thinking people made the leap and realised that a whole other section of the population was being denied the opportunity to develop their gifts.

It's only when someone questions the status quo that we realise how rigid and exclusionary it can be. The twentieth century was the great century of improved access to third level education, and the ending of discrimination against particular groups.

In the course of the century it became the norm, rather than exceptional, for women, different ethnic groups, those from economically deprived backgrounds, mature students, and those with physical disabilities to attend university.

With each 'opening out', we realised that not only had countless individuals been denied the full exercise of their potential, but society had been denied their talents and services.

And I'm proud that today Trinity is a pioneer of education, research and advocacy for people with intellectual disability. The NIID's flagship 'Certificate in Contemporary Living' has inspired other third level institutions round the country to inaugurate similar programmes.

And because Trinity's approach is always in favour of collaboration and interdisciplinarity, NIID's research is illuminating many Trinity research areas. For instance, TILDA, the Trinity-led longitudinal study on Ageing, is looking into ageing in people with intellectual disability under IDS-TILDA.

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The Certificate in Contemporary Living focuses on academic learning, personal growth, and skills development for students with intellectual disability. Creative Arts Appreciation and Performance is a key module within this certificate, and the Margaret McLoughlin Art Project is part of that module.

Joan and Tony McLoughlin, together with their children, David, Louise and Kieran, established the Margaret McLoughlin fund to commemorate the spirit and vitality of their daughter Margaret, who had Down's Syndrome and passed away in 2003 at the age of 25. In their generosity they donated the funds to NIID, specifically for the Expressive Arts Programme, in order to provide, as Joan McLoughlin has said,

"the opportunity for people like Margaret to enhance their lives and be given a means to develop the talents which they undoubtedly possess".

Around us, in these bold, ambitious works we see the fruit of the McLoughlins' generosity, and the proof of our students' talents. Abstract and figurative, optimistic and inquiring, these works reach out to us, as only art can, giving insight into other states of mind.

I quote from a poem by Noelle Doran, this year's winner of the Margaret McLoughlin Art Prize. The poem is called 'Me' and begins:

'Half moon –
I think about me
being whole'

That's only eight words. It takes the lightning speed of poetry to say so much in eight words.

This is the very first Margaret McLoughlin art exhibition. I am inspired by the quality of the work here. I thank the NIID staff, particularly the two visiting artists. Your remarkable work has helped our students unleash their creativity. I thank the McLoughlin family and friends for making this possible, and for your continued support of NIID.

And finally I congratulate the students. As pioneers in this educational programme, your example will inspire future generations, and will help to determine the direction this programme takes. Your commitment, hard work and creativity, on show today, has meant that not only have you raised the

barrier of what we expect of you, but you have helped towards building a more inclusive, ethical and respectful society for the future.

Thank you.

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Wednesday, 9th January 2013

Welcome Address for the EU Presidency Press Corps Visit to Trinity College Dublin

Long Room Hub, Trinity College

Minister, Distinguished members of the European and international press, I'm delighted to welcome you to Trinity College Dublin as part of the Irish Presidency of the Council of the EU.

This morning we will look at some of the education priorities of the Presidency. And Minister Rabbitte will launch a major pan-European telecommunications project, starting this month, and co-ordinated by Trinity.

This project, like other FP7 projects, showcases the EU's commitment to higher education as the key to improving Europe's growth and competitiveness.

I'm delighted that Ireland is commencing its Presidency by highlighting higher education's importance to economic growth - and I'm delighted that Trinity is involved.

A few months ago I had the honour of being appointed to the governing board of the European Institute of Innovation and Technology – the EIT. As I'm sure you know, the EIT aims to link up Europe's higher education, research, and business sectors in order to develop a new generation of innovators and entrepreneurs. I take my appointment to the board as a tribute to the way we have embraced innovation alongside the core mission of education and research – put it at the heart of university activities.

So today I'd like to talk, briefly, about Trinity, our research, and how we might further Europe's innovation agenda.

This year, 2013, heralds the 40th anniversary of Ireland's entry to the EU and the 421st anniversary of the founding of this university, Trinity College Dublin.

Trinity was founded long before the independent Irish State came into being, but of course that's not uncommon in Europe: the ancient universities of Salamanca and Bologna predated by many centuries the unifications of Spain and of Italy. With their long traditions of learning, languages, and academic exchanges, Europe's universities are precursors, in a sense, of the seminal EU commitment to the free movement of people and ideas.

There's something reassuringly familiar about the historical layout of Europe's universities – many, like Trinity, are groupings of buildings and

libraries around courtyards, quadrangles and lawns. Later this morning, you will have the opportunity to visit the Old Library and the 9th century Book of Kells, which is one of Ireland's great treasures held here in Trinity.

Trinity is Ireland's highest ranking university, and ranked 19th in Europe. We're proud of this position, but we'd like to see Europe's universities, in general, improving in the world rankings. We recognise that investments made by both the public and private sectors in the US and in Asia mean that Europe's universities face serious competition, and that Innovation Ecosystems in Europe need strengthening.

However Horizon 2020, together with initiatives such as the EIT, do show that there is real vigour – real serious intent - in Europe's commitment to innovation. It's the job of Trinity, as of all Europe's universities, to work within EU frameworks to really deliver education goals and improve our continent's growth and competitiveness.

Trinity is a multidisciplinary university with faculties of Medicine, Law, Engineering, Humanities, Science, Social Sciences, and others. Where some universities draw their strength from specialisation, we draw ours from interdisciplinarity. We show what a multidisciplinary community focused on excellence can achieve. In eighteen fields we are ranked in the top 1 percent in the world – in fields such as neuroscience, immunology, and bioengineering.

This emphasis on collaboration – between people, disciplines, and institutions – has meant, I think, that Trinity has fitted naturally and well with the aims, ideals, and procedures of the EU Framework Programme, with which we have been involved since its inception in the 1980s. I know that, among Irish universities, Trinity received the largest portion of FP7 funding, secured for over 146 research projects, covering areas from security, telecommunications, and health, to environment, agri-food and energy.

The Minister will be launching one such FP7 awarded project this morning: *DISCUS*, a major pan-European telecommunications research project that will revolutionise broadband use in Ireland. It's a three year project, starting this month, and co-ordinated by the national Centre for Telecommunications Value-Chain Research (CTVR), which is headquartered here in Trinity College under the leadership of Professor Linda Doyle.

This project is key to strengthening Europe's digital economy. When I say 'digital economy' I'm talking about a broad field. For instance, Trinity also co-ordinates two major Digital Humanities FP7 projects. One of them, called CENDARI, aims to integrate different countries' archives and resources to enable pan-European research in medieval and modern history. Later this morning, Dr Jennifer Edmond, CENDARI's coordinator, will tell you a bit more about it.

And five other leading Trinity researchers will talk about their EU-funded projects to give you an idea of the range of research in Trinity, and of the research areas prioritised by Europe.

This is, I don't need to remind you, a difficult period for Europe in general, and for Ireland in particular. I don't want to minimise the difficulties - and as the Head of a part publicly-funded university I'm not likely to forget them!

But equally, I recognise that this is also a time of opportunity because of the potential for industry and academic link-up. We're in a period of an historic global opportunity for universities, and it's to the credit of the European Council, Commission, and Parliament that they have understood the nature of the opportunity.

I'm delighted that Ireland has made education a priority of its Presidency. I know that we, and future generations of Europe's students, innovators, and entrepreneurs will be grateful for it.

I hope you enjoy the rest of your morning in Trinity - I know you will enjoy your visit to the Science Gallery, which exhibits science as if they were art, and is the first of its kind, - and we are in talks with cities around the world - Bangalore, New York, London, for example, to establish Science Galleries there too based on the Dublin model.

Thank you for your attention. It's my pleasure now to invite Mr Pat Rabbitte, Minister for Communications, Energy and Natural Resources, to launch *DISCUS*.

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Friday, 11th January 2013

**Welcome at the Conference ‘GROWing into Recovery: A
Re-enchantment with Life’**

School of Nursing & Midwifery, Trinity College

President Higgins, Mrs Higgins,

Ladies and Gentlemen,

You are most welcome to the School of Nursing and Midwifery, and to what will surely be one of most important conferences held in Trinity this year.

We are, all of us, only too aware, from recent tragic headlines, of the burden of mental illness carried by so many people, of all ages, all around this country. It's not unique to Ireland. The World Health Organisation predicts that by 2020 depression will be the one of the most important causes of disability in the world. I believe the World Health Organisation alerted us to this danger at least a decade ago. Governments are now beginning to take action, and are seeking transformations in the way we deal with the intrinsically human and costly problem of mental illness.

This conference takes place within that framework of seeking transformation. As is evident from the title, the emphasis is on recovery and return to full health. The organisers of this conference take the positive view that mental illness is not necessarily a lifelong disease requiring continuous medication, but can be a temporary response to particular stresses, a condition from which people can emerge if given the right help, including help from the community.

Today we will hear three papers presenting evidence for the ‘recovery model’, and suggesting ways to treat mental illness going beyond reliance on medication. Afterwards we will hear a panel discussion, chaired by the broadcaster Vincent Browne, and including Dr Julie Repper from Nottingham Healthcare Trust, Dr Patrick Devitt from the Mental Health Commission, Dr Eddie Molloy who is chairman of the Irish Mental Health Reform, and Dr Mike Watts, one of today's speakers, who has recently completed his PhD here in Trinity under the supervision of Professor Agnes Higgins and has thirty years' experience with GROW, the co-hosts of today's conference.

The strength and diversity of the panel and speakers; the calibre and professionalism of you, the invited audience, who come from the HSE, the Department of Health, NGOs, and the higher education sector; and the attendance of our President, Michael D. Higgins – all this testifies to the great importance of the issues under discussion today.

There is controversy around the diagnosis and treatment of mental illness – as there is around all illness, of course, but particularly perhaps mental illness, which remains a relatively new area of study and research, compared to other fields of medicine. The diversity and the high standing of the panel and audience here today shows, I think, the willingness and flexibility of all involved to get to the heart of causes and cures, without prejudice or assumptions.

I congratulate GROW and Trinity's School of Nursing and Midwifery for organising this conference, for presenting new empirical evidence, and for helping widen the public debate on this crucial issue. I thank the sponsors, the Mental Health Commission, for their support.

It is now my pleasure to invite President Michael D. Higgins to open this conference. This is not the first time I've had the honour of welcoming the President to Trinity - as an academic himself, he is a great supporter of the research we do here, especially research which looks to ameliorate society and to explore the human condition. As a poet he has a particularly sensitive understanding of mental pain. In his inaugural speech as President, he called for "a society which is profoundly ethical and inclusive". "Our strength," he said "lies in our common weal – our social solidarity".

Social solidarity and inclusive community is very much the message of GROW. It is their preferred treatment for mental illness. We are honoured that President Higgins, who has given such thought to this whole area, can be with us today.

Ladies and Gentlemen, Uachtaráin na hÉireann, Micheal D. Higgins

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Monday, 14th January 2013

Address at the Launch of the Feasibility Study on Admissions

Royal Irish Academy, Dawson Street, Dublin

Ladies and gentlemen, distinguished guests,

First of all, I would like to thank the President of the Royal Irish Academy, Professor Luke Drury, for chairing the event this evening, and for allowing us to launch this feasibility study at our national academy. It's the right venue, because the Academy was founded for the advancement of knowledge and for embracing "all the objects of rational enquiry".

Tonight, in partnership with the Central Applications Office – the CAO - we launch a feasibility study which we hope will advance our knowledge about third-level admissions in this country. And which will test a new admissions route within a rigorous framework of rational enquiry. Our objective is create an opportunity to reform one of the more controversial aspects of the Irish education system.

The Minister for Education and Skills, Ruairi Quinn, rightly made third level admissions a priority on his taking office. I recall him speaking in September 2011 about the need

"to think in terms of radically new approaches and alternatives to the current arrangements"

.....while at the same time "maintaining public confidence in the integrity and fairness of any selection system." These are the twin considerations being explored in this feasibility study.

I also remember the Minister, quoting with approval, a spokesperson from the Irish Second-Level Students' Union who referred to the "infamous points system" and noted that [quote],

"although the [current] examination structure has elements that are fair, there must be a better way. The points race puts our young people to the pin of their collar - physically, mentally and emotionally."

I echo this: both the relative fairness of the points system - it has the great merit of anonymity and transparency - and its drawbacks. It is too narrow a gate through which to admit students to third level because it doesn't take into sufficient account students' potential, nor the context in which they achieve their results.

This is an issue which has long been on my mind. Back in April 2011, a few days after my election as Provost, I gave an *Irish Times* interview in which I indicated that a priority of mine would be, [quote], “to move the admissions criteria beyond a purely CAO points-based system”.

I suggested that we might learn from other approaches internationally, for example in Texas where coming in the top 5 percent of your state school guarantees you automatic access to a university education. This suggestion was referenced, later in the year, in Aine Hyland’s invaluable report on ‘*Entry to Higher Education in Ireland in the 21st Century*’.

Many of us within the sector, coming from different standpoints, have come to the same conclusion: reform of the entry system is necessary. We may differ about how to reform, but we’re agreed about why we need to. Such consensus means that this is the right historical and psychological moment to effect change.

The wind is with us. But we must move swiftly or the moment will pass.

The impetus lies with the universities. As the Minister for Education and Skills has so often pointed out, universities control the system that is used for admission to third-level. It is administered by the CAO – and administered superbly – but the responsibility for deciding on the entry criteria are ours. Therefore change must come from us.

Trinity seeks change, some people might say, we are one of the “winners” of the points race. Every year many of our courses have the highest points requirements in the country; we therefore have the pick of students who perform best in the Leaving Certificate.

I hope that the fact that our points are high gives us moral authority when we say that we need to find a better way. In Trinity, we know we have excellent students, but we’re also aware that high overall points don’t necessarily measure aptitude for a chosen subject, and that the potential of students with different skills sets is being overlooked. We know from the success of the Trinity Access Programmes, and other national access initiatives, that there are brilliant students whose potential is not released by the Leaving Cert, but who thrive at third level when given the chance.

This is a national issue; we are not merely concerned with finding a better way for Trinity to admit its students. We seek a better, fairer way for all students to enter third level in Ireland. We’re prepared to openly test this new admissions route, and share the results with all third-level Colleges.

When he came into office, I set my new Dean of Undergraduate Studies, Dr Patrick Geoghegan, the task of looking at ways to reform admissions. He put together a working group which produced a discussion paper in February 2012. This led to an international conference on admissions in May 2012, which enjoyed contributions from both the IUA and the IOTI, as well as the

advice of national and international experts. Today's feasibility study arises directly out of all that work.

With this feasibility study, we're asking a simple question: can we find a wider gate to admit our students, and make use of approaches that are trusted and respected internationally?

As we in Ireland look to see if there is a better, fairer mechanism for identifying and admitting students, it's reassuring to know that we can draw upon leading international experts, so I am particularly grateful to the Dean of Admissions at Harvard, Dr William Fitzsimmons, for joining us tonight as our guest of honour. We value his advice and support, and thank him for his friendship.

But we are not trying to copy Harvard, or the American admissions system, because we are two very different countries, and things that work in one system will not necessarily work in another. But there are elements that have worked successfully internationally, and which we shouldn't be afraid of attempting here, especially because the stakes are so high.

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This evening we are proud to be launching our feasibility study in partnership with the Central Applications Office. I do wish to emphasise how grateful I am to the General Manager of the CAO, Ivor Gleeson, for his strong support, and to Joseph O'Grady for his hard work and advice during the development of the study. The CAO is one of the most respected institutions in the country - they do a brilliant job administering the system; they never complain when caught in the crossfire of criticisms of the points race; and in working with us to develop this study we have found them both helpful and innovative.

I'm also grateful to the School of Law and the School of Histories and Humanities at Trinity, for agreeing to be part of this feasibility study. Both schools share a long commitment to increasing access, and we are delighted that they were willing to test this new admissions route as part of that commitment.

You may wonder why I keep referring to a feasibility study, rather than a pilot. It's an important distinction. When I entered Trinity in the 1980s to study engineering, the first thing I learned was that Engineers should never be afraid of trying something new - but you should also test it first. So we will test the new admissions route in this study, running it on a very small scale, and sharing the results with the sector.

This study arises out of work across all seven Irish universities, and in co-operation with the Institutes of Technology. This is a study on behalf of the sector, with all information shared, and results published. It's a study which is part of a larger analysis being carried out by the "IUA Task Group on Entry and Progression", chaired by my colleague Professor Philip Nolan, the

president of NUI Maynooth. We greatly look forward to the task group's forthcoming suggestions and solutions.

Dr Patrick Geoghegan will shortly explain how the new admissions route will work in Trinity, and there's also information on this in the programme, as well as on the Trinity website, so I won't dwell on the specifics.

I will just note that I'm particularly pleased that the new route takes into account personal and contextual data, as well as the applicant's performance compared to every other applicant from the school - what we call the 'relative performance rank'. I've always felt that, for example, 450 points gained in one school may be a far greater measure of achievement than 550 points in another, and I'm glad that this sense of relativity is being embedded in the study.

I don't expect change to our national admissions system to come in the form of radical, revolutionary overhaul. It will be incremental change, but steady, progressive and significant. We are not seeking to tear up what we have, but to refine it and improve it - we acknowledge the system was important and ground-breaking in its day.

One of my predecessors as Provost, Bill Watts, played a key role in the development of the CAO, when he was the College's Senior Lecturer back in the 1970s. He served as the CAO's first chairman. In his memoir published in 2008, two years before his death, Watts had some amusing remarks to make about the pre-CAO admissions system. Apparently Trinity used to request references from teachers, but found that, and I quote from Dr Watts' memoir:

"conscientious nuns always found the best in their girls"

and, Watts' goes on:

"one Irish-speaking boys school had only one reference – buachaill ar fheabhas – an excellent boy".

This was taken, Watts writes, as a "tongue-in-cheek testing of Trinity's suspected linguistic incompetence."

Such are the possible dangers, lest we forget, of third level admissions in small, intimately connected countries, with controversial pasts! Little wonder that Watts wrote: *"In the course of its more than thirty year history, the CAO has contributed importantly to the equality of opportunity. Long may it flourish!"*

However Watts also noted the dangers of the points system. He had sharp words to say about the prevalent idea that you mustn't *"waste your points"*,

and was concerned to see students, quote, *“being pressed into subjects for which they have little or no taste, while actually preferring subjects in which places are more easily gained.”*

Watts, one of the architects of the CAO points system, would I think, have been behind what we are trying to achieve today.

Nothing is so good that it cannot be improved.

Any system will, over time, reveal its restrictions and inefficiencies. And once such problems are identified, it's the simple duty of those responsible to mend them.

In seeking reform, we must be ready to change what is inadequate and inequitable, and preserve what is fair and efficient. For Watts, for me, for the Minister, for most of us, the great contribution of the CAO points system to third-level admissions in Ireland was anonymity and transparency. That legacy must at all costs be preserved, and so I'm delighted that our new proposed admissions route is also anonymous.

For the rest, for those parts that don't work as well as they should, we must be prepared, pragmatically and energetically, to find better solutions.

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I'll end, if I may, with a quote from Archimedes, since I'm an engineer and his words amount to an engineering principle. He said: *“Give me a place to stand, and a lever long enough, and I can move the world”*.

In our contemporary world, that lever is education. It's the one thing that unlocks a person's potential, opens up opportunity, gives a person the means to go out and fulfill their ambitions in world.

But if we limit the standing space, and if we construct only short levers that favour some over others – denying opportunity to those who could take advantage of it – well, we all lose out. We can't keep preaching at our young people that they are the hope, the future, the creators of change - unless we give them a hand on the lever that moves the world. I believe this feasibility study is the first step towards giving them more leverage. I look forward, in excitement, to the next steps.

Thank you.

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Tuesday, 15th January 2013

Welcome Address at the Inaugural TCD-UCD Sociology Public Lecture

Edmund Burke Theatre, Trinity College

You are all very welcome to Trinity College and to the inaugural TCD-UCD Sociology Public Lecture.

This series of public lectures on contemporary issues by internationally acclaimed speakers is a wonderful initiative of the departments of sociology in Trinity and UCD, together with Trinity's Policy Institute. I see also it's part of the IIIS/TLRH new lecture series.

The aim is to offer new ideas on cutting-edge sociological issues, and to promote informed and non-partisan debate. There will be a Q&A session after the lecture, and we look forward to contributions from the floor - I know there are many here tonight with important insights to share.

These inaugural sociology lectures join the ongoing series of public lectures held in Trinity. While there has always been a tradition of public lectures in the College – I think of Erwin Schrodinger's famous 'What is Life?' lectures of 1943 – the number and diversity has been stepped up in recent years, thanks to new institutes like the Science Gallery and the Policy Institute, which seek to actively engage the public with academic research.

This time last year we had the pleasure of welcoming Joschka Fischer to give the Henry Grattan Public lecture, and I'm delighted that yet again we're kicking off the new year and the new term with such stimulating debate.

Trinity is not alone in seeking to make academic research accessible. UCD has held its own highly impressive series of distinguished public lectures. At tonight's event, Trinity and UCD are co-hosts.

A lecture is only as good as its speaker. We are delighted that this new series is being launched by such a distinguished academic, speaking on an issue of global significance, which she is framing in genuinely innovative terms.

Professor Saskia Sassen is the Robert S. Lynd Professor of Sociology and co-chair of The Committee on Global Thought in Columbia University. She was selected as one of the hundred Top Global Thinkers of 2011 by Foreign Policy Magazine, and her books have been translated into twenty languages. Tonight's talk is based on her forthcoming book, *Expulsions*. I won't attempt

to summarize her argument, since we will hear it shortly. But from what I can see, her conclusions demand our fullest engagement. Professor Sassen has gone to the heart of our current crisis.

In this country, we have been concerned with measuring the cost of the crisis in a national context. This has been essential work. But Professor Sassen reminds us of the far higher global cost on the poor and displaced.

Tonight we are here in the Edmund Burke theatre. Burke is sometimes dismissed as reactionary, or an apologist for conservative thinking – but he was passionate in his defense of justice and liberty. Attributed to Burke is the well-known phrase, “the only thing necessary for the triumph of evil is for good men to do nothing”.

When scholars present the results of their work - their findings – in lectures such as this, the intention is always for readers and listeners to react. If they don’t, the research is dead. The aim of this lecture series, the aim I think of all academic research, is to call us to think and to react. Academic research is a dialogue. At its best, academic research can change people’s minds, awaken the desire for reform and improvement, and inform policy decisions at all levels.

Belief in the power of academic research underpins this public lecture series. I know we will all appreciate Professor Sassen’s brilliant contextualising of one of the crisis issues of our times, and I hope it will jolt some of us into thinking about ways to use our skills to effect change.

To quote Burke again: “Nobody made a greater mistake than he who did nothing because he could only do a little.”

Thank you.

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Tuesday, 29th January 2013

Speech at the Reception in Honour of Luke O'Neill's RIA Gold Medal

Saloon, Provost's House

Colleagues, Ladies and Gentlemen,

Two months ago Luke O'Neill received the Royal Irish Academy Gold Medal, in recognition of his outstanding contribution to Life Sciences.

As you know, the RIA awards only two Gold Medals a year and competition is always intense. Everyone in Trinity is delighted, and proud, that Luke O'Neill received this award for his exceptional research. He has also in recent years won the highly prestigious Boyle medal of the Royal Dublin Society and the Science Foundation Ireland Researcher of the Year Award, not to mention other awards from universities abroad - including the universities of Oxford, Edinburgh, and McGill.

So tonight we want to pay our own tribute to Luke, here in Trinity. It's important, when our staff members are heaped with honours by other places, that we in Trinity make recognition of this, and mark our appreciation.

Excellence should never go unacknowledged, especially excellence like Luke's which, I think it's not an exaggeration to say, illuminates the whole university.

Immunology is one of Trinity's eighteen multidisciplinary thematic research areas, and it is also one of the research areas for which Trinity is ranked in the top 1% of higher education institutions world-wide. If Trinity is a world leader in immunology, that has a huge amount to do with Luke.

He is a graduate of this university, and after a PhD in the University of London and post-doctoral research in Cambridge, he returned to work in Trinity, becoming a fellow in 1996. Since then he has greatly built up the teaching and research capacities of biochemistry and immunology in Trinity. He was instrumental in the creation of the Trinity Biomedical Sciences Institute – and today he is its first Academic Director.

Luke is one of those fortunate beings who has a cross-breadth of skills and talents. He is, of course, an extraordinary scientist, but he is also, by all accounts, a wonderful teacher and collaborator, a formidable organiser, a man of ideas, and an entrepreneur. This evening, I want to pay tribute to all these attributes because we must recognise that in the 21st century the new breed of excellent academic is often just such a multi-talented figure – a modern version of the renaissance 'man'.

Now I hope there will always be space in universities for those who devote themselves to one thing – for those who concentrate exclusively on laboratory work or archive work, aware that their skills do not lie in organising conferences or starting campus companies. I do not under-estimate the importance of their singular contribution.

However as universities look increasingly to engage society in their research and as they become global competitors for great talent, then, yes, setting up campus companies, and organising large international conferences, and managing boards, and competing for research grants, and establishing international research collaborations – all these activities do assume an ever greater importance. So much so that the work of an academic today extends well beyond what it was even a few decades ago.

We may all sometimes crave the scholar's traditional solitude in the library or lab, but increasingly the challenge of academia demands that we exercise the full artillery of our skills. It makes the job more dynamic and rewarding. Luke is, I think we all agree, the best of us at this. The sheer amount he must get done in a day is dizzying to contemplate.

But of course it was for his research that he won the RIA gold medal. Luke is a pioneer in his discipline, one who was at the forefront of the shift in focus towards innate immunology.

His work on a set of immune proteins called Toll-like receptors (TLRs) had a major influence on the field. The discovery of these TLRs was rewarded with the Nobel Prize for Medicine or Physiology to Jules Hoffmann and Bruce Beutler, and the O'Neill lab played a very important role in supporting and extending their initial findings. These findings helped explain how TLRs work in terms of signalling, and we're now closer to developing therapeutic approaches which might be used to target TLRs in a number of conditions, notably transplantation, autoimmune diseases, cancer, and metabolic diseases.

In order to commercialise his work on TLRs, Luke co-founded the company, Opsona Therapeutics, in 2004, together with his Trinity colleagues, Professor Kingston Mills and Professor Dermot Kelleher. Last year Opsona received an Outstanding Achievement Award from Enterprise Ireland. Luke is currently acting as Opsona's chief scientific advisor.

Luke's former PhD students are in faculty positions around Ireland and overseas. Recently members of his lab, led by Dr Sarah Doyle, in a collaborative research project with the Ocular Genetics Group of Professor Peter Humphries, discovered that a part of the immune system, called the inflammasome, is involved in regulating the development of one of the most common forms of blindness, called Age-Related Macular Degeneration. This discovery could prevent the development of the disease.

In so many ways he enhances the life of the university. I'm thinking of the Science Gallery exhibition he co-curated a few years ago - called 'Infectious'

now that I recall. And I'm thinking of the key role he played in organising last year's Euroscience Open Forum (ESOF) programme in Dublin.

He was chair of the programme committee, and was instrumental in devising and co-ordinating a brilliant programme – we all remember the 'What is Life?' lecture of Craig Venter. Not only Trinity, but all of Dublin has much to thank him for.

I'd like to close with Luke's own words in an interview last year, when he was asked about his goals. I think that what he said then really sums up Luke's approach – his generosity, his inspiration, his team spirit, and his sense of excitement about scientific discovery. He said:

"My own goals are always about just trying to find out new interesting things. The most exciting bit is progressive discoveries. I have made five or six discoveries in my career that would have had an influence on the field and would have helped other people make their discoveries. So the goal is to make progress the whole time towards greater understanding. What greater thrill can there be then to discover life itself? We work at the very molecular level – we work on cells, on DNA, on genes, on proteins. That, to me, is a wonderful adventure. It's a great privilege to study life in that way, and to discover new aspects about life."

"Progress towards greater understanding" - "A thrill" – "a wonderful adventure" - and "a great privilege" – that just about sums up, I think, what the approach in Trinity, and in all universities, should be towards knowledge and discovery.

Today in celebrating Luke, we celebrate someone who has discovered so much – and will discover so much more. Luke was quick off the starting blocks and is now at the height of his powers. We look forward to what he will next "forge in the smithy of this soul" – or in the lab of his soul is maybe more accurate.....

It is, I think we are all agreed, 'a thrill', 'an adventure', and 'a privilege' to work with Luke. As your colleagues and friends, we are delighted to be part of what you call 'progress towards greater understanding'. On behalf of Trinity I thank you for all you have done and will do for this university. And now may I ask everyone to join me in raising a toast to Luke O'Neill.

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Wednesday, 30th January 2013

Speech at the Reception to Honour CEOs and Founders of Campus Companies

Saloon, Provost's House

Good evening,

I'm delighted to be here and to see so many of you present – so many of our Trinity entrepreneurs, founders and CEOs of campus companies.

I've been Provost now for eighteen months – which seems hard to believe; time has flown. Since the start of my tenure I've highlighted, in speech after speech, Trinity's success in innovation. Our core mission in education and research is increasingly inseparable from success in innovation. When I think about it the biggest change in college life since my student days has been the emergence of the importance of innovation and entrepreneurship to the mission of the university.

Since the strength of your ideas and the success of your companies has been such a feature of what I say about Trinity around the world – and is such a feature of Trinity's roadmap for the future – I felt it was about time to get you all together to recognise your achievements, and to focus together on innovation in Trinity, and on ways in which we might make it even better.

****Trinity Innovation****

As we know, Trinity is the highest ranking university in Ireland, and is ranked 21st in Europe. This is a good rating, but in terms of innovation and commercialising research, Trinity performs even better.

Twenty percent of all spin-out companies in Ireland stem from Trinity, which is a remarkable figure. Under its first Enterprise Ireland grant, 2007-2012, Trinity achieved 200 percent of its target number of campus companies.

Since 2009 we have averaged seven new spin-outs a year. We exceed not just European but International comparative figures and we achieve this technology transfer metric very cost-effectively. And among Irish start-ups, Trinity companies are frequently successful at raising finance. In last quarter 2011, three of Trinity's lifescience companies raised a total of €6.5 million in venture capital funding.

Trinity is, in fact, among Europe's leading innovation universities.

A great deal of this success in the early days was down to the leadership of Dr Eoin O'Neill, Trinity's first Director of Research and Innovation Services. I'm pleased to see here too the former Bursars who led on this "in the early days": Professor Vincent McBrierty and Professor Seán Corish. A more recent impetus is down to the Technology Transfer Office's new revised procedure since 2009 for the approval of campus company formation.

This revision was at the instigation of the Associate Director of TR&I, Dr James Callaghan, with approval from the Finance Committee for a derogation from the College's IP Policy. The simplified process led to an immediate, significant increase in numbers of new companies.

****Trinity's Innovation Pathways****

I've been impressed in recent years with the Trinity's Technology Showcase where we see clearly the results of a "funnel" that Trinity has set up with the support of Enterprise Ireland, where ideas can progress from being research projects with commercial potential, to licenses, to business partners, to investments, to sales - each development stage being tracked.

This funnel is of course just a way of visualizing an "innovation pathway". The rationale behind creating innovation pathways is that academic entrepreneurship isn't something that just happens automatically. Staff and students often need encouragement to identify the commercial opportunities in their research, and this process has to be supported by the university.

Innovation pathways should draw on an institution's core strengths, and will be different in different universities. In Trinity, two of our core strengths lie in our interdisciplinarity and our global connectivity.

We are a large, multidisciplinary university of 24 Schools and five interdisciplinary research institutes. We encourage collaborations and joint programmes between schools and departments.

What this means in terms of innovation, is that the products and services arising from Trinity research tend to be multi- and inter-disciplinary. Admittedly we have a prevalence of spin-outs from certain disciplines such as ICT and Life Sciences, and an insufficiency from other disciplines. This is something we need to address.

Trinity is also an outward-looking university with an international heritage, a large intake of international staff and students, and a wide-flung diaspora.

When promoting innovation pathways, we draw on these core strengths.

For example, a recent innovation pathway is the TCD-UCD Innovation Academy, aimed at incentivising PhD students to become entrepreneurs. This

Academy specifically encourages link ups between students in different disciplines, and it's exciting to imagine what ideas may arise from this.

Student entrepreneurship, and not just at postgraduate level, needs support and encouragement. We have to find more ways to incentivise and reward because fresh minds give rise to fresh ideas. We know for instance that the powerhouse of social networking started with Harvard undergraduates.

Last year we launched our Global Relations Strategy which addresses a number of key actions, including increasing the number of international students, creating more student exchange programmes, and further connecting with our global alumni.

I'm hopeful that this strategy will become another source of strength for Trinity innovation. Creating a more international campus, perhaps carrying out activities on campuses abroad – this is about getting students out of their comfort zone and triggering their imaginations.

****Systematising Innovation: EIT****

We want to develop innovation pathways in a coherent way, in an integrated way. We want all our core activities to enforce our core aims. So it's helpful to look at ways we might further systematise our innovation process.

In this context, I want to look briefly at Europe's approach to innovation. Trinity innovation is of course reliant on cooperation and support from the national government and the EU. Innovation does not take place in a vacuum. Trinity is part of Ireland and Europe's innovation ecosystems – we are players within a complex environment involving private enterprise, higher education, government, and supra-governmental authorities.

Our strategies must take into account domestic and EU innovation policies. And I also want to look at the EU's approach because I think it offers opportunities for innovation.

I know something about this because I was recently appointed to the governing board of the European Institute of Innovation and Technology (the EIT), a body of the European Union whose mission is to increase Europe's growth and competitiveness by reinforcing innovation capacity. The EIT governing board, representing a balance of individuals active across education, research, and business. It was a great honour to be appointed to this board and I took it as a tribute to Trinity's commitment to innovation - so the honour, indeed, is at least as much yours as mine.

EIT's mission is to foster a new generation of entrepreneurs and innovators. It seeks to facilitate the transitions:

- from idea to product,

- from lab to market,
- and from student to entrepreneur.

How does EIT hope to achieve this? By greatly increasing and facilitating common working between the three sectors of:

- higher education,
- the business community,
- and research and technology.

Higher Education is of course universities; Business is the private commercial sector; and Research & Technology are State-funded institutes like the Max Planck scientific research organisation in Germany, or, in Ireland, Teagasc.

The EIT views these three sectors as a “Knowledge Triangle” which it hopes to integrate using different innovation pathways.

I see really useful parallels here for Trinity. In Trinity we are also looking to facilitate the transitions:

- from idea to product,
- from lab to market,
- and from researcher (student/professor) to entrepreneur.

And we also need to increase and facilitate common working between the three sectors of our own Knowledge Triangle, which we might characterise as:

- Education
- Research
- Business

My ambition is to integrate our Triangle, so that staff and students, collaborating across disciplines, with partners in Europe and round the world, emerge with viable ideas that find investment and industrial partners, thus benefiting the economy and society more generally – contributing to the public good.

****Conclusion****

I haven't dealt this evening with the problems surrounding start-ups in a recession. I don't underestimate these problems: I know that many excellent campus companies are still seeking investment, and I acknowledge that both the regulatory environment and intellectual property law could be improved. But I've chosen not to speak today about the obstacles because I firmly believe that technology transfer and commercialisation is the big Trinity success story of recent years, and we need to celebrate it.

Trinity went from creating less than one campus company a year between 1986 – 2008, to creating seven a year in the past three years, an increase of 700%. That must be one of the few growths registered in the last three years in Ireland, and in Europe!

So my main wish today is to thank all of you for your dynamism, your commitment, and your flair. I would like to have mentioned each and every one of our campus companies, which collectively offer such ingenious solutions to the issues, large and small, confronting people in 21st century Ireland.

Your companies as a whole represent a massive incentive for all academics to step up research and to make new discoveries.

Increasingly, the commercialisation of research is the academic norm, but in Ireland you are the pioneers of it; frankly I am personally in awe and admiration of your energy, courage, and risk-taking, and I know many share my views.

If Trinity has a head-start as an “innovation university”, this is down to you. So I salute you. And I look forward to working with you to ensure the continued success of your present companies - and of your future ones.

I would now like to ask the Dean of Research, Professor Vinny Cahill, to update you on several initiatives he has undertaken, and plans to undertake in the coming months, to promote innovation and entrepreneurship in the College.



Provost with CEOs and Founders of Campus Companies

Friday, 8th February 2013

Welcome Address at the Trinity Economic Forum

Synge Theatre, Arts Building, Trinity College

Tánaiste, Colleagues, Ladies and Gentlemen,

Good afternoon and welcome to the Synge Theatre and to the Trinity Economic Forum - the only student-led forum of its kind in Ireland.

This event was inaugurated last year, when it was opened by our President, Michael D. Higgins. I believe 150 students from around Ireland attended. This year there are over 400 students, hailing from all Irish universities. Over the next two days, they will participate in debates on the future of the Irish economy, together with distinguished speakers from the IMF, the Central Bank, the UK Financial Services Authority, the Bank of England, and the Department of Finance, as well as academic, industry, and media speakers.

This forum, which got off to such a triumphant start, goes from strength to strength. This year, it is not only Ireland's, but Europe's, largest student economics forum. It also has the gift of timing: for the past two days Irish economic policy has made headlines round the world. It's a critical moment to be debating the key themes of this forum - 'Re-thinking Economics' and 'An EU banking union' - and I know we're all excited to have gathered here, in Trinity some of the top people in their field to lend us their expertise. I congratulate the organisers, Seán Gill, Gary Finnerty and the whole team, on a brilliant programme. I look forward to a most stimulating and productive two days.

The ambition of the Trinity Economic Forum, or the TEF, is high. You can read their mission statement on their website. Their aim is (quote):

"to promote student participation in shaping the future direction of economic policy in Ireland".

They point out that:

"Realistically, some of the people who will be sitting around the policy table in fifteen years' time determining the future of this country are in college right now... We want TEF to drive change, inspiring students and professionals alike to apply entrepreneurial flair to economic thinking, and to offer decisive, forward-thinking leadership for economic policy."

I must say that while of course the economy continues to cause concern in Ireland as elsewhere, this statement gives me hope. I like the cool appraisal – realistically future policy leaders are indeed in college right now – and I like the willingness to get stuck in. The TEF doesn't just seek to prepare students for the future – it reminds students that they are already in possession of

entrepreneurial flair and leadership skills, and that the time to start participating in shaping the future is now.

In Trinity we recognise the transformative power of higher education in its broadest sense – not just what happens in the classroom, but what students learn from peer-to-peer interaction, and from developing initiative and responsibility through event-organising, fundraising, competing, debating, and taking on leadership roles in College clubs and societies. In Trinity we seek to transcend the vocational; to educate for a career and for citizenship, not just for the first job.

This has always been our way – in fact our debating society, the Hist, is the oldest student society in the world. Our long-standing emphasis on the extracurricular has helped create students of drive and initiative, and today well capable of taking advantage of the opportunities afforded by recent innovations in social networking, marketing, communications, and campus entrepreneurship.

So when the TEF writes of seeking to “*inspire students to apply entrepreneurial flair to economic thinking, and to offer decisive, forward-thinking leadership*” that isn’t just high-sounding words. It is indeed within the grasp of students to make a difference – in business, in art, in policy.

Students today are studying in an uncertain economic climate. When they graduate they can expect to face a difficult jobs market, certainly as regards the traditional trades and professions. Their response in Trinity has been to hone their skills, and to develop a mindset which is not hidebound or defeatist, and which seeks out opportunities. This is precisely the mindset which will get us out of recession.

And it’s the mindset which led to this forum. I congratulate the students – both organisers and attendees - because they are helping themselves to a better future.

And I thank them because in so doing they are also helping us.

Ladies and gentlemen it is a pleasure for me now to introduce the Minister for Foreign Affairs and Trade, Mr Eamon Gilmore.

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Friday, 15th February 2013

Speech to the Irish Legal History Society

Saloon, Provost's House, Trinity College

Chief Justice; President, Officers and Members of the Irish Legal History Society; distinguished guests; you are all very welcome.

Twenty-five years ago this week, this society was formally inaugurated, here in the Provost's house at Number 1 Grafton Street, in the presence of the then Chief Justice of Ireland, the Honourable Mr. Justice Finlay, and of the Lord Chief Justice of Northern Ireland, the Right Honourable Lord Lowry. I'm delighted that Judge Finlay has honoured us tonight by returning for this celebration.

I would like to thank at the outset Dr Patrick Geoghegan for organising this reception, and for reminding me that the Society was inaugurated here on the 12th of February 1988, at a reception hosted by my predecessor, the late Provost Bill Watts.

The Society's stated objective is to encourage the study of the history of Irish law, and to advance its study through annual lectures and publications. It has succeeded admirably in both objectives over the past quarter of a century.

One of the Society's defining characteristics is that it brings together scholars and practitioners from both parts of the island of Ireland. This cross-border dimension has been one of its most significant contributions.

A driving force in the establishment of the society was Professor Niall Osborough. On the society's tenth anniversary in 1998, he delivered the autumn discourse and admitted then that the programme of work he had devised ten years earlier would have kept the society busy until the year 2088. The impressive list of publications and of discourses over the past 25 years would, I think, be the envy of any Society.

From my point of view, the publications and discourses are invaluable since so many of them have a Trinity theme. It seems that Trinity staff and students have, in their diverse ways, helped shape the legal history of Ireland.

Fifteen years ago, in 1998, the late great R.B. McDowell, then a mere 85 years old, gave the spring discourse on "Edmund Burke and the Law". R.B. quoted, with approval, Burke's view of the law as

“a subject whose study carries no difficulty to those who already understand it – and no difficulty to those who will never understand it! But all those poor unfortunates caught between those two extremes will ‘have a hard task of it’.”

It seems probable that Burke cast himself as one of those “poor unfortunates” since, as we know, he didn’t get too far with his study of the law. However he did at least enrol in the Middle Temple in London, unlike his Trinity contemporary, Oliver Goldsmith, who was given £50 by his uncle to go to London to study law, but promptly lost the money, gambling in Dublin...

Goldsmith and Burke now have pride of place in the College, gazing out on College Green from the front of Regent House. You will also have passed replicas of those statues as you came up the stairs to this Saloon. This should not be taken as the College’s endorsement of their laxity towards legal studies!

In fact the house we’re standing in now was built 250 years ago by a Provost, Francis Andrews - also trained as a lawyer. His portrait hangs behind me here. And another distinguished ‘legal’ Provost was John Hely-Hutchinson, who was called to the Irish bar in 1748, and became Provost in 1774. This lawyer-Provost got off to a poor start – the Fellows reacted badly to an outsider coming in with no scholarly achievements and he was challenged to a number of duels. But he is now recognised for his achievements. He seems to have had an enviable talent for securing government endowments for professorships – and for building projects. So Trinity does rather well under Provosts from the legal world...

I should say that my knowledge of these Provosts comes from the Dictionary of Irish Biography, which I take great pleasure in consulting when I need to check up on past Trinity men and women – staff and students. The Dictionary is, of course, edited by another of your former presidents, James McGuire.

And this evening we’ve had the pleasure of hearing Daire Hogan, also a former president, deliver the spring discourse on James Campbell who as a Trinity student won the Hist’s gold medal for oratory in 1873 and went on to represent this university in parliament. According to the Dictionary of Irish Biography, in his last years Campbell spent ‘quite a lot of time and money on the tables at Monte Carlo, and on an attractive Spanish girl who numbered tennis among her accomplishments’ – and he didn’t leave enough money to cover the numerous bequests in his will...

I congratulate Daire on an excellent discourse, and I’m delighted that it had a Trinity theme. I’d also like to take this opportunity to acknowledge Daire’s and his firm’s contribution to Trinity’s newest professorship – the McCann FitzGerald Chair for Corporate Law.

If I may mention a final discourse – one of our recent Trinity graduates, the medieval historian Dr Peter Crooks, delivered the spring discourse four years ago, in the Science Gallery, on "Reconstructing the Past: Later Medieval

Ireland and the Irish Chancery Project". I had the great pleasure of launching last year the website of the Chancery Project, which is a tremendous online public resource, hosted on Trinity's server.

In this, and in other projects to encourage the study of the history of Irish law, the Legal History Society's and Trinity's aims often dovetail. I know we will continue our mutual support and partnership.

* * *

One of the great strengths of the Irish Legal History Society over the past twenty-five years is that it has acted as a bridge between North and South, creating a forum for the exchange of ideas and for co-operation on intellectual and scholarly pursuits.

We have always been proud that Trinity has served a similar purpose on this island. We have always seen ourselves as a university for the whole island, attracting students from all 32 counties. In fact in 1917, the Irish Convention, which was the last valiant attempt to hold the 'centre' together, was held here in Regent House, with the imperious figure of Provost Mahaffy making his presence felt. Since independence, Trinity has continued to act as a bridge between north and south, as well as a bridge between Ireland and Britain, a role made possible by our history and traditions.

Unfortunately in recent years we have seen a sharp decline in the numbers of students we admit from Northern Ireland. There are a number of reasons for this, and some of the problems have been of our own making. But under my provostship we have taken active steps to reverse this decline.

The College's Senior Lecturer, Dr Patrick Geoghegan, who is also, of course, a vice-president of this Society, has recruited volunteer student ambassadors from every county on the island to encourage other students from their home areas to come to Trinity. You can see some of these student ambassadors make their case on Youtube.

We are also bringing forward policy changes, so that every student on this island, whether they do the Leaving Cert or A-Levels, is treated the same when they apply here. This represents part of our ongoing work to ensure that our research-inspired curriculum is made available to all those with the academic ability and potential to benefit from it. And it connects with our global strategy, spearheaded by another of your Council members, Jane Ohlmeyer, the university's Vice-President for Global Relations.

Speaking in 1998, Professor Osborough recognised the four qualities needed for success in the world of legal history: 'skill, dedication, imagination, and perseverance'. They could serve as a suitable motto for this society, and they are indeed qualities I like to encourage in our students.

I congratulate the society on reaching this important anniversary – and in doing so in such style. I wish you all the best over the next twenty five years.

And I hope that you'll invite me back to this house in 2038, when the society celebrates its 50th anniversary.

* * *



Picture from HIST debating chamber in GMB: Chair, Dr Robert Marshall.
Also pictured are Dr Patrick Geoghegan, Professor David McConnell, Provost Dr
Patrick Prendergast

Tuesday, 19th February 2013

Welcome Address at the Online Education Symposium 'Disrupting Higher Education'

PACCAR Theatre, Science Gallery, Trinity College

Colleagues, Ladies and Gentlemen,

It's my pleasure to welcome you to Science Gallery at Trinity College Dublin, and to this important symposium. I want to thank Tom Boland for being here - and signalling by his presence just how important are the issues under debate today. And I want to thank Professor Veronica Campbell, Dean of Graduate Studies, for organising this symposium to such a high level. Today we will hear from distinguished international speakers from academia and the innovation industries. They will take us through some of the wonderful opportunities - as well as the disruptive potential - of online education.

The title of my talk is 'Changing Universities'. I guess I intended a double meaning, or play on words, here: 'changing' as an adjective - universities are currently in a transitional state and ways of delivering education are changing - whether we like it or not.

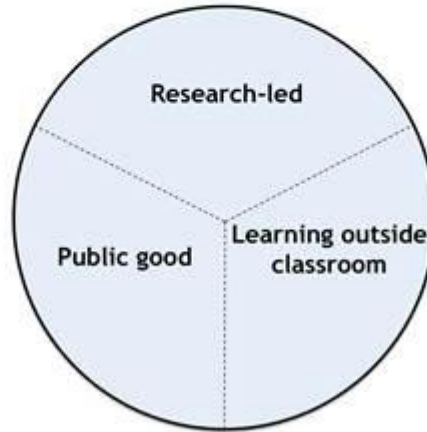
But also 'changing' as an active verb - because those of us who have a leadership role in higher education must not be passive participants. Online education is transforming the way universities deliver courses, and university staff and administrators have an active directional role to play; it is up to us to decide how to use this tremendous new resource.

Different universities serve different student needs - have different 'constituencies' if you like: one size never fits all, which is why in Ireland, as in other countries, we have diverse higher education institutions offering choice to students. As a resource, online learning will be used in manifold ways, depending on the requirements of particular institutions. This morning I want to talk to you about how I think online education might work in Trinity.

*****The Trinity Education*****

What is a Trinity Education? How do we in Trinity meet the needs of our students? How does this fit into the world of global universities? I believe three things in particular characterise the kind of education offered in universities such as Trinity, as shown here:

Trinity Education



- First, it is research-led: our students undertake research alongside professors in a common enterprise of discovery. This research may take the form of examining archives, analysing data, or conducting laboratory experiments, but it aims to be original research having reference to the latest scholarship in the field - and it starts at undergraduate level.
- Second, we recognise the transformative power of higher education in its broadest sense - not just what happens in the classroom, but what students learn from developing responsibility through event-organising, fund-raising, competing, debating, and taking on leadership roles in College clubs and societies. Trinity seeks to transcend the vocational and to educate not just for the first job but for a career - and for an active and participatory citizenship. The academic curriculum does not define the boundaries of a student's learning. These activities paralleling the academic curricular activities - the so-called extracurricular activities- are intrinsic to the education we offer.
- And third, a Trinity education serves both the private and the public good. Obviously a university education confers a benefit on private individuals in terms of enabling them to pursue interesting careers. But it also gives a valuable return to society at large, since the graduate within the community provides indispensable expertise in crucial areas like medicine, law, the arts, business, science and technology. Our recognition of the private and the public good is reflected in the way higher education is funded - we favour a balanced mix of exchequer and non-exchequer funds. And it's reflected in the way we seek to throw our net wide, to offer access and to facilitate learning for students from all backgrounds.

These three characteristics of the Trinity Education, and no doubt they characterise other universities too - research-led, learning outside the classroom, and serving the public good - go back many hundreds of years.

And while for much of its history, Trinity was, like most European universities, peopled disproportionately by the wealthy male elite who could afford to pay; the college did try to redress this by offering 'sizarships'- assistance with tuition fees and lodging - to those of limited means. The 18th Century playwright Oliver Goldsmith, whose statue gazes out on College Green from the front of Regent House, is probably our most famous sizar. And this year we celebrate 20 years of our Trinity Access Programme which is a pioneer programme in facilitating people from socio-economic groups under-represented in higher education to go to university. Increased access to a quality higher education has been one of the great successes of our times.

I cannot now envisage a situation in which we would deviate from our core principles – become, at one extreme, a purely privately-funded vocational college. We stick to our defining principles because they work for us and they work to the benefit of Irish society.

*****Online and Trinity*****

So how might online education fit into a Trinity education?

The title of this symposium is 'disrupting higher education'. Could online disrupt a Trinity education? Watching Daphne Koller's TED-talk on online education – which I'm sure many of you have seen – I was struck by one of the remarks in the comment box on the TED website. The commenter wrote of

"canned online lectures - students sitting at home like hamsters pushing buttons for hours and hours each day".

That certainly seems counter to my depiction of "students engaged alongside professors in a common enterprise of discovery". Surely a Trinity education depends on personal, rather than virtual, interaction? Is online education just another depressing 21st Century retreat from real, active, breathing life to the impersonal screen?

If we are honest we have to say, potentially, yes. But if handled right – and this goes back to my use of 'changing' as an active verb – then online education will actually help us adhere closer to our core principles.

Let's look at each principle in turn in terms of the development of online provision:

Trinity Education

Potential developments with online provision



First, research-led education. A Trinity education depends on student-professor, one-on-one time. By freeing up lecture hours, online education can help deliver this. In just a few years, it will, I think, come to seem laughable and archaic that professors were once tied to delivering lectures week-in, week-out, year-in, year-out, the same lecture in the same theatre to generations of undergraduates paying scant attention. We all recall sitting in those big sweaty rooms, with the professor shuttling through the lecture for the umpteenth time, trying heroically to inject some energy, ... Well those days can go, I think, and without any regrets.

Far better for the professor to deliver the lecture once, with fire and passion.

It's important that we ensure that students benefit from professors' time, and that this time isn't all used up just in delivering information. We should see online as an opportunity for more one-on-one staff-student time. Online will enable a research-led curriculum.

Second, extracurricular, learning outside the classroom. As I've said, third-level education is about developing potential, including potentials beyond the academic curriculum. Students are challenged to develop skills as, event-organisers, fund-raisers, entrepreneurs, volunteers, and communicators. Online education will create a more flexible tailored academic timetable allowing time for the extracurricular.

Online is also, in itself, transformative. It develops skills which are insufficiently addressed by traditional education as practised for the past five hundred years. What I find fascinating about online is that it returns us to a more oral, and aural, culture – one where ideas are articulated and debated rather than written down.

Third, the public good. This is the area where online education has the most exciting potential, as well, conversely, as the most possible pitfalls. As I've said, in Trinity we are committed to serving the public good by opening up access to students with diverse talents and from all socio-economic backgrounds.

Online – at its most avant-garde – through the MOOCS, offers free courses to hundreds of thousands of people, indeed to as many as have access to high-speed internet – theoretically a limitless number. Potentially, anyone in Ireland and beyond, could avail of Trinity courses, for free.

I should specify that they will not, then, necessarily be getting a Trinity education. The problem here isn't one of grading and accreditation. There are some fascinating solutions for this; particularly peer reviews – of students grading each other. As an educator, I can see exactly how this could work fairly and equitably.

The problem is that a Trinity education means face-time with professors and it means access to the whole range of extracurricular mind-expanding activities. A student at home accessing online course-work is not getting a Trinity education; at least not in the way I've described it so far. We can't deliver the kind of education we now offer to students anywhere in the world. You have to come to Trinity to get it, and until we've worked out how to teleport, that isn't going to change!

So leadership in this area involves not overstating our case. But once we are clear about what we can and can't do, we can emphasize all the advantages for the public good.

As we get used to people around the world accessing our lectures and course works, we will start expanding our idea of the public good – certainly beyond national boundaries. This is happening anyway, but it will be accelerated by online education. We will start thinking naturally in terms of dialogue - with Trinity not so much instructing, as engaging people globally with the research that we do here.

*****The online road map*****

So, to recap, online education is here and is already changing the way we deliver education. The challenge for universities is to use this new delivery system in a way that enhances the education they offer. For Trinity I think this will mean finding ways for online to help us better deliver on our three core principles.

When seeking change, it's advisable to first articulate what you want, and then develop a 'road-map' to take you there. This symposium is our means of exploring how we want online education to work for us. The next step is to provide the road-map.

Trinity's current five year 'Strategic Plan' which takes us up to 2014, includes the aim to, "make open access a key element of our publication and information dissemination policy". This was articulated in 2009 but the situation has changed even since then, and the next college strategic plan will include fuller, more targeted ways of developing online education.

To signal the vitality of this new sphere, I have asked Professor Veronica Campbell to prepare a discussion paper for the University Council, to spearhead our online activities. The new College Officership could be created, to link in with other college activities, for instance our global relations strategy, to ensure cohesion.

We want to hold a college-wide discussion on how best to enhance the Trinity education through online.

I know there are numerous decisions to take and issues to confront. For instance:

- Will we consider grading courses? Using what kind of system?
- Will the loss of the communal lecture room make learning more disparate?
- Will our professors hook up with academics in other countries to deliver cross-institutional courses?
- Is there a danger that online will feed into the culture of 'super-star academics', with people seeking out the courses of celebrity academics, who may be the most telegenic but are not necessarily the most profound thinkers?
- Is there a danger that this new oral/aural/visual culture will eventually kill off the written word, and that this will involve a loss in seriousness, concentration, and profundity? An incalculable loss of the reflective approach?

The full implications of these and other issues must be considered, and will be the subject of some of our deliberations here today. But this morning I've concentrated on how online might impact our existing education - because I think that you need to establish where you are, and what your strengths are, and where you want to go, before you can start evaluating implications.

Yes, online education is arguably the greatest potential education change in centuries and is revolutionary in its implications; yes, it can appear at once dangerously destructive of all we have, and dangerously glamorous in its boundless possibilities; but if we are secure in our foundations then we are not powerless in the face of disruption, nor dazzled by seductive fantasies.

To return to my title, 'Changing Universities': change in some form is always inevitable, and institutions (and individuals) must learn how to handle, and embrace, it. The great political theorist, Edmund Burke, whose statue stands

alongside Oliver Goldsmith's, was, as you probably know, a conservative (with a small 'c') but he noted that:

"A state without the means of some change is without the means of its preservation".

He would, I think, be happy with the way his alma mater has designed for change: a Trinity education has in-built flexibility; it is evolutionary in design rather than intractable. We now look forward to seizing the great opportunity of online education, and to developing it in a way consistent with all we stand for.

Thank you.

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(L-R) Mr Tom Boland, CEO of HEA; Professor Veronica Campbell, Dean of Graduate Studies; Provost, Dr Patrick Prendergast

Monday, 25th February 2013

Speech at the European Intersectoral Summit on Research & Innovation

Public Theatre, Trinity College

Distinguished guests, Ladies and Gentlemen,

You are all very welcome to Trinity College Dublin and to this landmark event of the Irish presidency. We welcome today key figures from the political and media worlds, and from research and industry across Europe.

We welcome you to one of Europe's great centres of learning - to the university of Samuel Beckett, Oscar Wilde, and Jonathan Swift, and of the great mathematician William Rowan Hamilton who gave us the Hamiltonian functionals in quantum mechanics, and of Ernest Walton who won the Nobel Prize for splitting the Lithium atom in 1934.

Trinity was founded by letters patent of Elizabeth the First of England in 1592. The grant of a site by Dublin Corporation allowed it to open here in the centre of the capital city. Today Trinity is a wonderful balance of the traditional and the contemporary; I hope you'll get the chance to visit both the 9th century Book of Kells and our new Science Gallery, which is a global leader where art and science collide.

Trinity is proud to be Ireland's leading university. In eighteen fields we rank in the top 1 percent in the world. And the whole area of creative industries, commercialisation of research and entrepreneurial innovation is a huge growth area in Trinity, as in other universities throughout Europe.

The remarkable research coming out of Europe's higher education sector is creating opportunities for economic growth across the continent. It's a tremendously exciting time for universities, industry, and for all players in innovation. But – as we know - with great power comes great responsibility.

There are all kinds of issues and responsibilities arising out of research and innovation, and over the next two days we will look at some of them.

We can look forward to some great talks on important themes, including gender equality, open access, and ethics. I'm delighted that Trinity staff are among those who will robustly engage in these debates over the next two days.

But for this welcome address, I want to say something about the importance for responsible research and innovation of independent institutions. I want to

touch on one of the central tenets of democratic and innovative societies – the ‘separation of powers’.

* * *

You are all familiar with Montesquieu’s separation of powers, into the executive, the legislature and the judiciary. And of course you all know that to these three, was added a ‘fourth estate’ – the press or the media - which should also act independently in a functioning democracy. Apparently the great political theorist Edmund Burke was the first to use ‘fourth estate’ to describe the press in 1787. He was a Trinity graduate, and his portrait hangs here in this very hall – the Public Theatre of the College.

The importance of independent media has now taken firm hold around the world. Press freedom is monitored internationally and a country which censors or unduly controls its press is not regarded as truly democratic.

Montesquieu came up with three powers and Burke added a fourth, but of course it’s not about numbers. What counts is the ‘separation’ between the different actors in civic society. Each must function independently, and must be enabled - indeed compelled - to take responsibility for their actions.

Another example of such democratic players is industry. We do not, in Europe today, see it as desirable that industries are directly controlled by governments.

What is the situation for universities and centres of higher learning? Do we include them among the democratic actors who must function independently in the public interest?

This is not an easy question to answer, not for Ireland, not for Europe as a whole.

* * *

In Trinity College we have enshrined academic freedom in our Statutes, where it is defined as, quote, “*The freedom, subject to the norms of scholarly inquiry, to conduct research, teach, speak, and publish without interference or penalty, no matter where the search for truth and understanding may lead.*”

The idea of governments influencing research decisions doesn’t sit easily with the sector. It raises the spectre of States funding only research which fits with some masterplan. Research-led universities, like Trinity, are particularly concerned to maintain freedom-of-action in research, because what we research ultimately decides what we teach.

Universities are now encouraged to commercialise research, and this is unequivocally a good thing - but there are dangers to the market being

allowed to influence research decisions too directly. I won't go into those dangers now. Most here will have already considered them.

My point is that people who say they recognise the importance of academic freedom, are well capable in the same breath, of advocating that only research projects with an immediate commercial potential - which they themselves identify - gets financed. This controlled environment is not the well-spring of innovation - quite the contrary.

* * *

There is currently a bill going through the legislative process here in Ireland called the Universities Amendments Bill, which could allow the government to send an investigator into a university to decide who is employed and on what basis, and to decide pay and conditions of staff without reference to the university's governing board. There has been little public outcry over this bill - which suggests to me a lack of understanding of the value to society of independent universities.

I can only speak about Ireland, but I do have some knowledge of the sector in Europe, from my time in universities in Italy and the Netherlands, and from my recent appointment to the board of the European Institute of Innovation and Technology, the EIT. My impression is that many European countries do have more clarity, but I suggest that, in most countries, a similar level of debate and confusion would greet the following question: to what extent do universities currently - and should universities ideally - have decision-making powers, in terms of being able to decide how to finance themselves (set tuition fees), who to hire, how to remunerate, what and how to research, and what and how to teach?

* * *

As we answer this question I think we need to continuously articulate that universities serve the public good as well as conferring a private benefit. The public good is not only the education of doctors, teachers, lawyers, writers, scientists, engineers, entrepreneurs and others who provide essential services and drive the economy, but also the education of citizens for participatory democracy. In an address last year the President of Ireland, Michael D. Higgins, centralised this role very well. He asked: *"Are the universities to be allowed and will they seek [...] to challenge paradigms of the connection between economy and society, ethics and morality, democratic discourse and authoritarian impositions that have failed."*

Our understanding of higher education as a private and public good informs the kind of education we offer. In a whole variety of ways we encourage critical independent thinking, initiative, and entrepreneurship:

- Our education is research-led, our students engage on original scholarly research alongside their professors.

- We know that learning is not only what happens in the lecture theatre and the lab. Our students develop initiative and responsibility through event-organising, fund-raising, competing, debating, and taking on leadership roles in student-led organisations.
- And we are proud of our rate of spin-out companies, which has averaged at seven new companies a year since 2007. A Trinity spin-out, the DNA-profiling company, IdentiGEN, came up with the technology that the Food Safety Authority of Ireland used to expose the horsemeat scandal in beef products.

* * *

There is great support for the kind of education we offer. No-one – not students, parents, government, or employers – is arguing against our emphasis on original research, student-led activities, and innovation. There is agreement that these are beneficial to the individual and to society at large.

Everyone is agreed that we need to nurture independent thinking and leadership skills in students. And that we must carry out research in an open, non-authoritarian environment. And yet when it comes to questions of universities independence: of staffing decisions, budgets, and research and teaching decisions, there is suddenly less consensus.

How can we encourage independence and responsibility in students, unless we ourselves are independent and accountable? How can we encourage decision-making skills when we cannot ourselves take decisions? How can we innovate in an environment of control and curtailment?

To make the analogy: if newspapers were under government remit, could they then carry out independent investigative journalism?

It's precisely because universities are increasingly valuable engines of economic growth, that issues of independence and accountability have become critical. If you look at the great innovation universities of the world - what characterises them is a high degree of autonomy. We could go so far as to state that the ability to act independently is a key indicator of innovation.

However the rate of change has been so fast that we've hardly had time to pause and get a handle on it. In a matter of decades, universities have changed from ivory towers into the roaring engines of knowledge economies. We have yet to take the measure of our new power. But to rephrase Voltaire: with increased power should come increased responsibility.

Unfortunately the current climate of austerity has bred an atmosphere of control and over-direction, in Ireland particularly. It's easy to see how it happened: when governments have to take over banks and regulate financial bodies, it can become second nature with them to seek to gather all public institutions under a government remit.

I believe this kind of thinking has crept up, rather than being actively encouraged. It's now time to call a halt.

Edmund Burke coined the phrase 'Fourth Estate' at a time when the press was gathering strength and becoming a professional force. Naturally governments sought to influence this new force, and sometimes succeeded. But the press was able to articulate a sense of itself as separate and independent.

Today, with the growth of online media, bloggers, and wikileaks, the fourth estate faces unprecedented challenges. But it is helped in confronting those challenges by the distinct sense of identity it has carved out over the past two hundred years or so.

I would like to see universities gaining this kind of identity. At the moment the picture across Europe is confused. Some universities have a lot of autonomy, others very little. Some are trying to articulate their role in civic society, others are not yet asking those questions.

The EU celebrates diversity, but it is, of course, premised on cohesion – on countries and sectors acting together. The European third level sector should be diverse – a dynamic mix of universities with different and complimentary missions – but there should be a shared sense of the importance of independent universities and of the need to develop governance structures that support it.

Today's summit seeks to develop a European model for responsible research and innovation.

I submit that that a crucial step towards developing responsible research is for universities to be allowed to take full responsibility for what they do.

Thank you.

* * *

Wednesday, 27th February 2013

Speech at the European Forum of Sign Language Interpreters

Hamilton Building, Trinity College

Ladies and Gentlemen,

Welcome to Trinity College Dublin. It's a pleasure and an honour for us to be hosting the third European Forum of Sign Language Interpreters, the EFSLI.

I thank Professor Lorraine Leeson for her kind invitation to say a few words to you this morning. I'm a great admirer of her work and that of her colleagues in the Centre for Deaf Studies.

Trinity College is one of Europe's great centres of learning. It was founded 420 years ago. Today it's a wonderful balance of the old and traditional with the modern and contemporary. This building we are in now, the Hamilton, built in 1993, helped revitalise the east end of our campus and provide a focal point for our science activities. We are now within easy distance of our new Trinity Biomedical Sciences Institute – TBSI - and of the Science Gallery, an exhibition space where science and art collide. I know that a visit to the Science Gallery is on your cultural programme. I hope some of you will also get to visit the Book of Kells, a 9th century manuscript of the four gospels on display in the old library.

It's a particular pleasure for Trinity's Centre for Deaf Studies to be hosting this important seminar, since in this year - 2013 - we celebrate the graduation of the first cohort of students with a Bachelor in Deaf Studies, the majority qualifying as ISL/English interpreters.

With this new Bachelor course, Trinity becomes the only university on the island of Ireland offering an undergraduate programme in ISL/English interpreting, ISL teaching, or Deaf studies.

It is just over a decade since Trinity established the Centre for Deaf Studies with a Diploma course in ISL/English Interpreting, but Trinity's commitment to Deaf Studies began earlier, in 1992, when we collaborated in offering the first ever sign interpreter training programme in Ireland. This was, appropriately enough given today's seminar, an EU-funded programme (Horizon II) run between Trinity and the University of Bristol. A keynote speaker of the Seminar, Professor David Little was, so Lorraine has told me, instrumental in facilitating this at Trinity.

I'm delighted that from the initial collaborations of Horizon II, twenty-one years ago, we are now at a stage of moving towards accreditation of sign

language interpreting programmes, in a parallel fashion to that currently offered to spoken language programmes.

The goal of this seminar is to prepare a consensus document on the threshold competencies for graduate interpreters, which will be presented to the European Commission's DG Interpreting. This is the first time that a collaborative approach to the development of sign language accreditation has been undertaken at European level. It's an exciting and also a logical development.

Accreditation will help develop cohesion. There are an estimated one million sign language users in the European Union but the role of interpreters is far from established - in many EU countries, training is still ad-hoc or non-existent. This impacts on the potential for deaf citizens to engage fully in society, and limits what society can learn from the contribution of deaf communities and individuals.

We have some way to go, but it is worth reminding ourselves how far we have come. In 1981, the UN International Year of Disabled Persons, there were no professional sign interpreters in Ireland. By 1992, two deaf students were registered at Irish universities, working without interpreters. Today, over 200 deaf and hard-of-hearing students access third level education in Ireland, and are facilitated by interpreters.

The progress of Deaf Studies in Trinity and in other European universities is part of, and illustrates, two of the most important educational developments in the late 20th and early 21st century higher education:

- First access and
- Second international collaboration.

*****Access*****

A hundred years ago, if you had visited this college, you would have been greeted by a monolith of white, male, middle-class, able-bodied students and staff. There would have been no wheelchairs or people with disabilities. You might have glimpsed a few female students - granted access in 1904 - but no female teaching staff. There were some students from poorer backgrounds, on grants, but a minority. You may have seen a few students from Asia, since Trinity has strong historical connections there, but again, very few. The situation was of course exactly the same in universities everywhere in Europe.

But the twentieth century was the great democratic century of improved access to third level education, and the ending of discrimination against particular groups.

In Trinity access has accelerated in the past twenty years. Since 1992 we have led the way, within Ireland, in broadening participation at third-level for

under-represented groups. We have been pioneers, as I said, in Deaf Studies. Through the Trinity Access Programme we pioneered access for students from economically deprived backgrounds and older students. And in 2004 we pioneered the rights of people with intellectual disability to a third level education.

With each ‘opening out’, we realised that not only had countless individuals been denied the full exercise of their potential, but society had been denied their talents and services.

The great success of these different programmes has inspired us to go ever further with broadening access. It is not just a matter of human rights – although it is that – it is also that, quite simply, we realise the value of diversity. It has become intrinsic to the kind of education we offer that we bring in staff and students from different backgrounds and expose our students to different perspectives and cultures. We are currently pioneering a pilot scheme to broaden our admissions policy and reach out to students whose potential is not measured by the current exam-based admissions system. We are also, through our Global Relations Strategy, actively seeking to bring more international students to study here.

The Centre for Deaf Studies, part of Trinity’s School of Linguistic, Speech and Communication Sciences, is central to our college policy of internationalising and diversifying education.

*****Collaboration: interdisciplinary and inter-institutional*****

Another key aim of our global relations strategy is more international research collaborations.

We find it natural to seek partners in other institutions with different and complementary skills to broaden and deepen our research offerings.

The Centre for Deaf Studies is exemplary in this respect. International collaboration underpins much of the Centre’s research work, and Trinity works in partnership with EFSLI and institutions across Europe in seeking EU funding for projects.

Indeed, today’s seminar is itself an instance of international collaboration. I thank Lourdes Calle, the EFSLI project manager, for her help in co-ordinating this event from Spain.

In conclusion, I wish the EFSLI all the best in achieving its great aim of EU-wide accreditation of sign interpretation.

I think I can say that the city of Dublin is behind this aim because I know that the Lord Mayor is holding a drinks reception for you on Thursday. I’m delighted that he and the city are acknowledging the importance of your seminar here this week, and of your work towards a fairer society.

I'd like to thank the co-sponsors of this event, Bridge Interpreting, who have provided ISL/English interpreting. Students from our Centre for Deaf Studies are also helping out at this event and at the Medisigns 'Interpreting in Healthcare Settings' seminar on Friday and Saturday.

And finally, I congratulate Professor Lorraine Leeson and all the staff and students of the Centre for Deaf Studies for its great contribution to university life and for helping Trinity deliver the diverse, international, interdisciplinary, and collaborative education which is our aim.

Tuesday, 5th March 2013

Speech at the Inauguration of Dr Edward McParland as Pro-Chancellor

Saloon, Provost's House, Trinity College

Pro-Chancellors, distinguished guests and colleagues:

It's my great pleasure to welcome you this evening to the installation of Dr Edward Joseph McParland as a Pro-Chancellor of the University of Dublin.

I will say a few brief words about the Pro-chancellorship, before asking Dr McParland to make the statutory declaration, and give his address to you. Pro-Chancellors are *ex officio* members of the Senate of the University, and Pro-Chancellors hold office in their own right. They deputise for the Chancellor in accordance with the Statutes.

For the Chancellor and Pro-Chancellors, the conferring of degrees at commencements is the primary commitment. The Chancellor is also one of the two Visitors to the College; this entails hearing cases from staff and students on all sorts of issues. In these matters the Pro-Chancellors are called on to deputise for the Chancellor as needed.

The University of Dublin is very fortunate to have in these offices very eminent individuals; our Chancellor, Dr Mary Robinson, and our Pro-Chancellors: Dr Patrick Molloy, Professor Dermot McAleese, Professor John Scattergood and Dr Mary Henry. Also recently elected is Dame Jocelyn Bell Burnell. And this evening is about adding a new name to this distinguished list.

Dr Edward McParland, or Eddie and he is known in College - affectionately known I would say – is a wonderful example, or embodiment, of a rounded education of the kind we value here in Trinity.

I find it fascinating, for instance, the mathematician William Rowan Hamilton was an ardent and prolific poet and that poetry was his first choice of career before turning to mathematics. Dr McParland went in the opposite direction, if you like. He studied pure mathematics up to M.Sc level in UCD. But he then went to Christ's College Cambridge to read for the Fine Arts tripos. And it was as Lecturer in the History of Art that he first arrived in Trinity in 1973. In his 35 years on the academic staff his research interests concentrated on architecture. So he is very much the polymath - and it would be most interesting to know if the mathematical training led to geometry led to architecture.

When Dr McParland joined the Department of the History of Art, it was barely seven years old, having been founded by Professor Anne Crookshank in 1966. Today the department is integral to the School of Histories and Humanities, and of course it is now the Department of History of Art and Architecture. Dr McParland was instrumental in building up research expertise in architecture and in enhancing the reputation of the department generally.

Great academics need such a range of skills: they have to be able to teach and inspire; to do scholarly research and to present the fruits of their labours in an accessible and illuminating way; and if possible, to bring their knowledge and learning to serve the public interest outside the university. Dr McParland excelled at all this.

“His archival and formal rigour”, as one of his former students puts it, inspired generations of students with the principles of sound scholarship and respect for sources. He combines this rigour with a wonderful ability to entertain. How do I know this? Because when I moved in first to this house I would follow him around on his tours listening to his subtle, sensitive, fascinating, and humorous delivery. Indeed after his retirement in 2008 he was persuaded back to give alumni lectures – always to packed auditoriums.

We, and future generations can enjoy his style, scholarship and writing grace in his books, which include his biography of James Gandon and his history of public architecture in Ireland between 1680 and 1760. His present research extends beyond Ireland to consider a number of problems in Western architectural classicism.

Because his focus is architecture and he seeks to conserve Ireland’s great architectural heritage, it has been natural for him to take his enthusiasm outside the university from the start. In 1974, when still a very young lecturer, he organised, with the historian and cartoonist, Nicholas Robinson, an exhibition of photographs of the interiors of the Georgian houses.

When the exhibition finished there was nowhere in Ireland that could take in the images to keep them for posterity, so they set about raising funds to create an archive which they called the National Trust Archive. This became, in 1976, the Irish Architectural Association, the IAA. The IAA is now magnificently housed in 45 Merrion Square East.

Nicholas Robinson is, of course, the husband of our Chancellor Mary Robinson. I do not suppose, back in the Seventies, that Nicholas and Eddie had any idea they would one day be connected, not only through the IAA, but through the chancellorship of this university. Such is life.

Dr McParland is also a co-founder of the Irish Landmark Trust and a member of the committees of management of the Alfred Beit Foundation and of the Irish Georgian Foundation. His level of activity reminds me that there are – and were – all kinds of entrepreneurship open to academics, beyond founding commercial companies. There are many ways in which we can make our research serve the wider public interest. Dr McParland deserves the thanks of

everyone on this island of Ireland, and the thanks of all who care about Georgian architecture.

As well as being elected a Fellow of the College in 1984 and a Member of the Royal Irish Academy in 1996, Dr McParland is an honorary fellow of the Royal Institute of the Architects of Ireland, an honorary member of the Royal Society of Ulster Architects, and vice-president of the Ulster Architectural Heritage Society. He retired as a Fellow of the Society of Antiquaries of London in 2010.

It is with the greatest pleasure that I welcome someone with such an impeccable record of scholarship and public service to the Pro-Chancellorship of the University of Dublin.

Dr McParland is the 54th Pro-Chancellor to be appointed to this role since the foundation of the College in 1592.

*** FORMALITIES ***

Provost In accordance with the 2010 Consolidated Statutes of Trinity College Dublin and of the University of Dublin, Dr Edward Joseph McParland, having been nominated in accordance with Section 6(3)(b) of the Chapter on the Chancellor, was declared elected a Pro-Chancellor of the University of Dublin at the Board meeting of the 30th of January, 2013. In accordance with Section 2(2)(4) of the said Chapter, I now invite Dr McParland to make the statutory declaration:

Dr McParland I, Edward Joseph McParland, solemnly declare that I shall faithfully discharge the duties prescribed for the Pro-Chancellor by the Statutes, and that I shall, so far as in me lies, promote and defend the welfare and interests of the University

Provost robes Dr McParland

Provost Dr McParland is now admitted to the Office of Pro-Chancellor of the University of Dublin. I invite Dr McParland to address you.



Pro-Chancellor Dr Edward J. McParland in the Drawing Room of the Provost's House

Friday, 8th March 2013

Speech at the INTEGER Partnership Group Meeting

Printing House, Trinity College

Good afternoon,

You are all most welcome to Trinity College Dublin for this INTEGER Partnership meeting.

Let me start by acknowledging the elephant in the room: as I stand before you in my capacity as President and Provost of Trinity, I'm well aware that many heads of universities are male. In a way we embody one of the problems which we are discussing today: the poor representation of women in senior roles in academia.

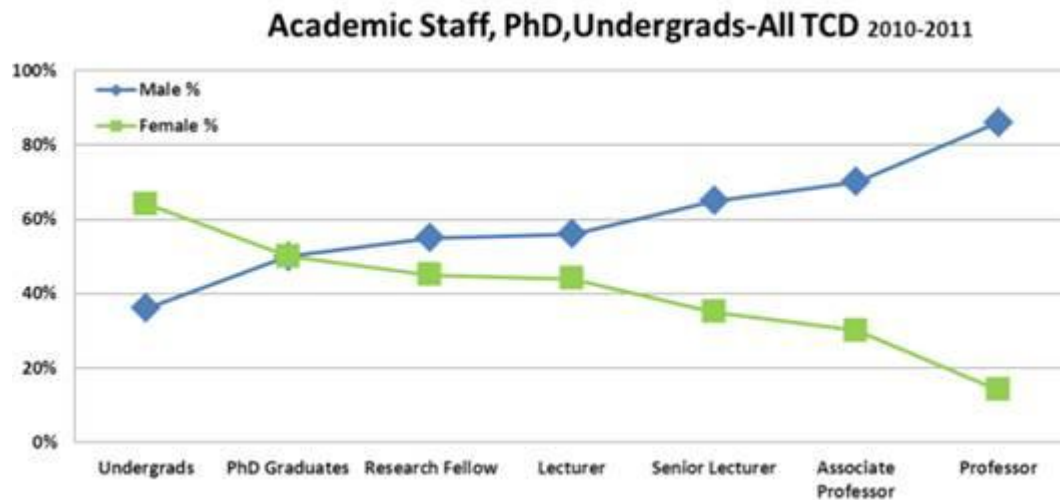
The issue of gender inequality in academia is one that I'm keenly aware of since I hail from one of the disciplines, Engineering, which is worst affected. I recall my undergraduate days: a few hundred of us in the lecture theatre, a monotony of men, with here and there, as unexpected as a swallow in wintertime, a sudden female face – rarely the lecturer's. That was the early Eighties. Happily the situation has improved, in Engineering and in other science and maths subjects – and this progress is something we celebrate and will build a brighter future on.

Today we look at the FP7 project, INTEGER which aims to create sustainable transformational change to improve the career progression of women scientific researchers.

When we talk about gender inequality in higher education, we are addressing two central issues:

- First, is the issue of female promotion to senior decision-making roles. This is an issue affecting all university faculties, and it is part of the wider issue of female promotion in the workplace generally.
- Second, is the issue of recruitment and retention. How many women undergraduates do we take in? How many remain to do PhDs? How many of those embark on university careers? Is it an issue disproportionately affecting some fields of study, such as Science, Mathematics or Engineering?

I want to look, briefly, at these two issues in a Trinity context. What is the current situation for women, staff and students, in Trinity? Here is a recent graph from 2010-2011:



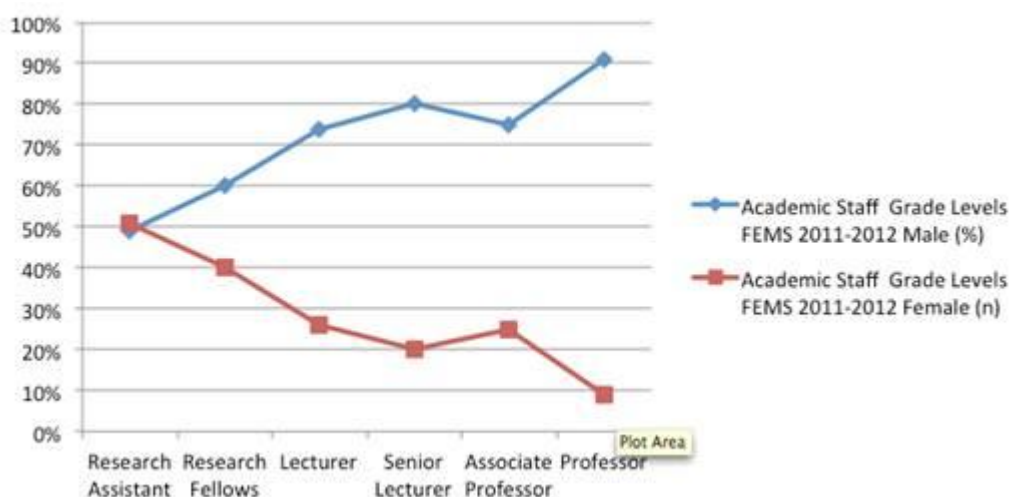
This shows a classic scissors shape: at undergraduate level we admit more women than men – at a ratio of 60:40. (This is, of course, all admissions to all faculties).

Male and female numbers converge at PhD level, but then the numbers start to diverge – the difference isn't acute for research fellows and junior lecturers, but begins to widen alarmingly at senior lecturer level. By the time you get to professorship, the ratio is 18% to 82%.

This graph is generic in terms of other European universities. Across the EU, women account for just 18% of Grade A academic staff. The findings are also quite generic in terms of senior management and CEO positions in the workplace generally. In fact, universities perform slightly better than other workplaces – women represent just 13 percent of board positions in large listed companies in Europe.

Universities should lead the way when it comes to gender representation in the workplace. Historically, higher education has been a trailblazer. For the first half of the twentieth century, universities were one of the few places women could lead fulfilling careers, although their numbers were of course very small – but for instance in 1925 Trinity appointed a woman professor of law, Frances Moran. It's now time for the sector to trail-blaze again, to find ways of appointing more women professors. This is what INTEGER is about. Where universities lead, other workplaces will follow.

Let's have a look now at academic staff in Trinity for Science, Mathematics and Engineering:



As you see, this follows a similar trend to the general academic staff - but exacerbated. There are equal numbers of men and women employed as research assistants, but the figures then diverge, sharply, until by the time we get to professorships, only 9% are held by women.

This is why INTEGER is concentrating on science, maths and engineering. But of course the Gender Action Plans, which INTEGER is developing, can be used to improve the career progressions of women researchers generally. We look forward to hearing more about these Gender Action Plans in the course of today's meeting.

INTEGER is looking at two schools specifically: Natural Sciences and Chemistry; they attract equal numbers of male and female undergraduates, there is a real issue with engineering, maths, computer science, and physics. Far fewer women elect to study these subjects, so early intervention is critical. Fortunately this whole area is now beginning to get the attention it needs.

Last October an event at Trinity's Science Gallery brought together people from universities, schools, government, media, and the private sector with a focus on attracting more women to science careers. All participants agreed on the importance of putting gender on their agendas, and of developing a co-ordinated, targeted approach. This is important since universities cannot address the recruitment problem alone. All of society has to get behind the idea that girls do science and engineering too.

INTEGER sprang from the realisation that the situation for women in universities, while it has improved, needs targeted action. It is not a situation which will just right itself - there has to be organisational change across the university sector.

This is obviously an equality issue - but not solely, or even primarily. The Commissioner for Research and Innovation, Maire Geoghegan Quinn, who will address us shortly through video link-up, has spoken of the need to build up the research capacity in Europe and increase our competitiveness, which can only be done if we are utilising the full skills and potential of all our workforce.

Universities are now valuable engines of growth – their research helps fuel the European economy. So the issue of gender equality is an issue of growth and competitiveness.

For a university like ours which encourages all these things, gender equality is obviously critical. There can be no diversity or innovation when half the population is under-utilised. It's imperative that we improve female representation in senior positions, and I am hopeful that Transformational Change, which is intrinsic to INTEGER's gender action plans, will help us to do this.

Transformational Change is the strategic means by which every institutional decision in the university takes into consideration the impact on men and women academic staff. So Transformational Change comes naturally to us, as, I am sure, to our partners on the INTEGER project. If we can get it right, I'm confident that INTEGER will have a profound impact on the whole European university sector.

We have the great advantage, and privilege, in Trinity, of a distinguished female chancellor. Our current chancellor is a former graduate and professor of law of this university, and also, formerly, President of Ireland and UN High Commissioner for Human Rights, Dr Mary Robinson. She is the first female chancellor since this university was established by Elizabeth the First in 1592. She has spoken frequently on the issue of gender inequality, and she put the issue starkly in context when she said: "In a society where the rights and potential of women are constrained, no man can be truly free. He may have power, but he will not have freedom."

On that note, let us do everything within our power to remove constraints on women to allow all of us, our institutions, and our society to reach its full potential.

Thank you.

Sunday, 10th March 2013

Closing Remarks at the European Student Convention

The Clocktower, Department of Education & Skills, Marlborough St, Dublin 1

Good afternoon,

Thank you Aengus for your kind introduction. And I would like also to thank Cat O'Driscoll, Vice-President of USI, for the last minute invitation to address you! I'm happy of course to replace the Minister who, I understand, is in China. Indeed it's an honour for me to say a few words to you at the close of the 25th European Students' Convention.

As Provost of Trinity College Dublin, Ireland's highest-ranked university and one of the oldest universities in Europe, let me say how important your convention is, and how timely is the theme of 'equality for diversity'.

During the opening session of the convention, Trinity's Dean of Undergraduate Studies, Dr Patrick Geoghegan, addressed you. He chose the theme of university admissions and, I believe he spoke about the work he is doing to test the feasibility of a new approach to university admissions in Ireland. Trinity is conducting this feasibility study on behalf of the sector, and if it is successful it opens up a new possibility for broadening access to university beyond a purely points-based approach; it could help us account for yet more diverse socio-economic backgrounds. This is a difficult area, and one where much is at stake for the future of Irish society. But change can happen. Nothing is cast in stone.

The opportunities of higher education should be open to all who can benefit from it. Our society will do best when all its talents can find their route to contribute. But this is not easy to achieve – not easy at all, though many positive changes have been made in recent decades.

We have just heard the Chief Executive Officer of the Higher Education Authority, Mr Tom Boland explain the policy level challenges in Ireland. I agree with him about the importance of diversity of mission among Irish higher education institutions. Regarding what he says about regulation of the university sector, I emphasise the need for balance. As in all things in life, there must be balance. Accountability of universities to society is essential, but too great a degree of control would be self-defeating. The best return to society is found in higher education systems with a sound balance between autonomy and accountability.

Meeting the challenge of successful policy development requires the strong contribution of students. Now you might think I'm only plámáising you – but I'm not.

Our universities should go beyond just taking on board students' opinions; they must recognise students' expertise and integrate it into their governance systems. We must recognize that students are often more immediately aware of where the system is failing – for example in admissions - than we who lead universities are ourselves.

Indeed I would go further - students have a responsibility to make their voice heard in shaping higher education. And this responsibility is acted on by appropriate use of the levers of power within universities, and by contributing to public discourse. At Trinity College board meetings I face the officers of the Students' Union, and the Graduate Students' Union. I value their contribution.

Beyond university governance, student-led organisations are also important to the delivery of the mission of a university. By student-led organisations I mean particularly the university's societies, and also the sporting clubs. In Trinity College the Vincent de Paul society is the largest society, with over 7,000 members, and we have the oldest debating society in the world – The Hist – and also the oldest Rugby club in the world – the Dublin University Football Club founded in 1854. Independent and autonomous, these student-led, student-governed organisations are one of our success stories.

I'm glad to say, many universities around the world have are committed to the unfettered student contribution; committed because as educators we see the value of it for promoting active citizenship, for developing a participatory citizenship in an open society, for indeed, as you have put it in your own summary of the convention – "changing the world".

Thank you.

Thursday, 14th March 2013

Speech to the Bologna Follow-Up Group

Dining Hall, Trinity College

Ladies and Gentlemen,

Welcome to Trinity College Dublin. We're delighted to be hosting this dinner during the Irish Presidency, thus helping to further the Bologna reforms which will lead to greater social diversity in Europe's universities, and to greater mobility of staff and students.

This Dining Hall was built in 1760, and for 250 years staff and students have eaten here together in an evening meal we call "Commons".

What really interests me about the Dining Hall is the range and variety of the portraits. Gazing down on us are fourteen full-length portraits of notable figures; all 18th century figures and all male – I'm afraid there is no gender variety - but this only serves to remind us of the great leap that Trinity and all European universities made with access in the 20th century. We want to continue making such leaps into the 21st century to broaden participation in higher education, and Bologna will help us to do this.

But if these portraits are monotonously male, they are also politically and philosophically diverse. Many of them show lawyers and politicians, Trinity graduates all, involved in the great issues of the late 18th and early 19th centuries – the issues of catholic emancipation and of Ireland's relationship with Britain.

On these walls you will find all shades of opinion. Here are Lord Kilwarden and Lord Chief Justice Downes, both opposed to catholic emancipation and in favour of the union with Great Britain. But here, alongside them, are Barry Yelverton, Hussey Burgh and Henry Grattan, patriotic liberals, defenders of catholic relief and of Irish independence.

Up till now history has favoured the patriots – Henry Grattan in his red Volunteer's uniform is the most famous figure in this room and indeed he gave his name to the short-lived 'Grattan's parliament', a form of home rule, which ran from 1782 to 1800. As a Trinity undergraduate, Grattan was known as 'the elastic body' because his feet never seemed to touch the ground, and he brought the same manic energy to the House of Commons.

But if history elevates the one and condemns the other, on this wall they all get equal status, and I like to think that they represent the diversity and freedom of opinion which we seek to encourage in our students.

Freedom to dissent from the reigning politics of the day is a precious freedom. Fostering the spirit of inquiry which may result in dissent and radicalism is part of our job as educators. The Bologna Process is about widening access to create more socially diverse universities, and it's about improving student and staff mobility to open up to new cultures and new ideas. In so doing, Bologna helps us deliver on our commitment as educators – our commitment to the students and to society.

We are committed to providing our students with a global education, exposing them the latest ideas, research, and technology, so enabling them to embark on fulfilling careers. Our commitment to society means providing the cutting-edge research which helps grow the economy, and educating skilled, inquiring graduates who will improve and 'disrupt', in the best sense, generic ways of doing things. In this way universities serve the private and the public good.

We want our staff and students to be global, entrepreneurial citizens who spend time working and researching abroad. And we want a campus which reflects society's diversity.

We have incorporated these aims into our college strategy and into our various programmes, including the Trinity Access Programme, the Global Relations Strategy, and our recent feasibility study to broaden undergraduate admissions.

But we know that we cannot achieve success alone. No university is an island. There can be no true internationalism or diversity unless the sector as a whole is committed, and acts collectively. This is why we have signed up to the Bologna Process. We're excited about the possibilities for reform and implementation. I wish the Bologna Follow-Up Group all the best with implementing the recommendations of the Bucharest Communiqué, and with defining the next period of reforms.

I would like to conclude by touching very briefly on the European Institute of Innovation and Technology, or the EIT, because I'm one of the members of its governing board, and I know that many of you will be participating in a thematic session on the EIT tomorrow morning.

* * * **E.I.T.** * * *

The EIT's governing board represents a balance of individuals active across education, research, and business. EIT's mission is to foster a new generation of entrepreneurs and innovators. We recognise that too often ideas remain abstract, and people's potential remains unrealised, and so we need to create pathways to move from the ideas phase into something concrete and profitable. The EIT seeks to facilitate the transitions:

- from idea to product,
- from lab to market,

- and from student to entrepreneur.

How do we propose to do this? By greatly facilitating common working between higher education, business, and research institutes.

The EIT views these three sectors as a “Knowledge Triangle”. We have created structures, which we call Knowledge and Innovation Communities, or KICs, to integrate the three sides of this Knowledge Triangle. These KICs are currently implementing various education programmes, projects, and funding schemes to help meet specific targets for new start-up companies and for PhD students with entrepreneurial skills. The EIT is about creating and educating a new breed of European innovators.

The relevance to Bologna is I think evident: in order for the EIT to succeed in its aims there has to be dynamism and mobility within the Knowledge Triangle. Entrepreneurial students, commercialising their cutting-edge research, are likely to be those with the global experience of studying in more than one institution, and they are those who reflect the diverse fabric of society. So a successful Bologna Process will enable the EIT.

The European Union is founded on the four fundamental freedoms – the free movement of goods, capital, services, and people. As the legislative barriers come down we need to proactively enable mobility, understanding the value of this for each individual student. The EIT helps improve the flow between people, ideas, and products and services.

The more coherence we can bring to our activities, the more successful we will be in achieving our aims at every level – institutionally, nationally, and globally.

I spent some time myself studying in Erasmus University Rotterdam in the Netherlands. Since then I’ve been much attracted to Erasmus - his wandering around the Europe of the middle-ages, speaking his Latin. I always think of something he said, and I like to quote it: “*Ego mundi civis esse cupio*”. I long to be a citizen of the world.

I look forward to a successful Bologna Process and to a successful EIT which will enable Trinity students, Irish people, and Europeans to be citizens of Erasmus’ world.

Thank you.

Wednesday, 20th March 2013

Speech at the Inauguration of Dame Jocelyn Bell Burnell as Pro-Chancellor

Saloon, Provost's House

Pro-Chancellors, distinguished guests and colleagues:

It's my great pleasure to welcome you here this evening to install Dame Jocelyn Bell Burnell as a Pro-Chancellor of the University of Dublin.

I will say a few brief words about the Pro-Chancellorship, before asking Dame Jocelyn to make the statutory declaration, and give her address to you.

Pro-Chancellors are *ex officio* members of the Senate of the University, and hold office in their own right. They deputize for the Chancellor in accordance with the Statutes.

For the Chancellor and Pro-Chancellors, the conferring of degrees at commencements is the primary commitment. The Chancellor is also one of the two Visitors to the College; this entails hearing cases from staff and students on all sorts of issues. In these matters, the Pro-Chancellors are called on to deputize for the Chancellor as needed.

The University of Dublin is fortunate to have in these offices very eminent individuals; our Chancellor, Dr Mary Robinson, and our Pro-Chancellors: Dr Patrick Molloy, Professor Dermot McAleese, Professor John Scattergood, Dr Mary Henry and our newest appointment Dr Edward McParland.

This evening we add a new name to this list – and it is a greatly distinguished name, indeed a household name: Dame Jocelyn Bell Burnell was the first woman president of the Institute of Physics of the UK and Ireland, and last month she was named (by BBC Radio 4) as one of the 100 most powerful women in the UK - though this seems an unnecessarily genderised appellation.

A few years ago she was the subject of the first programme in the three-part BBC series, *Beautiful Minds*. Viewers had the pleasure of seeing her describe, in her admirably lucid way, without jargon, how as a research student in Cambridge in 1967, she detected unusual radio pulses coming from outside the solar system. And, after rejecting various theories – including that they were produced by 'little green men' – she helped identify the pulses as emanating from rapidly spinning, super-dense, collapsed stars, subsequently named 'pulsars'.

This was one of the most significant astronomical discoveries of the twentieth century. And it rightly won her Cambridge superiors the 1974 Nobel Prize for Physics. I know there are many within the scientific community who feel that Dame Jocelyn should also have been honoured, or at least cited – indeed she featured on *Scientific American's* 2008 list of 'Top 10 Nobel Snubs'.

I'm reminded of a sign that used to be up in Aughawillan, County Leitrim – and for all I know is still there – which said something like: 'This way to the birthplace of John McGahern, winner of the Man Booker Prize'. Of course John McGahern never won the Booker for *Amongst Women* - he was only shortlisted. But the consensus is that he should have won, that he wrote a 20th century masterpiece - so the people of Leitrim took it on themselves to correct the mistake.

McGahern himself was always humorous and little concerned about being passed over. And Dame Jocelyn displays the same attitude.

She acknowledges that demarcation between supervisors and students is always difficult to resolve, but she is also careful to give the historical context: in the 1970s, as she points out, it was still believed that "science was driven by great men".

Her own part in challenging this belief has ensured her place in history. As President of the Institute of Physics, she named "encouraging more women to consider a career in science" as one of her three key aims. This is an aim which we in Trinity are also committed to, and we are delighted to be appointing as our pro-Chancellor one who both embodies it, and promotes it.

Anyone who has seen Dame Jocelyn speak must be struck by the tremendous sense of excitement she conveys about scientific discovery. In the *Beautiful Minds* documentary she uses a phrase that has stayed with me. Talking about noticing the second set of pulses, after the first, she said: "Once you start seeing things, you begin to see more".

That phrase is, I think, an aphorism for all intellectual discovery, not just scientific discoveries. It conveys the sense of momentum which builds when the brain is firing on all cylinders, when you're forming connections, and mobilising all knowledge, experience, and intuition to make that breakthrough.

Listening to Dame Jocelyn, you know that the motivation – the point of it all – was discovery. Achievement can be recognised in many ways but nothing beats the adrenaline rush of true discovery. We want to impart this spirit to our students, so they understand that ultimately satisfaction can only come from the work; if the satisfaction comes only from the accolades then something is out of shape in science and in scholarship.

However, I'm happy to say that Dame Jocelyn has enjoyed her deserved share of accolades. Her many international awards include:

- the Albert A. Michelson Medal of the Franklin Institute of Philadelphia;
- the J. Robert Oppenheimer Memorial Prize from the University of Miami;
- the Beatrice M. Tinsley Prize of the American Astronomical Society;
- the Herschel Medal of the Royal Astronomical Society;
- and the Grote Rebel Medal from the International Radio Science Union in Istanbul.
- She has been a Fellow of the Royal Society since 2003 and was elected an Honorary Member of the Royal Irish Academy in 2012.

After working in the University of Southampton, University College London, and the Royal Observatory in Edinburgh, she was made Professor of Physics at the Open University in 1991. I'm told that her appointment *doubled* the number of female professors of physics in the UK! She is currently visiting professor of Astrophysics at Oxford.

She combines scientific focus with a great breadth of other interests. Dame Jocelyn has co-edited an anthology of poetry on astronomical themes, with the rather good title of *Dark Matter: Poems of Space*.

This recalls to me the great Trinity astronomer and physicist, William Rowan Hamilton, who wished to be a poet before he was appointed Andrew's Professor of Astronomy at the age of 21.

Among the poems in Dame Jocelyn's anthology is a marvellous one from William Butler Yeats, describing – a little dismissively! - the job of astronomer. He also speaks only of 'the starry men' but we'll forgive him that...

*'...Seek, then,
No learning from the starry men,
Who follow with the optic glass
The whirling ways of stars that pass -
Seek, then, for this is also sooth,
No word of theirs – the cold star-bane
Has cloven and rent their hearts in twain,
And dead is all their human truth.'*

As might be deduced from her choice of this particular poem, Dame Jocelyn looks beyond 'human truths' - she is a practising Quaker, and sees no conflict between science and religion. This makes her, I feel, particularly well placed to combat superstition and irrational thought. Her gentle and humorous rejection of the once-entrenched belief, originating with the Mayans, that the world would end in 2012, can be seen on YouTube. It is all the more effective for being delivered not by an atheist and materialist, but by one who admits the possibility of divine mystery.

Her modesty, which is often remarked on, may well stem from her Quaker beliefs, although it may also stem from the no-doubt sobering experience of failing the 11+ exam all those years ago in Belfast!

It's a great privilege for Trinity to be appointing Dame Jocelyn to the Pro-Chancellorship. I like to think that we are building on Trinity's strong tradition in the study of astronomy. In 1862 the great Irish astronomer, the 3rd Earl of Rosse, was appointed Chancellor of this university. He constructed the largest telescope in the world in Birr in the 1840s - the Hubble telescope of its time - and after observing a particular supernova remnant, he named it "The Crab Nebula" because it looked like a crab. This is now known to be a pulsar. We couldn't wish for a stronger connection between our then Chancellor and our newest Pro-Chancellor! And we are delighted to have with us tonight, embodying this connection, the 7th Earl of Rosse and his wife, Lady Rosse.

Trinity astrophysicists now lead an all-Ireland consortium that aims to build a large radio telescope called LOFAR in Birr, which will connect Ireland to a €150 million European network of radio telescopes. Last year Dame Jocelyn opened the LOFAR radio telescope in the UK. We hope that she will one day soon open the Irish LOFAR station.

So it is now with the greatest pleasure that I welcome Dame Jocelyn Bell Burnell to the Pro-Chancellorship of the University of Dublin.

Dame Jocelyn is the 55th Pro-Chancellor to be appointed to this role since the foundation of the College in 1592.

*** FORMALITIES ***

[Provost] In accordance with the 2010 Consolidated Statutes of Trinity College Dublin and of the University of Dublin, Dame Jocelyn Bell Burnell, having been nominated in accordance with Section 6(3)(b) of the Chapter on the Chancellor, was declared elected a Pro-Chancellor of the University of Dublin at the Board meeting of the 30th of January, 2013. In accordance with Section 2(2)(4) of the said Chapter, I now invite Dame Jocelyn to make the statutory declaration:

[Dame Jocelyn] I, Jocelyn Bell Burnell, solemnly declare that I shall faithfully discharge the duties prescribed for the Pro-Chancellor by the Statutes, and that I shall, so far as in me lies, promote and defend the welfare and interests of the University

Provost robes Dame Jocelyn Bell Burnell

[Provost] Dame Jocelyn is now admitted to the Office of Pro-Chancellor of the University of Dublin. I invite Dame Bell Burnell to address you.



Pro-Chancellor, Dame Jocelyn Bell Burnell in the Drawing Room of the
Provost's House

Wednesday, 27th March 2013

Speech at the Launch of ‘Trinity Explore’

Saloon, Provost's House

Good evening everybody,

You are most welcome to the Provost's House.

Today we celebrate Trinity's Explore Initiative and we thank and congratulate the students who have made it possible. I am delighted to see key figures from the world of higher education here tonight. I welcome the Secretary General of the Department of Education and Skills, Seán Ó Foghlú, who will later say a few words, and also Gerry Breslin, the President of the ASTI. Your presence here tonight is a powerful endorsement of this project, and a wonderful tribute to the work of our student ambassadors.

This initiative, Trinity Explore, came about because of our concerns that certain regions in Ireland were under-represented in Trinity's undergraduate body. Trinity values diversity, and we would like students from all over Ireland, and the world to come here. Together they will create the cosmopolitan environment where everyone can thrive, learn from each other, and achieve their best.

The reasons for students not applying to Trinity differ from county to county. A few months ago I was in Belfast to address the TCD Association of Northern Ireland. I remarked then that back in the 1950s and 1960s there were as many Northern accents heard on campus as Dublin ones. But today, I said, this is so far from being the case, that I feel a bit like President Obama would if New York and Massachusetts were to start voting red. What went wrong? Well, in Northern Ireland, it's very much related to lack of knowledge of the CAO system and the proportionality of A Level and Leaving Cert results.

Were I addressing people in Sligo, Leitrim, or Kerry, I wouldn't be talking about formerly 'blue' states voting 'red'. My talk wouldn't be about a recent reversal in applications to Trinity – it would be about the lack of a 'Trinity tradition'. The issue here is sometimes geographical – Trinity is simply further away than other universities. But sometimes unfortunately, there can be a perception of Trinity as a cold, elitist, unwelcoming place.

Archbishop McQuaid's long ban on Catholics attending may have something to do with this perception. But I admit that certain previous traditions of this college may also be implicated, as represented by, for instance, my most colourful predecessor as Provost, John Pentland Mahaffy. The story of Mahaffy's comment on James Joyce is apocryphal - he did not say that Joyce was "proof that it had been a mistake to build a university for the aborigines". But there's no doubt that Mahaffy was a die-hard unionist and

his habit, as lecturer, of using ancient Greece to give lessons on the Irish situation annoyed at least one of his students. That student was Oscar Wilde, who complained of Mahaffy's tendency "to treat the Hellenic world as if it were Tipperary writ large".

Wilde, of course, was a nationalist, which didn't prevent Mahaffy from recognising his genius – and that's all part of Trinity's rich and subtle tapestry of Trinity's history.

But we didn't start this initiative, Explore, to analyse the different reasons why students might not be applying to Trinity.

Our aim is much simpler and more positive: we simply wanted to have students speak to other students in an honest, direct way. We wanted to provide a platform for students to share their experience of Trinity life.

That's why I was delighted when the Dean of Undergraduate Studies, Patrick Geoghegan came to me with this Trinity Explore initiative. Patrick is also a country boy – from a Westmeath farming background. He is known for his great rapport with students – a few years ago he received the prestigious Provost's teaching award. So it was characteristic of Patrick to see that the solution to our application issue lay with our students.

Rather than providing a polished, official version of what *we* think students would like to hear, why not let them speak for themselves? Let them address the fears and concerns, as well as the joys and inspirations of college life.

Well, the results have surpassed all my expectations. When we put out the call, the response was overwhelming - 174 students shared their experience and asked to be 'ambassadors' for Trinity. So many had arresting personal stories, it was difficult to choose who to feature on the website.

The range and diversity of experience really is exceptional. If you listen to the students' own voices on the website you will hear all manner of different concerns. Let me give a few examples:

- From Westmeath: "I must admit that before coming to Trinity I had the preconception that Gaelic sports would not be very significant in this college, if there was a GAA club at all."
- From Antrim: "Coming from a secondary school in Northern Ireland, the system for choosing university education was very much focused on encouraging pupils to apply through the British UCAS system. Information on applying down south through the CAO was almost discouraged."
- From Leitrim: "I believed a college like Trinity was too prestigious ever to consider an application from someone who ticked all the boxes that indicated that I was from a disadvantaged background."

Despite such concerns, these students applied to Trinity, showing themselves to be independent thinkers, not averse to a bit of risk. They took the plunge because they wanted to do the right course, to experience studying in the heart of Dublin city, and to meet new and different people. In all cases their courage was rewarded - and their enthusiasm about college life is inspiring. Collectively, they celebrate the diversity of societies; the quality of the professors and courses; the warm atmosphere in Trinity Hall; the beauty and sense of tradition of our College.

The Donegal ambassador puts it colourfully: “Trinity often feels like Hogwarts except that magic really happens here.... as it is full of opportunities for everyone to take.”

Hearing these student ambassadors brought back my own undergraduate days. We know how important it is to get this message out - to encourage students now in secondary school to consider Trinity. We have written to the Principals and Guidance Counsellors of *every* secondary school on this island, telling them about Trinity Explore, asking them to make their students aware of the website, and offering to send out student ambassadors to address their schools personally. I am happy to say that we have since been inundated with requests for school visits. Many are from schools, north and south, who traditionally don't send students to Trinity.

It's wonderful to think what one student from these schools' catchment areas will achieve, simply by telling a personal story. As the old newspaper adage goes: 'a picture is worth a thousand words'. Well a minute of genuine student experience is worth a thousand hours of didactic argument.

In Phase 2 of Trinity Explore, we plan to add additional features, such as subtitles for the hard of hearing, and we plan more video content. In line with the Global Relations Strategy, we want ambassadors for all the countries around the world that we currently have students from.

We also plan to make short videos for every course currently offered in Trinity, and to identify student ambassadors for each one. Studies by the HEA and others have shown that the biggest reason why students drop out in first year is because of inadequate course information. 'Explore' is the perfect way for students to talk to students about courses. We have been inspired here by the excellent work of CourseHub, founded by one of our students, Georgina Smithwick - I thank her for her work as advisor to Explore.

Since the Explore site went live we have received emails from 204 students, volunteering to be course or county ambassadors. All such ambassadors work on a voluntary basis, giving up their time willingly. Phase One of this initiative was achieved at an astonishingly low cost. It could not have come about without the help and support of many people. I thank in particular:

- the College Web Officer, Maura Horan, and the web design office team who designed the site - (I am delighted they are all here tonight);

- Dr Gary Baugh, a postdoctoral fellow, and a graduate of Trinity, who shot all the ambassador videos,
- Norah O'Connor, of the Office of the Vice-Provost, who co-ordinated everything logistically;
- and Callum Smith, one of our students who allowed his video work to be used.

Dr Patrick Geoghegan deserves special commendation since this is very much his brainchild. I know how excited he is by the growth of this initiative into Phase Two.

Finally, most importantly, I thank our student ambassadors. We have all been inspired by your words. We are proud that you chose to come to Trinity and that you have benefitted, so manifestly, from all Trinity has to offer. We hope that you are proud of being the inaugurators of this great resource.

Thank you.

Monday, 8th April 2013

Speech at the Presentation of the An Taisce Green Flag Award to Trinity College Dublin

Moyne Institute, Trinity College

I would like to begin thanking Dr Ronnie Russell for his introduction.

I am delighted to welcome you all here on this Trinity Monday to celebrate the Green Campus status the College has been awarded. In particular, I would like to welcome Patricia Oliver, Director of the Environmental Education Unit of An Taisce.

The award of the Green Flag to Trinity College has been realised following the significant efforts of the Green Campus Committee. The committee has been extremely proactive in encouraging all staff and students to participate in making Trinity a green campus.

Green Week has gone from strength to strength; this year, the College presented a cheque for €4,400 to Our Lady's Hospital for Sick Children from the proceeds of the College Print Cartridge Recycling Scheme – so it is not just Trinity benefitting from a greener environment. We also launched 'Trinity Let's Grow' – a new student-led initiative which involves the distribution of free seeds or 'grow packs' and which encourages students to plant the seeds and eventually use the produce in their own kitchens.

Achieving a sustainable campus is a key priority of the College's Strategic Plan (2009-2014) in terms of enhancing the quality of the residential environment of the College, and developing our reputation – both at home and abroad. Both staff and students have been working hard to improve the quality of the Campus. We have also recently appointed a Green Campus co-ordinator, Ms Eszter Kenez, who has been undertaking great work.

I am delighted that our efforts have been rewarded and that we are the first university in Dublin to 'fly the Green Flag'. While environmental initiatives have been on-going in Trinity for many years, involving both student and staff activities, this award has validated the work which has been taking place. It will act as a motivator to continue the work that still needs to be undertaken across campus.

Achieving a Green Campus has realised an important objective for Trinity and we must now continue to play a leading role as one of the largest employers in Dublin and as an institution occupying an historic site in the centre of a capital city.

I will close by thanking our Green Campus Committee:

- Ronnie Russell,
- David Hackett,
- Noel McCann,
- Gwen Duffy and;
- Joan Somers Donnelly

and all those across College for their efforts in making Trinity a greener place to live and to work.

It's my pleasure now to hand over to the President of the Students' Union, well-known to all, Rory Dunne. Rory will say a few words on behalf of the students.

Thank you.



Green Flag flying outside Pavilion Bar

Monday, 8th April 2013

Speech at the Scholars' Dinner, Trinity Monday

Dining Room, Trinity College

Pro-Chancellors of the University,

Fellows, Scholars, Distinguished Guests,

Welcome to the Scholars' Dinner, and to Trinity Week.

On Friday last we had the ever-eventful Trinity Ball, and today was the traditional announcement of the new Fellows and Scholars from the steps of the Public Theatre.

This evening we formally welcome the new scholars. You have excelled in a difficult examination and you now join the distinguished community of scholars and past scholars, several of whom, I'm delighted to say, are here tonight - including two who became scholars in 1943, seventy years ago. Later we will hear from a scholar of 1963, Professor Andrew Mayes, a former Vice-Provost of the College.

Tonight we also recognise ten new Fellows and five new Professorial Fellows. Fellowship is a singular distinction that can only be achieved for serious scholarly research of international standing. In each new generation, Fellows mould the College's distinctive traditions.

I'd like to extend a particular welcome to our guests from our sister Colleges across the water: St John's College, Cambridge and Oriel College, Oxford. From Oriel we welcome Professor James Sparks and Dr Elsje van Bergen. And this evening is particularly special because we further strengthen our bond with St John's by awarding Honorary Fellowship to the Master of the College, Professor Christopher Dobson, who is here tonight with his wife, Dr Mary Dobson. A Fellow of the Royal Society since 1996, Professor Dobson's research into the processes of protein folding and misfolding has transformed our understanding of the origins of diseases such as Alzheimer's and Parkinson's. In addition, his work provides new insights into the evolutionary constraints that act on the chemistry of life itself.

Tonight we award just one other honorary fellowship: to Professor Patrick O'Meara, Emeritus Professor of Russian and former Master of Van Mildert College in Durham University. Professor O'Meara is a former Fellow of Trinity and served under Provost Tom Mitchell as the Senior Lecturer. For President Gorbachev's visit to Ireland in 1989, he was interpreter to An Taoiseach Charles Haughey. He would have performed the same service for the Taoiseach Albert Reynolds when President Yeltsin visited in September 1994

... .. if Mr Yeltsin had actually stepped onto the tarmac at Shannon... The honorary fellowship recognises not only Professor O'Meara's academic distinction but his service to the College.

* * *

Last year, at this dinner, I talked about Innovation - in terms of campus spin-outs and student entrepreneurship, and I also raised the potential dangers of universities being judged in terms of immediate economic returns rather than for educational outcomes. The priority, we must not forget, is to create the space and freedom needed for true innovation.

Tonight I want to look, briefly, at innovation in the context of two developments which have absorbed us this academic year: admissions and online education.

Admissions

A Trinity Education incorporates diversity and innovation. We seek to enrol students from all over Ireland and the world, people of diverse skills who will bring their unique perspectives to bear on research and scholarship.

How can we ensure that we are admitting these kinds of students? In truth, third level admissions in Ireland doesn't particularly favour diversity. There is only one gate through which to admit students - the CAO, via Leaving Cert points. Now the CAO has the great merit of anonymity and transparency - but it favours a particular type of intelligence. We want that intelligence in Trinity, but we want other types as well.

Similarly, Trinity tends to receive a large share of students from particular counties and schools - and, internationally, from particular countries. We're delighted with the quality of these students, but we're concerned that our global reach is not as extensive as it should be, and moreover that even within Ireland some schools are not encouraging pupils to come here.

It may seem perverse to be bringing this up tonight when we celebrate the achievement of our new Scholars - because no doubt those of you who sat the Leaving Cert, performed brilliantly! But you've now spent two years in College and have thrived here - and I imagine you'd be the first to say that the Leaving Cert didn't measure all your abilities. And I'm sure you'd agree that one of the great benefits of college is meeting people with different kinds of intelligence - not 'People Like Us', as the old snobbish saying has it, but 'People Unlike Us'.

There's no doubt that it's often people coming from different backgrounds, with different experiences, who have excelled at Trinity. I'm thinking of the subject of today's discourse, Jacob Weingreen, who was born in Manchester and didn't receive formal secondary school education. This didn't prevent him taking a first class moderatorship in Trinity, and eventually becoming

Professor of Hebrew here. I would like to thank Dr Zuleika Rodgers for her excellent discourse on Jacob Weingreen this morning.

I'm also thinking of J.P. Donleavy who is from New York and served in the US Navy during the Second World War before coming here to study, and to write perhaps the quintessential Trinity novel, *The Ginger Man*.

And I'd like to recall Leonard Abrahamson, a 1915 scholar of this college, whose son Max, himself a 1953 scholar, is with us this evening. I've learned from the *Dictionary of Irish Biography* that Leonard was born in Odessa before his family emigrated to Newry to escape pogroms.

As an undergraduate, Abrahamson invited Patrick Pearse to address Trinity's Gaelic Society. Given Pearse's reputation, this was daring and "innovative" behaviour to say the least! The society was suspended and Abrahamson was disciplined. Nothing daunted, he switched from modern languages to medicine, and subsequently became President of the Royal College of Physicians in Ireland.

We're delighted to have Max Abrahamson with us this evening. Max's son, also Leonard, or Lenny, is also a former scholar, from 1988 – so this family has managed a Schols hat trick, which may be a Trinity record. Lenny, as many of you know, is now Ireland's finest young film director.

We want to be proactive about encouraging diversity at the admissions stage, so that we can get more people like Jacob Weingreen, J.P. Donleavy, and Leonard Abrahamson. So we've embarked on a two-pronged attack:

This year we launched a feasibility study of admissions, on behalf of the whole third level sector in Ireland, which will take into account personal and contextual data, as well as the applicant's performance. We are piloting this study in September 2014 in three of our most popular courses, Law, History and Classics.

And we've recently launched 'Trinity Explore', a website where student 'ambassadors' from every county in Ireland give their honest accounts of life in Trinity. The response from secondary schools has been excellent – the 'Trinity experience' is now being heard in classrooms around the country.

I'd like to pay tribute to the Senior Lecturer, Dr Patrick Geoghegan who has been instrumental in both of these initiatives.

Online Education

As we look to diversify our admissions system, we, in Trinity, are simultaneously engaging with the possibilities and challenges of a potentially game-changing educational development.

‘Online education’ is a term that has been current for years. But recent ICT advances have enabled truly exciting innovations.

It will, I think, come to seem archaic that professors were once tied to delivering routine lectures week-in, week-out, year-in, year-out - the same lecture, in the same theatre, to generations of undergraduates, many of them paying scant attention.

Far better to have the lecture online, with students engaging when they’re properly focused. The time that professors and students save from routine course work will free up space for true critical debate. This will strengthen our research-led education, which prioritises critical thinking.

Online has enormous transformative potential. It develops skills which are insufficiently addressed by traditional education as practised for the past five hundred years. Indeed online returns us to a more visual, oral, and aural, culture – one where ideas are demonstrated, articulated, and debated rather than written down.

It’s essential that Trinity embrace the potential of online to positively support the kind of education we offer.

Many of you here are familiar with MOOCs. For those who aren’t, this acronym stands for ‘Massive Open Online Courses’. Leading-edge universities are today offering their courses to hundreds of thousands of people around the world – indeed to as many people as have access to high-speed internet, theoretically a limitless number. And such courses are almost always offered for free.

Potentially, anyone in Ireland, and beyond, could soon avail of free Trinity courses. Of course, they would not then be getting a Trinity education, because a Trinity education means face-to-face interactions with professors, it means peer-to-peer learning with other students, and by social interaction by participation in Trinity’s extracurricular activities.

But MOOCs do offer a wonderful opportunity to share our learning, and strengthen our dialogue, with people from different backgrounds and cultures, with whom we would not otherwise be in communication.

Of course there are issues with online education, as with any new development. For instance, there’s the fear that this new oral/aural/visual culture may eventually kill off the written word. This would involve a loss in seriousness, concentration, and profundity - an incalculable loss of the reflective approach.

So this and other potential dangers must be considered, and by the whole college community. I look forward to the contribution of Fellows and Scholars on this vital matter for Trinity’s future.

Our new scholars will contribute much here – since you are the ‘online generation’ if you like. You have the chance to shape the direction of this great innovation in education. I know that as scholars you feel a stake in Trinity’s future. It’s never too early to help mould our distinctive traditions.

As I said last year, in Trinity we focus on “Innovation within Tradition”. Trinity’s historical greatness engenders a natural respect for knowledge, while providing a base of strength and solidity to innovate from. Staff and students are conscious that, paradoxically, to uphold Trinity’s tradition, they have to “make it anew”.

In her excellent sermon this morning, Professor Geraldine Smyth ended on a not dissimilar point. She spoke of wanting to “open up and take down the walls ... to widen the space of solidarity ... out of a larger transcendent hope.” And she found the perfect quote from Brendan Kennelly (whom she calls Trinity’s poet laureate):

*“Something that will not acknowledge conclusion,
Insists that we forever begin.”*

Thank you.

* * *

Monday, 15th April 2013

Welcome Address at the TBSI Symposium 'Metabolism and Metabolic Disease'

Tercentenary Hall, Trinity Biomedical Sciences Institute, Trinity College

Ladies and Gentlemen, colleagues,

I welcome the opportunity to open this symposium on 'Metabolism and Metabolic Disease'. And I thank Professor Luke O'Neill for the opportunity to say a few words to you this morning.

The Trinity Biomedical Sciences Institute – TBSI - is a major strategic investment by Trinity College Dublin. We wanted to provide top class facilities for our biomedical researchers in the Schools of Biochemistry and Immunology, Medicine, Chemistry, Pharmacy and Bioengineering. Occupancy was completed about two months ago and we now have over 500 researchers working here in TBSI.

This combination of disciplines in one building is unique internationally. Our aim is to foster highly innovative research crossing disciplinary boundaries, to lead to discoveries that will attract the attention – even admiration - of our peers worldwide, and discoveries that will give rise to better patient care - this is the mission set out by Luke as the Institute's first Director.

The good news is that the Institute has already had success in areas such as cancer, diabetes, and infectious and inflammatory diseases. There have been no fewer than six publications in *Nature*, three of which had TBSI lead investigators - this is a remarkable feat by any standard.

Research income has also topped €35m since occupancy began, with funding from agencies such as the European Research Council and Science Foundation Ireland. A notable success was at the last round of the SFI investigator awards, with €13.8m being raised by TBSI researchers, representing 25% of the entire budget nationally across all disciplines.

These funds - and others that will flow will be dedicated to research of the highest calibre. In a world where scientific information flows rapidly across borders, the only valuable research is globally-competitive research. That where innovation and commercialization opportunities arise, in an innovation ecosystem primed to support it.

Today is all about stimulating world-class cutting-edge research. There is no better way to do this than to hear of the great research being done by leading scientists around the world. In this regard it's a particular pleasure for me also to welcome personally our distinguished visitors:

- Gregory Petsko from Brandeis University,
- Graham Hardie from Dundee University,
- Larry Brody from the NIH,
- Patrick Stover from Cornell University, and
- Jeremy Nicholson from Imperial College London

We look forward very much to your presentations.

The ambition for TBSI is to encourage new ideas and collaborations across disciplines, since it is in that interface that important breakthroughs are made, and I'm very happy to see such outstanding scientists from overseas here as well as some of our own colleagues participating.

* * *

Today is also about remembering one of our great scientists who, as Luke has already said, typifies what TBSI is about - Professor John Scott. I'm pleased to see that Professor Anne Molloy will give a tribute lecture to Professor Scott at the symposium today. As you all know, John was a long-standing member of the Department of Biochemistry. Working with clinical colleagues in St James's hospital, John made a series of contributions into the importance of folic acid as a preventive in neural tube defects. These contributions were ground-breaking, and show us all of the value of excellent science, and are an inspiration for translating research into clinical practice.

I wish you all well in pushing the boundaries of science, and I look forward to an excellent symposium.

Thank you.

* * *

Monday, 15th April 2013

Speech at the Launch of a Festschrift in Honour of Dr Katharine Simms

Saloon, Provost's House, Trinity College

Good evening, and you are all very welcome to the Saloon in the Provost's House for the launch of *Princes, Prelates and Poets in Medieval Ireland: Essays in honour of Katharine Simms*.

I have launched a number of festschrifts in my time, but I think none so extensive as this. A festschrift is typically a slimmer volume – but this runs to over 570 pages and has essays from scholars who come from all over Ireland, and Britain, and also from the United States, Canada, Germany and the Netherlands.

Dr Seán Duffy, in his preface, explains that “The problem is that nearly everybody I asked to contribute said “yes”! The volume would be bigger still had I not set an impossibly tight deadline.” And Seán continues: “The explanation for this general readiness to write isn’t hard to find: it stems from a universal admiration – personal and scholarly – for our honorand, Katharine Simms, and a recognition on all our parts that this presented an opportunity to repay a debt.”

And indeed this volume is a magnificent tribute to one of Trinity’s finest scholars - to the range and depth of her research interests, to her ability to inspire, to her generosity in encouraging students, and to her contribution to building up the reputation of Medieval and Celtic studies here in Trinity.

Trinity seeks to be the leading engine for the study of medieval Ireland anywhere in the world - we have the talents, skills and resources for this.

Katharine Simms, through her publications, her archival and database work, and her encouragement of others’ talents, has immeasurably enhanced the profile of medieval studies in Trinity. I am delighted that the College has recently demonstrated its commitment to Irish medieval studies by making a new-blood appointment, Dr Peter Crook.

Dr Simms comes from a most distinguished Trinity family. Her father, George Otto Simms, a foundation scholar of this college, was chaplain here for ten years in the 1940s before being appointed bishop of Cloyne, and subsequently Archbishop of Dublin, and then of Armagh. Her great-uncle, Edward Gwynn, served as Provost from 1927 to 1937, and was the first provost to be appointed by the Irish government. He vigorously opposed the amalgamation of Irish universities. His portrait, which looks down on us in the College boardroom, always recalls to me his rallying cry: “Hands off Trinity!”. It’s good to see we remain consistent over the generations!

Gwynn was a distinguished Celtic scholar and George Simms was an expert on the early Irish church and an enthusiast for the Irish language. Dr Simms is the successor of this academic inheritance. But nothing is preordained. Every generation must rise to the challenges anew, and Katharine Simms has diligently pursued the challenge of bringing new interpretations to Ireland's past, ever since she began as an undergraduate here.

Her research interests are conveyed by the title of this festschrift – *Princes, Prelates, and Poets*. Her PhD, under Professor James Lydon, was on 'Gaelic lordships in Ulster in the later middle ages'. This informed her landmark book, *From Kings to Warlords*, published in 1987.

She is also an expert on church history in the later middle ages, and on the medieval Irish bardic tradition. Her *Bardic Poetry Database*, now available online, hosted by the Dublin Institute for Advanced Studies, seeks to identify, classify, and explicate all surviving bardic poems. It is a phenomenal resource, on which Dr Simms started work in 1977 and which, as Seán Duffy writes, "she appears to have done in her spare time."

It is the great breadth of her interests which have contributed to the length of this book, which is divided into three parts, and has essays ranging in subject-matter from the murder of the sheriff of Louth in 1402, to romantic misconceptions of the Irish pilgrimage, to the court poet in early Ireland. I congratulate Seán for the work he has put into editing this very handsome and fascinating volume.

Seán has written of Katharine's 'lovely, uncomplicated writing style'... 'her gift for demystifying'...her wish 'to communicate her findings, without jargon, to those who want to know' and this desire of hers to be lucid and intelligible to non-specialists has been communicated to her students – and indeed to the students of her students, because her work has fed into several academic generations.

Intrinsic to Dr Simms' desire for direct communication, is her commitment to publishing in local history journals. The current fads of academic publishing seek to discount such writing, but in Trinity, secure as we are in our global standing, we value the local, we value our rootedness in this place, and our important role in presenting the fruits of scholarship where they may be appreciated by all.

In this context, I must also mention the online resource for medieval Irish Chancery Letters, which I had the pleasure of launching last year. Dr Simms was a principal investigator on this project, together with Dr David Ditchburn. The database of chancery letters can now be accessed free by the general public.

When it comes to broadening access, to communicating in the language people understand, and in the places people want to read, Katharine Simms gives the example, not only to historians and Celticists, but to all Trinity scholars.

I thank you, Katharine, for your long association with this university, for your dedication to research, scholarship and education, and for your immense contribution to the study of medieval Ireland.

And I thank Seán, the Four Courts Press, and all the contributors to this book for continuing with the discourse, with reinterpreting the past and so keeping it alive for us.

* * *

Tuesday, 16th April 2013

Address to the Londonderry Chamber of Commerce

Everglades Hotel, Londonderry

Ladies and Gentlemen,

It's a great pleasure to be here. I've been hoping for a chance to visit Derry City of Culture since the start of the year, so it was wonderful to get this invitation. I've spent a most enjoyable morning visiting businesses and getting a sense of your city.

This afternoon I'd like to talk about innovation and how it can be encouraged in cities and regions, the role that educators play, and the importance of universities within the "innovation ecosystem". I'll pay special attention to creative and cultural innovation since this is a distinctive feature of innovation in Trinity, Dublin and Derry. I'll also be talking about current EU innovation policy, since I have experience of this through my membership of the Governing Board of the European Institute of Innovation and Technology, or the EIT.

But first I'd like to introduce myself, and the university I have the honour to be head of.

TRINITY

As many of you know, Trinity is the oldest university in Ireland, and one of the oldest in these islands. It was founded in 1592 by Elizabeth the First of England – and it's also known, sometimes confusingly, as the University of Dublin. What's not so well known is that the start-up money was provided by the citizens, including a substantial sum from Sir Turlough O'Neill of Tyrone. The clincher was the grant of a 45 acre site by Dublin Corporation, a site which was then just outside the city walls.

Like all old institutions, we've gone through many changes, but today Trinity is a high-ranking, multidisciplinary university of with schools, ranging from Business, Law and Drama, to Chemistry, Engineering and Medicine. We encourage research collaborations and joint programmes between Schools and Departments, and interdisciplinarity is a core strength. We are recognised worldwide for our achievements in eighteen thematic interdisciplinary research areas including: Neuroscience, Cultural Heritage and Arts, Infection and Immunity, Bioengineering, Telecommunications, and Ageing.

Another of Trinity's distinctive strengths lies in our openness, international identity, and global connectivity. We have always sought to be outward-

looking - we founded a chair in oriental languages as far back as 1762, and for centuries we have prepared graduates to work far afield as civil servants, doctors, missionaries, teachers, lawyers, and engineers.

We're proud of our international traditions, and we count on it for the success of the modern university, because we know that today higher education is increasingly a globally traded and borderless activity. People and research projects no longer belong exclusively to one institution. Staff, students, and research switch between countries and institutions, going to where the money and expertise is.

In world-class universities, research is collaborative and inter-institutional, taking advantage of global academic networks. Staff and students refresh their ideas through frequent sabbaticals and exchange programmes abroad. All this encourages openness and innovation.

Trinity is positioning itself to be such a world-class university. The winners of the 2011 Nobel Prize in Physiology or Medicine - Bruce Beutler, Jules Hoffmann and Ralph Steinman - are close collaborators of Trinity's School of Biochemistry and Immunology. And in the last year, I've signed memoranda of understanding with universities in China, Singapore, and Rwanda, to deliver joint student training programmes. I could give hundreds more examples of the moves Trinity is making towards globalization - it is central to our strategy.

NORTHERN IRELAND and DIVERSIFYING ADMISSIONS

On the subject of a diverse student body, let me say that we're concerned, in Trinity, that in recent decades our intake of students from Northern Ireland has fallen off. This is a cause of regret because many of our most distinguished alumni have come from Northern Ireland. It was said that in the mid-twentieth century there were more Northern accents heard on campus than Dublin ones.

One of our 1970s graduates, Kathy Gilfillan, who is from Eglinton, which I'm told is just down the road here; - is now publisher with Lilliput Press, one of the best small presses in the country. (She is also married to U2 manager Paul McGuinness whom she met in Trinity). In the past few years Lilliput has published a series of books, *Trinity Tales*, which are reminiscences of students from the 1950s, '60s, and '70s.

These books attest to the once pervasive presence of Northern Irish students in Trinity. You can read Michael Longley's account of "inhaling poetry with our Sweet Afton cigarettes", or Derek Mahon's acute distinction: "Trinity in those days wasn't much about work, although quite a lot of reading got done." I do like that distinction, I must say - in Trinity we want our students to read, and think, outside the curriculum. An environment which gives space and freedom to learn is the well-spring of creativity and innovation.

But since Longley and Mahon's undergraduate days, two separate admissions systems have been introduced on this island - the CAO and UCAS. This has inevitably impacted on admissions: Northern Irish schools and applicants know little about the CAO system and it's tricky to equivocate between A Levels and Irish Leaving Cert results.

Under my Provostship, all this is starting to change. We believe that the entire Irish admission system is flawed, not just as regards applicants from Northern Ireland. We need to diversify admissions in order to bring in students with potential not measured by the current exam system. This issue is central to innovation. True innovation depends on original ideas, and you don't get originality if you continue with the old outworn way of doing things.

So this year we launched a feasibility study in admissions, on behalf of the third level sector in Ireland, which will evaluate students beyond exams results. It's a radical move but we're determined to set the national agenda in this area.

Another related initiative, already up and running, is called Trinity Explore and it has involved recruiting student 'ambassadors' from every county in Ireland, asking them to give honest accounts of college life.

If you go to the Explore website you can hear the student from Derry talking about how he was the only person from his year to come to Trinity but how he has relished meeting new people and joining various societies.

We are hopeful that voices like his, together with our new admissions route, will help bring up student numbers from Northern Ireland. We want students from this province to benefit from, and contribute towards, innovation in Trinity, and in Ireland.

PERSONAL CONTEXT

Perhaps one of the reasons why I'm concerned to encourage a diverse, international campus where students can explore their full potential, is because of my own background and experience.

I'm not from what might be perceived as a typical 'Trinity' background. I'm from a small place called Oulart in Wexford. My father was a haulage contractor and my mother a nurse. Neither they, nor my aunts or uncles, went to college, although most of my siblings and cousins did.

I'm an Engineer and I've spent much of my career at Trinity with two long stints abroad, doing post-doctoral work in Bologna, and at the University of Nijmegen in the Netherlands. I've also held visiting professorships in Warsaw, Delft, and Barcelona.

My experience abroad has left me with a zeal for all Trinity students to enjoy similar experiences. I want study periods abroad to be part of all students' education.

Two years ago I put myself forward as Provost, because I was excited about what Trinity could achieve - and apprehensive about potentially less desirable outcomes.

These are difficult, recessionary times, but also times of potential radical change. People can be more inclined to take risks during crises because they've invested less in the status quo.

TRINITY INNOVATION PATHWAYS

One of my priorities as Provost is of course, to develop innovation and entrepreneurship. Trinity's global, interdisciplinary education is an excellent springboard for innovation.

But how do we move from excellent research to commercialisation? All good universities are incubation centres for ideas, but what distinguishes "innovation universities" is their ability to build "innovation pathways" so that staff and students move beyond the ideas' phase to the market.

Before looking at some of the innovation pathways we've built in Trinity, I want to take a brief look at the whole idea of the "innovation ecosystem" and how this is being encouraged right now in Europe.

THE INNOVATION ECOSYSTEM and the EIT

You're probably familiar with the term 'Innovation Ecosystem'. I don't like buzzwords, but in this case I think the biological metaphor is apt: it gets across the idea of different players, or "organisms", interacting to sustain a flourishing environment.

The innovation ecosystem involves the public and private sectors; it involves individuals, enterprises, higher education institutions, and government bodies interacting in the right regulatory environment to create jobs and open up opportunities. It recognizes that entrepreneurship is a private sector activity, and that university research is feeding into the economy more directly than ever before.

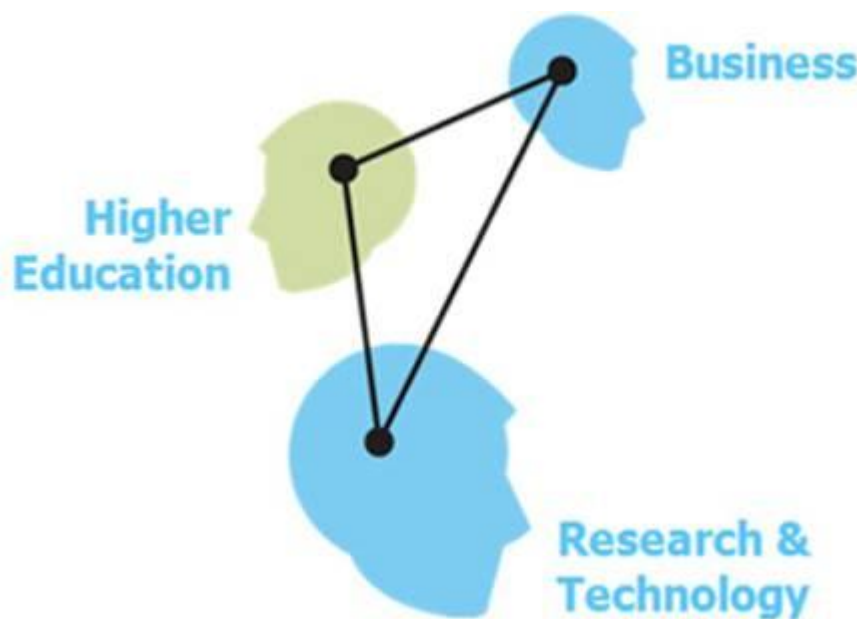
In Europe today, we don't expect innovation to 'just happen'. We know we have to create the conditions favourable to it. The European Institute of Innovation and Technology, or EIT, was founded in 2008 with a mission to increase Europe's growth and competitiveness by reinforcing innovation capacity. Its governing board represents a balance of individuals active across education, research, and business. It was an honour to be appointed to this board - I took it as a tribute to Trinity's commitment to innovation.

The EIT seeks to create pathways to move people from the ideas phase to something concrete and profitable. We want to facilitate the transitions:

- from idea to product,
- from lab to market,
- and from student to entrepreneur.

How do we do this? By greatly facilitating common working between education, the business community, and research and technology.

The EIT views these three sectors as a “Knowledge Triangle”, as on this slide.



Higher Education is of course universities; Business is the private commercial sector; and Research and Technology are State-funded institutes such as the Max Planck scientific research organisation in Germany.

EIT has created structures, which we call Knowledge and Innovation Communities, or KICs, to integrate the three sides of the Knowledge Triangle.

TRINITY INNOVATION PATHWAYS

Ireland, like other EU countries, works within EIT’s framework for fostering innovation.

In Trinity, we understand our role within the Knowledge Triangle. Creating spin-out companies is a normal, valued output of our university activities.

But how do we go about setting up these companies? Let me look briefly at how two of our ‘innovation pathways’ work in Trinity.

(1) *Innovation Academy*

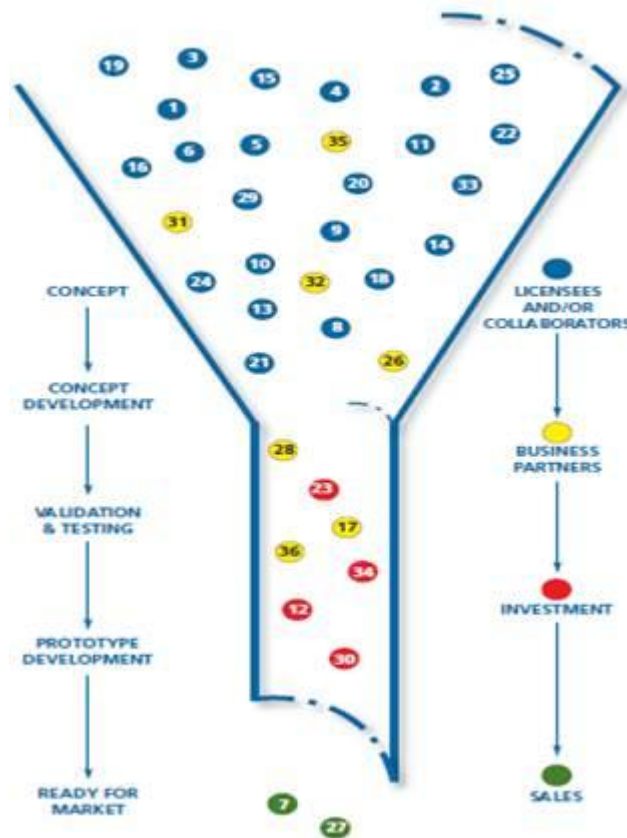
Just over three years ago, Trinity - together with University College Dublin and Queen’s University, Belfast - established the Innovation Academy. This educates PhD students to collaborate across disciplines, developing opportunities for innovation arising from their research.

The Academy is interdisciplinary and inter-institutional. It provides a range of specialised modules, including creative thinking, protecting your idea, and planning and financing your venture. Most importantly it gets students working in groups to solve real-world problems identified by industry and partner organisations. Many of these are private cultural enterprises; like Kila the band or Monstertruck, the art gallery and studios.

(2) *Innovation and Technology showcase: the funnel*

Once Trinity staff and students, and their international research partners, are ready to go to market with a product or service, they need to find business partners for licensing or further investment.

This slide is from Trinity’s annual Innovation and Technology showcase. It shows 36 research ideas ready for commercialization. The ideas enter what we think of as “a funnel”, where they progress from licenses, to business partners, to investments, to sales - each development stage classified in the ‘funnel’. We track these to ensure as many as possible get investment and create jobs.



In the academic year 2011 to 2012, thirteen campus companies were founded –so we know we’re getting something right, but we constantly seek to improve. In the last year Trinity spun out 20% of the campus companies in the Republic of Ireland.

CULTURAL AND CREATIVE INNOVATION

The innovation coming out of Trinity is collaborative, multi-disciplinary, and globally competitive. It is also, frequently, cultural and creative, and I want to end my talk by talking about cultural innovation.

For many commentators, innovation or ‘knowledge’ in a knowledge economy is always high-tech – like software or cyber knowledge in California, or mobile communications in Finland.

I don’t doubt the importance of science and technology, and I’m proud of Trinity’s excellence in that field. But when I was inaugurated as Provost eighteen months ago, I gave a definition of innovation and the knowledge economy which I stick to. I said then that:

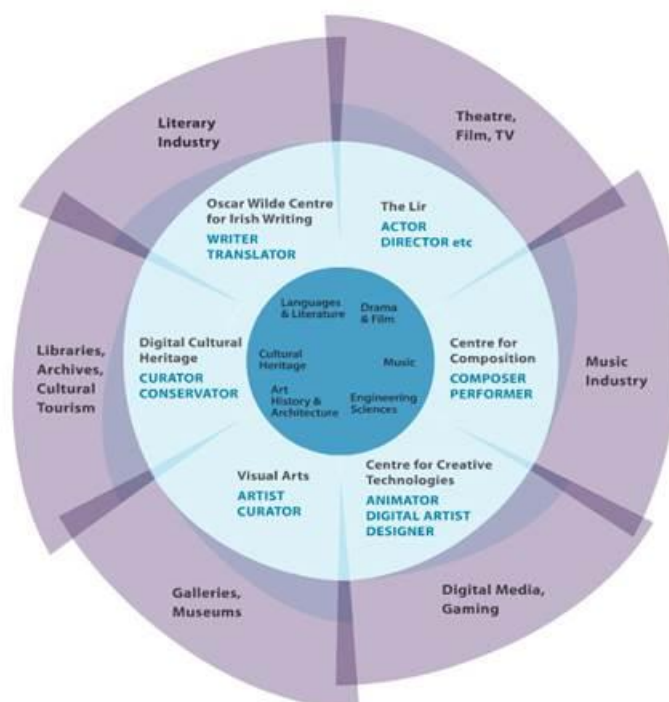
“As long as you’re creating knowledge at a faster rate and to a higher level than your competitors, then you’re opening up opportunities for innovation – ultimately with the potential of creating jobs and wealth and improving society.”

This ‘knowledge’ can be scientific but it doesn’t have to be. Innovation round the world tends to play to the traditional strengths of the region and university which incubates it. For instance the high tech revolution didn’t come out of nowhere in Silicon Valley - it came out of that area’s 20th Century focus on electronics and radio transmissions.

Dublin, like Derry, and like Ireland, has traditional strengths in culture and creativity. Trinity has educated a phenomenal number of creative people – the roll-call includes Jonathan Swift, Oliver Goldsmith, Oscar Wilde, John Millington Synge, Samuel Beckett, and in recent years the actor Dominic West and film director Lenny Abrahamson.

Of course all these individuals benefitted from inspiring lecturers but until recently the college syllabus put little emphasis on creativity. When I was a student in the Eighties, there were no courses in acting, directing or film studies, there was no creative writing course, and no music composition.

This has all changed. Fostering artistic creativity is now a cornerstone of the college’s strategy for developing the arts and humanities. This slide shows the different centres – the Oscar Wilde Centre for Irish Writing, the Lir Academy for Dramatic Arts, the Centre for Music Composition – which foster creativity in all its forms.



There is of course an obvious parallel here to Derry. This city also has a distinguished history of creativity. You have drawn on this for the programme of City of Culture which showcases the Undertones, Field Day, and art galleries which flourished here from the 1970s.

As in Trinity, Derry creativity frequently happened without the city authorities actively investing in it. Again like Trinity, this has changed in recent years. Fostering artistic creativity is now a cornerstone of the strategy for Derry's regeneration. I know that City of Culture is not just about 2013, but about long-term cultural regeneration.

We are now realising - in Dublin, in Derry, and all around the island - the extraordinary heritage we have. We know not to be seduced by high-tech innovation into undervaluing the importance of cultural innovation. The arts are central to any plan for the social and economic regeneration on the island of Ireland.

When I speak of collaboration, I think it's vital to work together across the island to harness our creativity and reinforce our links. This often happens organically. But it's worth not leaving this to chance. It's worth designing collaboration into our strategies. This is exactly what Derry City of Culture has done, bringing 'Other Voices' up from Dingle.

And of course my invitation here today is part of such collaboration.

While there will, of course, be differences in the innovation that develops in different regions of this island, there will also be similarities, particularly as regards culture. Reinforcing and growing our cultural identity is something which will benefit all.

As with any innovation ecosystem, the universities have an essential role to play, and I look forward to Trinity playing its part, both in terms of growing cultural innovation and reinforcing cross-border links. As I've said, Trinity is already collaborating with Queen's University, Belfast for the Innovation Academy, and our thematic interdisciplinary research areas, such as Ageing, also involve cross-border research collaborations. I look forward to many more such link-ups with universities and higher education institutes in Northern Ireland.

Who knows where this focus on cultural innovation and on stronger collaborations may lead? One of your own great innovators put it well in his Nobel lecture:

"I credit poetry", he said, "for making the space-walk possible."

Which I think means that from culture to high tech, it can be a small, or giant, step.

Thank you very much.

Wednesday, 17th April 2013

Speech at the Business Student of the Year Award

House of Lords, Bank of Ireland, College Green

Good evening,

I'm delighted to be back in this wonderful venue for one of my favourite events of the year.

As Provost, I give a great many speeches on innovation and academic entrepreneurship. In fact, I am just back from Derry, where they are celebrating as UK City of Culture. I was addressing the Londonderry Chamber of Commerce on innovation – cultural and creative innovation, to be specific.

When I speak about innovation in Trinity, I always mention our successful spin-outs and the TCD-UCD Innovation Academy. But I also stress that innovation and entrepreneurship in Trinity is not something that only comes at graduate level. It's not just a focus for staff and PhDs - it's something we encourage in our students from the start.

When giving examples of student innovation and entrepreneurship, I am always delighted to draw on the nominees of Business Student of the Year. This year, as last year, your achievements are inspirational and diverse.

You show student initiative and entrepreneurship at its best.

You show what can be achieved by undergraduates determined to seize every opportunity.

As we've heard from Kingsley, this year our nominees have, between them:

- established start-up companies
- held senior positions in the Trinity Student Managed Fund
- headed up clubs and societies
- been involved in the Innovation Academy
- and volunteered and fund-raised in Ireland and abroad.

And all this on top of demanding academic work! And we know that these students have been short-listed from a larger pool. I understand the competition was especially rigorous this year.

The most profound change in college life since I was an undergraduate here in the 1980s is this emphasis on innovation, creativity, entrepreneurship and

commercialising knowledge. Undergraduates today naturally take on activities which we would not have considered. I'm thinking not only of the kind of business and volunteering activities which I've just mentioned, but also of creative activities like writing, acting, directing, and music composition – which feed cultural innovation.

In my student days, there was no Lir Academy for Dramatic Art, no Oscar Wilde Centre for Creative Writing, no Samuel Beckett theatre, no Centre for Music Composition. Our Professors were not commercialising research and setting up companies and there were no awards for student entrepreneurship.

In Trinity today we are conscious of the importance of entrepreneurship and also that it's not something that just happens automatically. Staff and students need encouragement to see the commercial potential in their research, and students have to be encouraged to consider entrepreneurship as a serious career choice.

This award for Business Student of the Year offers just such encouragement. An award is never just about financial remuneration, it's about a group of influential people getting together and saying

- this is what we think is important,
- this is what we want to focus on.

An award draws attention to the qualities it endows.

The Business Student of the Year award was established in 1995 in order to reward not only academic achievement, but business acumen, fundraising, networking and other activities. The award puts focus on the qualities that are needed for entrepreneurship and for career success – and this sends out a clear message to our undergraduates.

The Award is the brainchild of the Business School and Trinity Business Alumni and it has been sponsored by the Bank of Ireland from the outset. It is among the most high profile undergraduate awards in the country. All involved should feel proud of its status.

As an example of what winners of this award can achieve after college we have only to look at Alan Foy, who stood here nine years ago to accept the 2004 Business Student of the Year Award.

Before even graduating, he had established his own company and he is currently CEO at Blueface Telecoms, which was named one of the Top 20 fastest growing businesses at the 2011 Deloitte Fast 50 awards. He is with us this evening as the outgoing president of the Trinity Business Alumni.

The new president of the TBA, Kingsley Aikins, is also a fine example of what Trinity alumni can achieve. As former CEO & President of the Worldwide

Ireland Funds, he set up a consultancy firm, Diaspora Matters, in 2011 to advise individuals, corporations, and governments on methods for engaging with diaspora communities.

Let me take this moment to thank the Trinity Business Alumni for their commitment to this award, and to Trinity, on so many levels. You demonstrate how alumni can develop a mutually-beneficial, lifelong relationship with their alma mater. I hope that the nominees tonight – and all Trinity Business students – will develop into just such supportive alumni.

The strength of Trinity's Business alumni is testimony to the excellence of the Business School. Recognising that a successful and internationally ranked Business School is a keystone of any great university, Trinity has identified the School of Business as a strategic priority. This School has risen steadily in the ranks - the recent QS Business School rankings places the school within the global elite group of 39.

I congratulate Dr Jim Quinn, Head of School, and all the staff on the success of the School of Business, and I particularly thank Jim, Mary-Lee Rhodes and Elaine Moore for their part in managing the nomination and short-listing process for this award.

Last year I noted the college's commitment to building a new state-of-the-art building to reflect the School's enhanced capability. I'm pleased to say that the first meeting of the project's governance team met last week, under my chairmanship, with the task of bringing this to fruition as quickly as possible.

We look forward to another great new building on campus to house this flourishing School. However, I hope that the ceremony for this award does *not* move. In truth, I would not like to see this event take place anywhere else. A great feature of this award is its venue here in the old House of Lords.

It is wonderfully generous of the Bank of Ireland, not only to sponsor the event, but to host it here in this chamber where, back in the 18th Century, so many Trinity graduates used the skills honed in college debating societies to make speeches as Members of the Irish parliament.

Actually the two most famous Trinity men to sit in the old Lords - John Fitzgibbon, Earl of Clare, and John Scott, Earl of Clonmel – are not remembered fondly in the nationalist tradition. Both earned similar nicknames – 'Black Jack' Fitzgibbon and 'Copper-faced Jack' Scott, origin of the famous Copper Face Jack's nightclub

* * *

The Bank of Ireland has always been most generous in allowing our students use this chamber for occasional debates and for ceremonies such as this – I thank the Bank's CEO Richie Boucher for the continued sponsorship and for

his motivational words here this evening, and I congratulate the students on their considerable achievements, and I wish everyone an enjoyable evening.

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Thursday, 25th April 2013

**Address at Presidency University, Kolkata.
'Opportunities in Higher Education: Global Perspectives
from Trinity College Dublin'**

Presidency University, Kolkata, India

Vice-Chancellor Malabika Sarkar, Ladies and Gentlemen, Good afternoon.

It's a great pleasure for me to be here today. We've spent almost a week now in India, and I've had a wonderful time visiting universities we haven't been to before. With me on this trip is Vice-President for Research Professor Vinny Cahill, Director of Internationalisation Ms Sinead Ryan, Associate Director of the Trinity Foundation Mr Simon Williams, and India Country Advisor Ms Suchita Ohri. On this trip we've aimed to get a better understanding of the way higher education works in this country, and I'm excited about the opportunities for academic collaborations between India and Ireland.

Today is a great opportunity for me to meet and talk about global perspectives in higher education to you, the students and staff of Presidency University.

It's my contention that as educators we are now operating in a radically changed environment to the one I studied in as an undergraduate – indeed in a radically changed environment to even a decade ago. New opportunities need to be created for students – opportunities that didn't exist and perhaps weren't even necessary, decades ago. That's the focus of my talk, and I'll be using my own university, Trinity College Dublin, to illustrate my points.

But first I should set the context and explain briefly the role that universities play today in my country, Ireland.

Ireland

Ireland is a European island about the size of West Bengal. We're unusual among European countries in that we were colonised – in fact we're often known as Britain's earliest colony - a "laboratory for the experiment of colonization" as one Trinity historian has termed it. We are now approaching the centenary of our independence, which was gained in 1921.

We were the first colony to leave the British Empire since the Americans, and this got us a lot of attention on the world stage in the twentieth century. Another reason why Ireland is well known is of course that the world is full of people of Irish descent. There has been large-scale emigration from Ireland for two centuries and there are now huge Irish diasporas in for example, the United States, Australia, and Canada. This emigration started in earnest after

the Great Famine of 1845-1848, a cataclysmic event in Irish history where more than a million people starved to death and another million emigrated. On the eve of the Famine, the population of the island of Ireland was at least 9 million – it has never recovered to that figure.

For a decade - from 1998 to 2008 – Ireland was also famous for having one of the highest economic growth rates in the world. This was the period when we were known as the “Celtic Tiger”. The world financial crash of 2008 hit Ireland hard; things haven’t been easy since then but I think we’re dealing with the crisis well and the mood in the country is broadly optimistic.

At independence in 1921, Ireland had a predominantly agricultural economy. We now have a knowledge and service economy, although agricultural products still account for a sizeable proportion of our exports. Our national strategy is to develop into a very strong knowledge economy – that is, into an economy where knowledge is turned into wealth through the intellectual capabilities and skills of our people. This knowledge can be scientific and technological, but it can also be cultural knowledge.

India has, I think, a similar national strategy. But of course the knowledge economy in India will take a different path compared to Ireland since our two countries are vastly different in scale, and draw on different strengths and traditions.

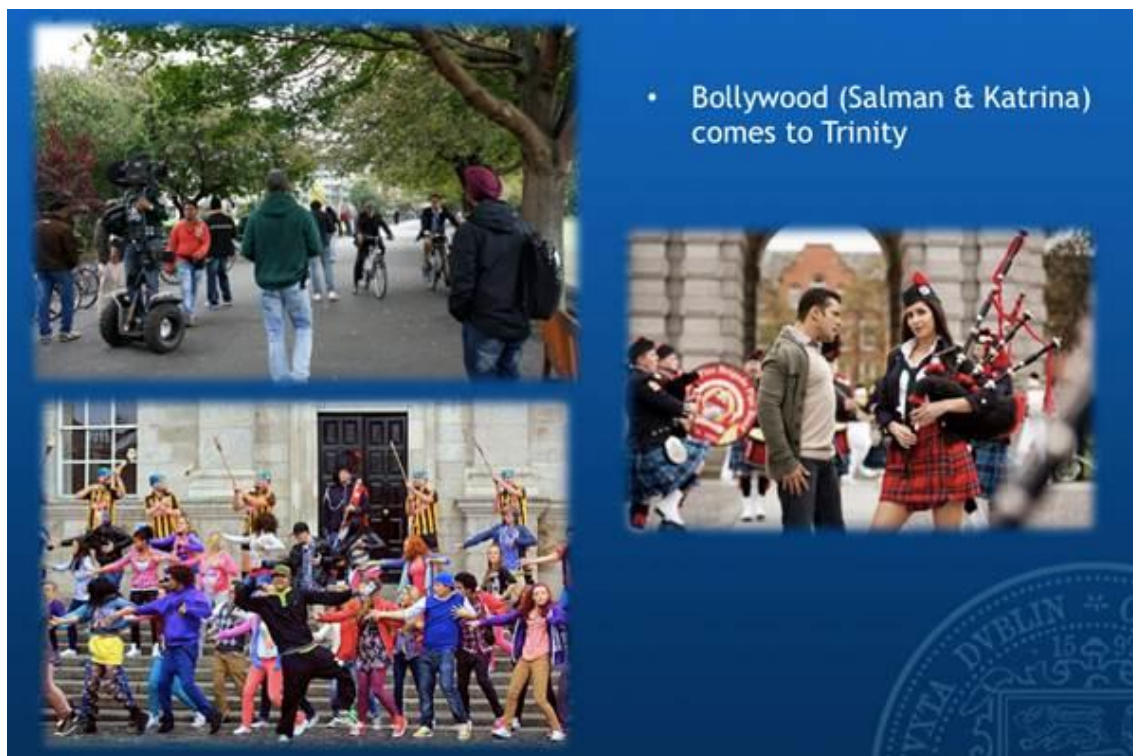
Any country that wants to be a knowledge economy needs a strong technological base and a globally-competitive education system. It means that investment is needed – heavy investment - in higher education.

This can come from the public sector – or the private sector, or both. Private versus public funding is a controversial issue, at least in Europe, and not everyone agrees about who should be investing, or on what basis.

Introduction to Trinity College Dublin

The funding question aside, there is firm agreement that the university sector is crucial to Ireland and to its ambitions for the future. Ireland has about forty higher education institutes, including large multidisciplinary universities in the main cities.

Here are some facts about Trinity: Trinity was ranked 48th in the world by the recent Leiden rankings – and 9th in Europe, and 1st in Ireland. It is also one of the world’s oldest universities – it was founded 421 years ago. Today the campus is a wonderful mix of beautiful old Renaissance buildings and very modern contemporary buildings. The college has featured as a location for a number of films – the latest, made just last year, was the Bollywood film *Ek Tha Tiger*, directed by Kamir Khan, which you may have seen. I’m told it was a big box office hit.



- Bollywood (Salman & Katrina) comes to Trinity

Trinity is lucky in its location, in the heart of Dublin city, which is why we're also called the University of Dublin. It's unusual to be at once an intimate college and a university in the heart of a vibrant capital city. Staff and students alike benefit from the urban dynamism, and the city benefits from our presence - it's impossible to think of Dublin centre without Trinity.

The Trinity Education

The university today is a hub of activity – of research, of teaching, and of extracurricular activities. We have over a hundred student clubs and societies, covering just about every sport, hobby, and interest you can imagine. Because in Trinity we believe that a sound education has academic achievements for sure, but also involves the development of the whole person through student-organised extra-curricular activities.

We know from surveys of employer expectations that employers of our graduates value:

- critical and independent thinking;
- excellent communication skills;
- and students who have developed a capacity for responsibility and initiative through extra-curricular activities.

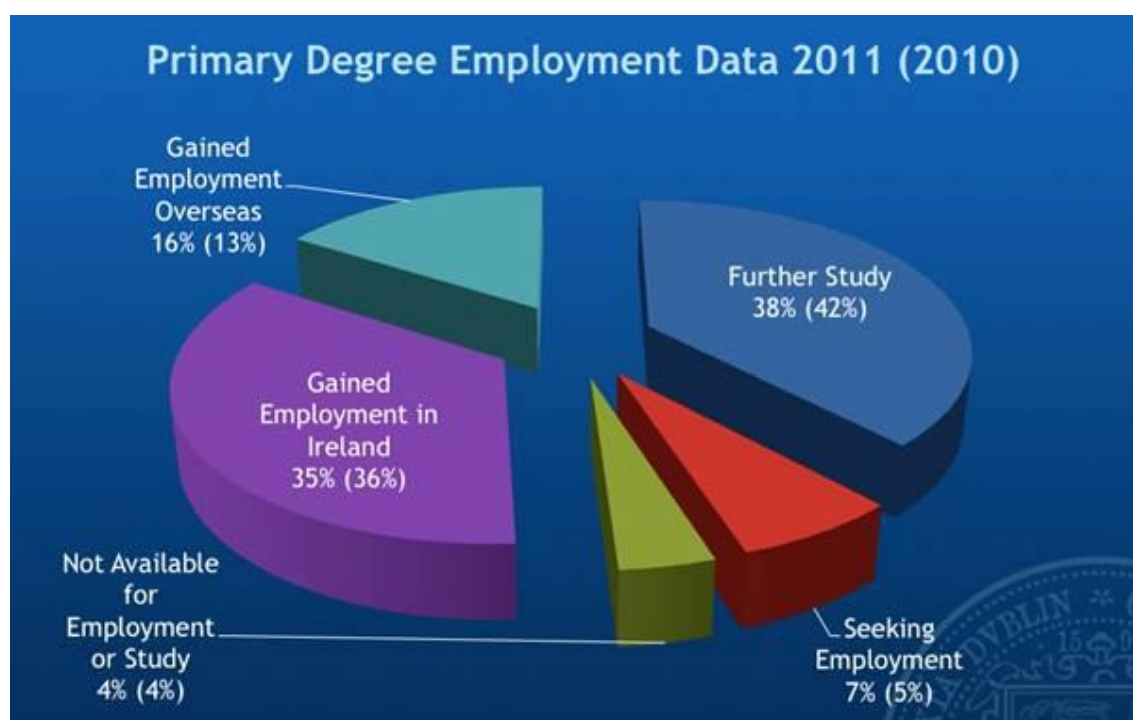
Our curriculum is strong on all of these. An essential characteristic of the Trinity education is that it is research-based - our students undertake research alongside professors in a common enterprise of discovery. This research may take the form of examining archives or conducting laboratory

experiments, but it aims to be original research having reference to the latest scholarship in the field - and giving students an appreciation of the frontiers of their discipline.

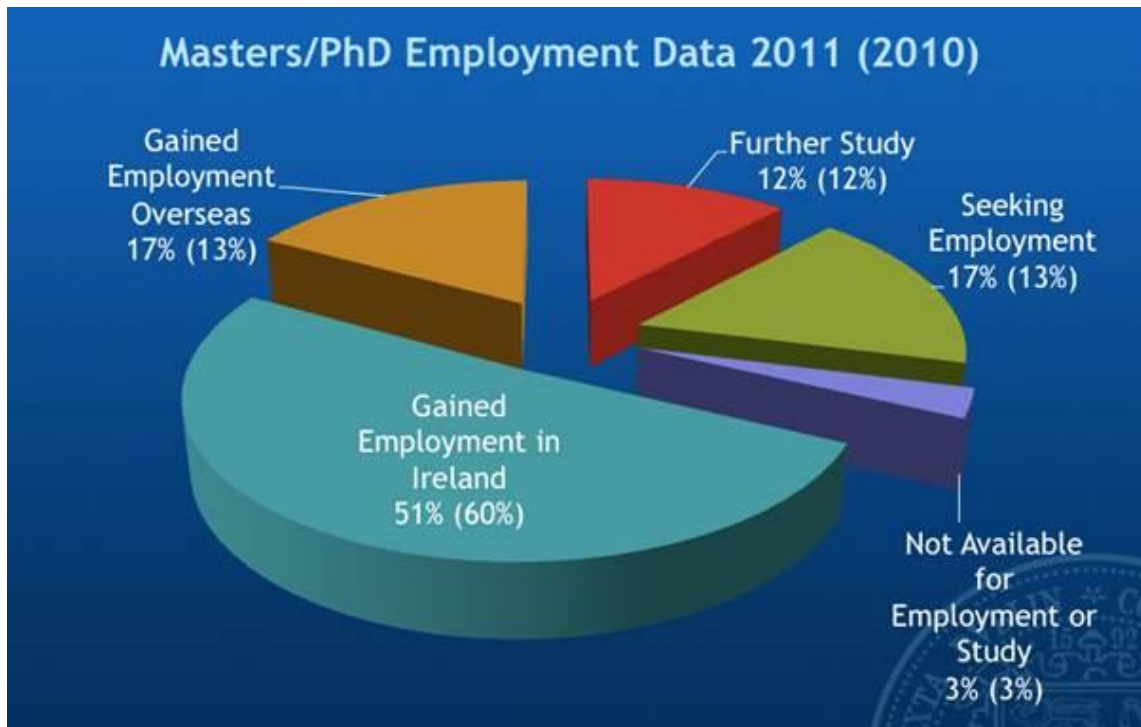
In Trinity, we recognise the transformative power of higher education in its broadest sense - not just what happens in the classroom, but what students learn from developing responsibility through event-organising, fundraising, competing, debating, and taking on leadership roles in College clubs and societies. In Trinity, we seek to transcend the vocational and to educate not just for the first job but for a career - and for an active and participatory citizenship.

We know that employers value our way of educating and our graduates, because fortunately our figures for graduate employment are good.

In a survey of our 2011 bachelor graduates, taken nine months after graduation, 38 percent were in further study, 51 percent had found jobs, and only 7 percent were still seeking employment – which is a good result in an economic recession.



Among postgrads, 68 percent had found employment and 17 percent are still looking for jobs – they are of course coming in at a higher entry level.



We're confident about the kind of education we offer. We are firm in our values; but at the same time, like all world-class universities today, Trinity is in transition – it is in the process of becoming a truly global university.

I want to look at how Trinity is transitioning, at how we are seizing the current education opportunities, but first I think we should take a look at the broader picture. What do I mean when I talk about 'a truly global university'?

Education in a Global World

As educators we are now operating in a radically changed environment to the one we studied in as undergraduates. The rise in demand is the most obvious change, linked to the education required to earn a living in the world economy and so to participate fully in society. However, there are deeper structural changes in the nature of the education itself, aside from mere "quantity" – one of these is the greater engagement with society through the returns from research and scholarship. This can take the form of cultural inputs, or policy developments, but increasingly it spurs on innovation arising from research projects involving multiple universities in multiple countries. Or it can take the form of joint programmes and courses which two or more universities collaborate to deliver. It means that staff, students, and research projects are no longer identified with one institution as they once were. Higher education is a borderless activity.

If you look at the world academic rankings, you'll see that as well as the classic indicators like citations, universities are now ranked on things like 'international collaboration', and 'international outlook', and even 'web

impact'. The academic landscape has changed and universities must seize the opportunities or get left behind.

Universities need to create the kind of environment where innovation, collaboration and internationalism can thrive. I believe that this means taking action on six fronts – I should say at least six fronts, there are certainly more:

- Increasing international research collaborations;
- Creating markets for new courses;
- Encouraging an entrepreneurial and innovative mindset in staff and students and getting them to think outside their disciplines;
- Increasing staff and student exchanges so that the campus is diverse, cosmopolitan, and culturally open;
- Increasing the number of campus companies by facilitating the transition of ideas from the library and lab to the market.
- Ensuring that online open access is a key element of information dissemination policy.

These things don't just happen automatically. They need to be activated and formally incorporated in academic policy. Let me return now to Trinity because I want to give you some concrete examples of how universities can encourage these things I've been talking about – and the only university I can speak for is Trinity. I'd also like to look at some of Trinity's connections with India and with Indian universities - both current and historic connections.

Trinity is fortunate – when it comes to innovation, international collaborations and student exchanges, we're not starting from ground zero. We have a strong tradition to draw on:

Trinity: Interdisciplinarity and Thematic Research

Innovation means coming up with new ideas and researching in adventurous ways that lead to the development of new, globally competitive products and services. Some of the innovative exciting research now happens at the interface between disciplines. When two or more disciplines come into contact, there is a reaction – something new is born.

In Trinity we have 24 Schools, ranging from Business, Drama, and Law, to Chemistry, Engineering, and Medicine. Within these schools are departments - for instance Medicine has departments of Immunology, Anatomy, Psychiatry, and many more. We are very comprehensive. It's college policy to encourage Schools to collaborate and to offer joint programmes.

Through clustering expertise into multi-disciplinary teams, Trinity has built up a portfolio of seventeen thematic research areas, for which we are recognised worldwide. These thematic areas include: Next Generation Medical Devices, Neuroscience, Digital Humanities, Immunology, Inflammation and

Infection, Telecommunications, and Ageing.



Researchers from different schools and departments feed into these thematic areas. For instance researchers into Ageing come from Epidemiology, Geriatric Medicine, Demography, Social Policy, Psychology, Economics, and Nursing.

The expertise of so many disciplines allows us to gain a comprehensive, aggregate understanding of the research area, and this in turn facilitates innovation.

In terms of commercialisation, the products and services arising from Trinity research come out of this interdisciplinary approach, and our researchers then seek to link up with a range of different industry partners – they are not confined to one field.

In our Nanoscience Institute, for instance, researchers from Physics, ICT, and Biotechnology are currently working on the development of Graphene, a novel material which is 200 times stronger than steel but 100,000 thinner than human hair. With its excellent electrical conductivity, Graphene can potentially be incorporated into a range of materials, including thermoelectric devices and sensors, and it can substitute for plastic in everything from household goods to airplanes. It can be used to make lighter cars, engines that use less fuel, and computer screens that fold into your pocket.

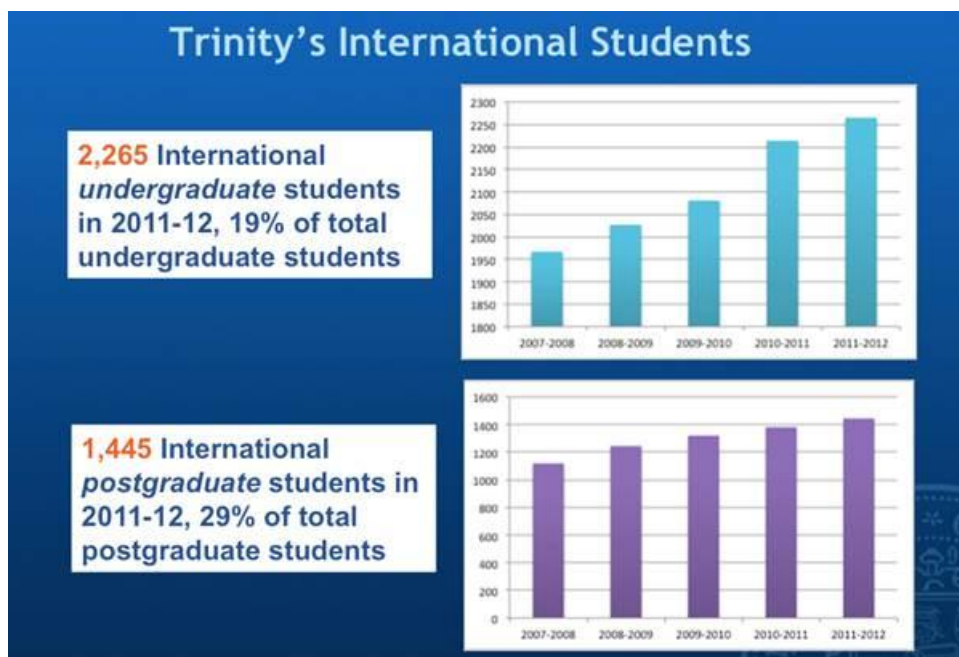
Trinity and India: Global Connectivity

It's important to us that our researchers should be collaborating globally. This has been the case since our foundation. For instance, our engagement with India began in 1762 with the appointment of Mir Aulad Ali, an Indian Muslim, as Professor of Arabic, Hindustani, and Persian.



- 1762 - Chair in Oriental Languages - Sanskrit, Hindi, Tamil, Urdu etc
- Mir Alaud Ali (1830 - 1899), Professor of Arabic 1861; Hindustani 1866; Persian 1873

And since the twentieth century, Trinity has had a most international student profile, with the medical and engineering Schools in particular boasting numerous students from India and Africa. Today we have 16,800 students undergraduates and postgrads – studying in Trinity.



Of these 19 percent of undergraduates are international – that is, they are from non-Irish backgrounds. And 27 percent of postgrads are international.

We also encourage student exchanges – our students go abroad for a semester and foreign students come to us. In this academic year about 300 students are exchanging with students from EU countries via the Erasmus programme – and from outside the EU we have about sixty students visiting for the year, and a further 300 students visiting for a term.

Semester and Exchange Students 2012/13	
Programme	Number of Students
Erasmus (within EU)	343 undergraduates inbound 5 postgraduates inbound 246 outbound (study) 14 outbound (placement)
Moscow State University	8 inbound 2 outbound
Non-EU Visiting	48 One Year Visiting Student 240 One Term Visiting Student 131 SSP (One Year Visiting)
Non-EU College Wide Exchanges	37 Outgoing Students who have been away during 2012/13
EU Visiting	28 EU Visiting

Trinity and India: Research collaborations and Scholarships

Our staff members are more international again than our students. About half of our staff are non-Irish, and in the past decade or so, Trinity has extended its international research collaborations and joint study programmes. In the past year, I've signed memoranda of understanding with universities in China, Singapore, and Rwanda, to deliver joint student training programmes. We hope to establish such joint programmes here in India.

Today, Trinity has research collaborations with 110 countries worldwide. The UK and the US are our top two collaborators – which is unsurprising as we share a language and a history. We have increasing numbers of collaborations with China, Japan, and India.



Our collaborations in India are wide-ranging. As an example, one project between Trinity and the Indian Institute of Technology in Kanpur concerns the bioengineering of cartilage for transplantation into humans. It's a crucial project with obvious societal impact and is jointly funded by Trinity and India's Ministry of Science and Technology, under the India-Ireland cooperative science programme.

Postgraduate Scholarships

Trinity's link with India has also taken the form of undergraduate and postgraduate scholarships. For the year beginning September 2013, sixteen postgraduate scholarships are being offered in any of Trinity's taught masters courses. Five scholarships are available in the Faculty of Arts, Humanities and Social Sciences, five in the Faculty of Health Sciences and four in the Faculty of Engineering, Mathematics and Science. A further two research scholarships valued at €6,000 per year for three years are available for full-time study on a PhD programme in any discipline. My colleague Sinead Ryan is available to advise on these scholarships.



TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH

THE UNIVERSITY OF DUBLIN

Postgraduate Scholarships

Postgraduate Indian Scholarships

- 16 postgraduate taught scholarships for the academic year 2013/14:
 - 5 scholarships in Faculty of Arts, Humanities & Social Sciences
 - 5 scholarships in Faculty of Health Sciences
 - 4 scholarships in Faculty of Engineering, Mathematics and Science
 - 2 research scholarships valued at €6,000 per year for three years are available for full-time study on a PhD programme in any discipline.

Government of Ireland Scholarships Awards 2013/ 2014

- 2 postgraduate taught awards for Indian PG students
- Includes a full tuition fee waiver and a stipend of €10,000 to cover living expenses for one year.
- Deadline for applications for 2012/13 is Friday, 26 April 2013
- Further information on scholarships is available at:
<http://www.tcd.ie/globalrelations/scholarships/>

Because our postgraduate students are engaged on important research work, many have their fees paid and receive grants, and can count on scholarships and stipends to cover travelling costs for research and to conferences. The best way to proceed in this is to make direct contact with individual PIs.

Trinity Innovation Pathways

Good universities are always teeming with ideas and with gifted people, but ideas can remain abstract, and people's potential unrealised unless pathways are created to move from the ideas phase into something concrete and profitable. These pathways should facilitate the transitions:

- from idea to product,
- from lab to market,
- and from student to entrepreneur.

In Trinity we have a number of innovation pathways. I'll just look at two:

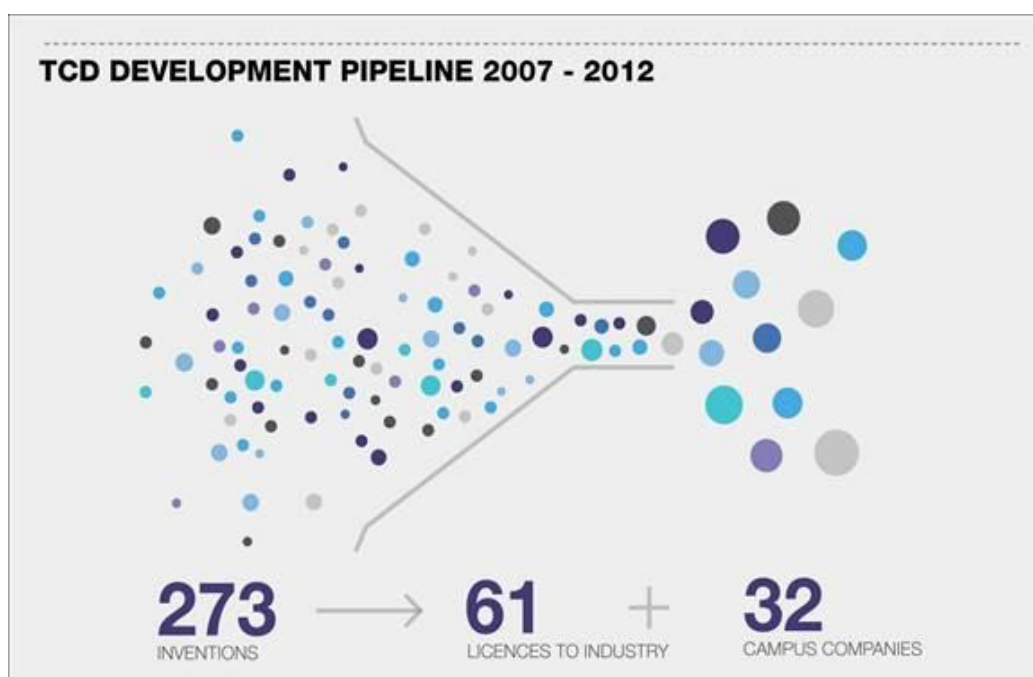
Innovation Academy

Three years ago we established the Innovation Academy. This educates PhD students to develop opportunities for innovation arising from their research. It is, of course, interdisciplinary. To quote from its website: "We bring together postgraduate students from the arts, humanities, business, science and engineering to spur them into action."

The Innovation Academy provides a range of modules, including creative thinking, protecting your idea, and planning and financing your venture. Most importantly, it gets students to work in groups to solve real-world problems identified by industry and partner organisations.

Technology Transfer: the funnel

Once a research project has reached a level where it is ready to find a business partner for licensing or further investment, it can be showcased by the university. This slide shows the funnel or the 'development pipeline'. Ideas enter the "funnel" where they progress from licenses, to business partners, to investments to sales. In the last five years, over sixty commercial licences have been granted and 32 new campus companies have been founded to commercialise Trinity's intellectual property.



Conclusion

So, these are some of the actions we're taking to enable us to seize the new opportunities, and to provide a global education. We're aware that, to misquote Thomas Jefferson, "the price of success is eternal vigilance". Today's academic world is fast-paced and constantly evolving and certainly no-one can afford to stand still.

But we're imperilled to continue our vigilance by our sense of participating in something larger. Today they are drivers of the knowledge economy. And when we speak about international cooperation, and about free online access, and about student exchanges, what we're talking about is enabling and advancing a spirit of openness, trust, curiosity and interest – a global spirit.

Thank you.

Monday, 29th April 2013

**Welcome at the European Institute of Innovation &
Technology Symposium: Foster Innovation &
Strengthening Synergies within the EU**

Quek Theatre, Trinity Biomedical Sciences Institute, Pearse Street

Minister, Distinguished Guests, Ladies and Gentlemen,

It's my great pleasure to welcome you, and to introduce this conference in my capacity as Provost of Trinity College Dublin and a Governing Board member of the EIT.

Over the next two days we look forward to talks and plenary sessions on issues relating to the KICs and partnership, funding models, synergies, and the regions.

I am delighted that so many key players have assembled in Dublin and Trinity for this dynamic conference.

The EIT - as is captured in the title of today's conference - is about fostering innovation and strengthening synergies between higher education, research, and business sectors in Europe.

This university – Trinity College Dublin - provides an example of some of the ways in which excellent European universities can place innovation at the core of their activities.

Trinity: An Introduction

As you know, we're a long-established university – Trinity was founded more than 420 years ago. The newest building in the university is the one you are in: the Trinity Biomedical Sciences Institute, or TBSI, which opened this year. While we are known for old buildings, particularly the magnificent Front Square and the Old Library which draw the tourists, the research action happens in the many new buildings put up in the last few decades. This mix of the old and the new is very much a feature of Trinity. We intend the university campus as a dynamic space where our students can feel supported by tradition and open to the new.

This juxtaposition of old and new is best showcased in our two main visitor attractions: the Book of Kells, which dates back to the 9th Century and is one of the world's oldest, most beautiful books, and the Science Gallery which opened in 2008 as a place where "art and science collide".

In 2011, we received a gift from Google to launch the Global Science Gallery Network - a network of eight Science Galleries which we are developing in partnership with leading universities in urban centres worldwide. Just yesterday, I returned from Bangalore where we are in the advanced stages of opening a Science Gallery supported by the Karnataka State Government.

I hope that at some point over the next two days you get a chance to visit both the Science Gallery, and the Book of Kells.

Trinity: Interdisciplinary and Global Connectivity

Universities, as key players in innovation ecosystems, must create the right space and conditions for ground-breaking research to happen, and they must build innovation pathways to connect with industry - and bring that research for the benefit of society. To the universities' age-old core mission in education and research is now added a new dimension - the mission to innovate and open opportunities for entrepreneurship.

How can universities ensure that their research is cutting-edge, ground-breaking, and compelling enough to attract industry partners?

My view is that as long as you're creating knowledge at a faster rate and to a higher level than your competitors, then you're opening up opportunities for innovation, ultimately with the potential of creating jobs and wealth and improving society. This knowledge can come in all forms - it can be technological, cultural, creative, health sciences - what matters is that it's world-class and competitive.

Trinity has 24 Schools, ranging from Business, Drama, and Law, to Chemistry, Engineering, and Medicine. Some of the most exciting research happens at the interface between disciplines so it's the university's policy to encourage Schools and Departments to collaborate and offer joint programmes.

Through clustering expertise into multi-disciplinary teams, Trinity has built up a portfolio of thematic research areas, for which we are recognised worldwide.

These thematic areas include:

- Next Generation Medical Devices,
- Neuroscience,
- Digital Humanities,
- Immunology, Inflammation and Infection,
- Telecommunications, and
- Ageing.

Just as some of the most exciting research happens at the interface between disciplines, so also does it happen at the interface between different mindsets, often to be found in different countries and different types of institutions. Universities need to collaborate and refresh their ideas through multiple different approaches. European universities have embraced this through the framework programmes - and it is one of Europe's strengths. Such collaboration and renewal through diversity hasn't been developed to anything like the same extent in other parts of the world – neither in Asia nor in North America.

Higher education today is increasingly a globally traded and borderless activity. People and research projects no longer belong exclusively to one institution. Staff, students, and research switch between countries and institutions, going to where the money and expertise is. The EIT grew out of the desire to make full use of these opportunities, and it's up to universities, like Trinity, to seize the initiative.

Trinity has 16,800 students – undergraduates and postgrads. About a quarter of our students are international – that is, from non-Irish backgrounds. And about half of our 800 faculty members are non-Irish.

Trinity will continue with its global strategy to improve internationalism and research collaborations. We believe we are going in the right direction and were pleased to be rated 9th in Europe by the recent Leiden Rankings.

Universities and the Innovation Ecosystem

The products and services arising from our global education and research are internationally competitive and aimed at the world market. In the past five years in Trinity, over sixty commercial licences have been granted and 32 new campus companies founded to commercialise our intellectual property.

Some of our spin-outs have achieved great global success. I'm thinking of companies like Havok, founded in 1998 to commercialise research into physics simulation software for computer games and films, and a decade later sold to Intel for \$110 million.

Twenty percent of all spin-out companies in Ireland come out of Trinity. This figure alone shows how vital universities can be when it comes to improving the growth and competitiveness of the cities, regions, and countries where they are situated.

This is to the benefit not only of the university, but of the whole Dublin region and country.

The EIT was born out of this kind of awareness. The EIT formalises, on a much larger, continental scale, what universities like Trinity are hoping to achieve for their regions and countries.

In the EIT we talk about the Knowledge Triangle - ideally Europe will have a myriad of Knowledge Triangles, assembling to a Knowledge Pyramid. The more knowledge triangles we have, and the better they can work in partnership and synergy, the sooner we will move from austerity to gain.

The Irish poet, William Butler Yeats, once remarked that education is not about filling pails (or buckets), it's about lighting a fire. I like this quote – it reminds us that education is, in the best sense, not something safe or contained. It reminds us that the spark that ignites the EIT is education. Great research, great products, great entrepreneurs – all these start with great students. It's the job of universities to light the fire in students and send them out to the world to spread the flame. Let's remember over the next two days - as we look to get our knowledge triangles working in synergy - that it all starts with the fledgling undergraduate in Fresher's Week.

Thank you.

* * *

Wednesday, 1st May 2013

**Speech at the Presentation of the J.V. Luce Medal to
College and Celebration of J.V. Luce as Public Orator
(1971-2005)**

Saloon, Provost's House

Welcome everybody to the Saloon in the Provost's House for this very special occasion. We welcome in particular Mrs Lyndal Luce and her daughters, Alice, Kristina and Jane.

Today we celebrate one of the most distinctive of all our fellows and professors, John Victor Luce. He was elected Fellow in 1948 and served the College for over sixty years. I believe he fell just short of his father's sixty-five year record of college fellowship. Between them Arthur Luce and John Luce served Trinity from 1912 until 2005 – both were athletes as well as scholars, and quite simply, twentieth century Trinity history would not be the same without them.

From the start of his undergraduate career, John Luce excelled as scholar, sportsman, and writer. His academic achievements, alone deserve a whole oration. He transformed the School of Classics, established new courses, and wrote much admired books on Homer and Greek philosophy. I am personally grateful to him for his history of Trinity which he published in 1991 and was the first College history I read myself. Indeed without his book and R.B. McDowell's earlier book, I would have much less understanding of this university's great history.

John Luce also served with distinction as Senior Dean and as Vice Provost under Provost Watts. But today, we are not marking John's academic, administrative, or indeed sporting achievements – all of which, as I say, could take a speech in themselves. Today we celebrate John Luce, the Public Orator. He held this post for 33 years, from 1971, beginning when A.J. McConnell was Provost and finishing in 2005, the longest tenure in that post in Trinity's history.

To celebrate John's singular oratorical achievement, his wife, Lyndal Luce has most kindly agreed to present to the College one of John's Gold Medals, which now becomes the medal of office for all future Public Orators of the College, to be worn at Honorary Degree ceremonies. This will be a fitting and permanent record of one of the great figures in the College's recent history.

The principal duty of the Public Orator is to write and personally deliver the orations, in Latin, at commencements to confer honorary degrees. Over the course of his three decades, John gave orations to a most remarkable and varied set of people, including Neil Armstrong, Saul Bellow, Seamus Heaney, Gay Byrne, Iris Murdoch, Juan Carlos of Spain, Mary Robinson, Jennifer

Johnston, Brian Friel, George Mitchell, Nelson Mandela, Bono, Judi Dench, Fiona Shaw, and Michael Bogdanov. In short, many figures of international significance from the worlds of politics, literature, academia and entertainment have had the pleasure of hearing their careers summarised, and their achievements lauded, in John's succinct, humorous, and always generous phrases.

A hallmark of his orations, which so many of us here in this room remember, was his gift for finding Classical counterparts for contemporary figures. For instance:

- He said of Seamus Heaney that he is "country-born like the poet Horace".
- And Iris Murdoch is a "latter-day Diotima".
- For Mary Robinson he quoted "that ancient Greek feminist, the poet Euripides: *Honour is returning to the race of women*".
- And about R.B. McDowell, he said: "In Socratic fashion he has sought to imbue his students' minds with the desire to know rather than with knowledge itself." That is a quite beautiful distinction which we must all remember when we talk about a Trinity education.

I would have liked to pay John Luce the compliment – no-one deserves it more – of finding his classical counterpart, but it is beyond me. I put it to Professor McGing speaking after me to find the apt comparison.

As well as being learned and erudite, John's orations were witty and pithy and he was not above the rare but judicious soundbite. He called Mary Robinson "the people's president" and this was in 1992, five years before Tony Blair had occasion to use this phrase for Diana, Princess of Wales. So I am wondering if New Labour was reading Professor Luce's orations!

For the conferral of Juan Carlos of Spain, John recalled the attempted coup of February 1981 when, some of you might remember, the Spanish parliament was seized by members of the Guardia Civil. Juan Carlos, as king, gave a public television broadcast calling for unambiguous support for the legitimate democratic government, and this broadcast was believed to be a major factor in foiling the coup. Recalling the incident, John Luce found a wonderfully elegant way of summing it up. He said: "To adapt a famous saying of Cicero to modern times, *arms yielded to television* and violence gave way before the valour of a leader who staunchly upheld the rule of law and the constitution."

John Luce had a way of ending his orations by politely soliciting applause from the audience. He would say something like: "I commend her to your most enthusiastic applause" or "I urge you to bestow on him the tribute of your readiest and most cheerful applause." But when conferring Nelson Mandela in 2000, Professor Luce, fully alive and alert to this most remarkable of men, ended uncharacteristically with an almost peremptory order: "See to it" - he said - "that the thunder of your applause re-echoes through this hall."

I could continue on much longer citing John's wonderful oratory – and I congratulate the Department of Classics for collating so many of his orations on their website. But I am aware that others have claim on your attention, so I must end now by thanking Mrs Luce again for her generosity. And in memory of that great man, her husband John Luce, see to it that the thunder of your applause re-echoes through this Saloon!

* * *



Mrs Lyndal Luce

Tuesday, 14th May 2013

Speech to the Graduating Class of St Peter's College, Wexford

Bride St Church, Wexford

Bishop Brennan, Reverend Fathers, Reverend Sisters, parents and guardians, students, good afternoon,

It's great to be here. I thank the Principal, Mr O'Callaghan, for inviting me and giving me this chance to talk to you, first, as an old St Peter's boy myself, and second, as Provost of one of the world's great universities, Trinity College Dublin – a university where some, I hope many, of you will come to study.

I spent all of secondary school in St Peter's as a boarder. I know there aren't any boarders now, but in my time, the seventies and early eighties, many of us from the country used to board, while those who lived in town were day boys, or 'townies' as we used to say.

In those days St Peter's, like many schools in Ireland, was streamed. There were four streams, from A to D, with A as the highest and D as the lowest. I was in the second lowest, the C stream. Your stream was decided on the basis of your entrance exam, which you sat, aged eleven or twelve. I didn't do well in this exam – maybe I was a slow starter. So I was placed in the C stream, and I suppose less was expected of me, academically, than of the boys in the A and B streams.

It wasn't a great beginning but it turned out to be a good experience because I started to do well in the end-of-term exams, and indeed to out-perform boys in the higher streams.

I took an important lesson from this, which is that you don't have to be defined by other people's expectations. What counts are your ambitions and expectations for yourself. You have within you the ability to confound other people's view of you. I was lucky to learn that early.

When I started doing better in exams, the school wanted to move me up a stream - but I didn't want to go because, by then, I'd made friends in my class. St Peter's showed great flexibility, I must say, because they allowed me to stay in the C stream, but do some subjects, like honours maths, with the B stream, so I got the best of all worlds. And I suppose the message there is that if you know what you want – then, often, you discover ways to make the system flexible enough to give it to you.

In Trinity, as in all good universities, flexibility is built into the way the place works. It has to be - there's so much to do: attending lectures and tutorials, doing course-work, doing sports, getting involved in clubs and societies.

Every year in Trinity we have students coming to us because of timetabling constraints – a lecture will clash with, say, a training session, or a rehearsal for a play, or a debating tournament. We try to find ways around the impasse, because we know the importance of extracurricular activities - or ‘learning outside the classroom’, as we sometimes call it.

We’ve always put strong emphasis on the extracurricular – our clubs and societies are some of the oldest of any universities in the world. We know that employers value this emphasis – recent surveys show that they favour graduates who have developed responsibility and initiative through participating in clubs and societies. We want to educate our students to find interesting employment and to be active and participatory citizens.

Like Trinity College Dublin, St Peter’s has always been ambitious for its pupils. In my time, many of us didn’t come from academic families – neither my parents, nor my uncles or aunts went to university, and it was the same for my friends. But St Peter’s encouraged us to believe that we were as capable as anyone of third level education. But among my schoolfellows, I was almost alone in opting for Trinity. The natural gravitation then, for St Peter’s boys, was UCD. Only three of us out of my whole year went to Trinity. I know it’s different today.

I can’t really say why I chose Trinity – but I remember that the careers guidance teacher, Mr O’Sullivan – whom I met last year again after many years at a careers conference in Trinity – did advise me to study engineering there. I guess he’s a man of intuition and foresight because this was a great decision for me. I got on well in Trinity - so much so that I eventually joined the staff.

But when I left St Peter’s to go to Dublin in autumn 1983, I was nervous. I didn’t know anyone else going to Trinity – I was on my own. But when I walked through Front Arch out into Front Square, nerves turned to excitement. Nothing had prepared me for the beauty of the buildings and of the layout – the cobbled squares, the tennis courts, the playing fields. I was entranced.

I know now, after reading reminiscences of other Trinity students, that this feeling of entrancement which I’d always thought was so personal, is actually universal.

It turns out that hundreds, *thousands*, of students have had a kind of epiphany walking under Front Arch, through the darkness, and out to the beautiful expanse of Front Square. This short walk is a metaphor of what a university education can do for the mind: it opens the mind out to wide expanses. That is certainly what happened to me.

I wouldn’t want to have to choose which part of university life was most important: was it the lectures and tutorials in the engineering department? Or my time in the Karate club? Or the way I started reading anything and everything? When you’re somewhere like Trinity, surrounded by so many

disciplines - history, classics, psychology, music, medicine – you develop a passion for learning. Curiosity is contagious: when you learn a little, you want to learn more. And the great thing about an excellent university, is that whatever you get interested in, there is always someone to discuss it with.

Suddenly in Trinity I was thrown into contact with people from all over the country, and from all over the world. That was an education in itself, just absorbing their experiences and cultures.

Today Trinity is more international again than when I was an undergraduate. About a quarter of our students and half our staff are from international – that is non-Irish – backgrounds, and student exchanges are a crucial part of our programme. We encourage students to spend a semester or a year abroad. At the moment, the students most likely to take up this opportunity are the language students, for obvious reasons – if you're studying French, you need to spend time in France – but I want to broaden this. My ambition is to get a majority of our students doing exchange programmes.

I'm evangelical about this because I benefitted so much from studying abroad. I was an engineering student who didn't know languages until I found myself working abroad, first in Bologna in Italy, and then in Nijmegen in the Netherlands. As a result I learned okay Italian and a smattering of Dutch, and I gained new perspectives on engineering, which I brought back with me to Trinity when I joined the staff.

A Trinity education creates independent, critical thinkers, with fresh, innovative ways of looking at things. It was said of one of Trinity's legendary professors, R.B. McDowell, who died last year, that:

"In Socratic fashion, he sought to imbue his students' minds with the desire to know rather than with knowledge itself."

I'd enshrine this as the motto for all Trinity staff. We are preparing students to lead fruitful, diverse, challenging lives.

Studying abroad is part of this preparation. So are the tutorials where students are asked to speak up and defend their views; So is learning responsibility through holding positions in one of our 49 sports clubs or 112 societies; and so is the original research which, in their final years, students undertake alongside professors. This research might be in a laboratory or a library, or it might be field work, but it's always an attempt at original research which makes a contribution to the discipline.

We want our students to have a sense of excitement about research and discovery.

New discoveries are coming out of Trinity all the time. For instance, recently our Department of Genetics discovered three genes that are unique to humans.

And then there's nanotechnology. 'Nanos' means dwarf in Greek and nanoscience is the study of atoms, molecules, and objects on the nanometer scale. It's a new science with amazing potential. In Trinity's nanoscience institute, researchers are working on the industrial production of graphene, a non-porous material could someday be used for computer screens that fold into your pocket.

Or you might have seen on yesterday's Six One news that Trinity has just created an online resource which allows users to explore 17th Century Ireland. This website overlays old 1650s maps onto Google maps; it uses GIS technology, and it maps out murders and violent assaults reported during the Cromwellian period. I'd urge you to take a look - downsurvey.tcd.ie - it makes history come alive.

These are all really exciting discoveries. And when I talk about a Trinity education, I hope that what comes across is the excitement, independence, broadness, and flexibility of such an education.

To you, the Leaving Cert students of 2013, the most important thing is, when you're leaving school, to feel horizons opening out, giving you a sense of the manifold possibilities of life. This is not a time to close down or narrow your options.

One of my favourite lines is from that great Irish poet, Michael Hartnett in a translation he made of the 16th Century Irish poet Dáibhí Ó Bruadair. He said: 'I pity the man who must witness the fate of himself'.

Sometimes we feel that life is forcing us in a certain direction - that we're fated to follow a certain path and fulfill certain expectations. But we don't have to accede to the 'fate of ourselves' - education helps transform all our fates.

I don't know any of you individually, and even if I did, I wouldn't be presumptuous enough to say what direction you should take in life. The only thing I do know is that your life will probably not turn out how you expect it to - but probably you should be glad that it doesn't!

You will all, I hope, have the experience of coming through darkness into a beautiful open space.

You are fortunate to attend a school which is preparing you so well for a life of opportunity and expansion.

Thank you for having me here today.

* * *



(L-R) Mr Ger Cush; Provost, Dr Patrick Prendergast; Student Prizewinner; Bishop Brennan; Mr R. O'Callaghan, Principal

Wednesday, 15th May 2013

Speech at the Launch of Professor Eda Sagarra's Book on Kevin O'Shiel

Saloon, Provost's House

Good evening,

You're all very welcome to the Saloon in the Provost's House. It's a great honour to have with us today to launch this book our former Taoiseach, Liam Cosgrave. He has the unique distinction of also being the son of a former Taoiseach, W.T. Cosgrave.

W.T. Cosgrave was head of the government which employed Kevin O'Shiel, the subject of tonight's biography, as director of the Boundary Bureau and as Irish Land Commissioner. Tonight, in the persons of Liam Cosgrave and of Eda Sagarra, daughter and biographer of Kevin O'Shiel, we have a living link with history, with the foundation of the State. So it's a very special occasion and I'm delighted that it is being held here in the Provost's House.

Eda Sagarra is our emeritus Professor of German, a former Registrar of the university, and a former Pro-Chancellor. She was appointed Professor of German here in 1975 and held this position for 23 years until her retirement in 1998. During this time she served as the first female Registrar under Provost Watts, from 1981 to 1986.

After her 'retirement' – which is not a word one would ever use in connection with Eda - she continued teaching in the German department up until very recently; she was inaugural chairman of IRCHSS; and from 1999 until 2008 she was Pro-Chancellor of this university.

Pro-chancellors are de facto illustrious and distinguished people who have made exceptional contributions to society or to the college. Eda brought all her grace, enthusiasm, and energy to the role.

She retired from the pro-Chancellorship five years ago but, as we know today, she certainly didn't retire from scholarship. Already the author of a number of key books on German history and literature, she has now turned her attention to Irish history to produce this biography of her father, Kevin O'Shiel who had a most remarkable career, starting in 1913, when he joined the Irish Volunteers.

I don't know if it was always Eda's intention, and part of her meticulous planning, to publish the biography in 2013, a centenary after the formation of the Volunteers, but there's no doubt that in this Decade of Commemoration, which began last year, O'Shiel is a lynchpin figure.

I'm not going to go into his contribution now. Our former Taoiseach will do this far better than I can. But I must just say that I have been hugely enjoying Eda's book – I have not yet finished it.

It is at once scholarly and lively, and the story Eda tells is fascinating. You will forgive me if, as Provost, I found myself particularly drawn to the account of O'Shiel's time in Trinity.

That he came to Trinity at all in 1909 was unusual enough since he was from a Catholic family in Omagh and had been educated at a Jesuit boarding school in England. His father was a home ruler and his maternal great-uncle was a prominent Fenian. With a background like that you might have expected him to go the new National University of Ireland.

But as Eda writes here, in an excellent phrase which I must remember: "Trinity could appear to offer a Catholic a more *catholic* education". That's catholic with a small 'c' – and certainly her account of her father's student days shows that the college a hundred years ago was diverse and 'small-c' catholic.

O'Shiel had Northern Catholic friends, unionist friends, and Jewish friends. His lecturers were mostly Unionists with a few Liberals among them, but an exception was his fellow Tyrone man, Joseph Johnston, who was made a Fellow in 1913, at the age of 22, and caused a stir a year later when he published a book highly critical of Edward Carson's campaign. When O'Shiel was appointed to the Boundary Commission in 1922, he chose Johnston as economic advisor.

I was delighted to find this link between a Trinity Fellow and the seminal events of the Decade we are now commemorating. It is Trinity's concern – as I am sure it is for all Irish institutions – to re-evaluate just what happened during these crucial years.

It is stories like this, which occur more in biographies and memoirs and personal histories, than in general or political histories which help us to build up a full, nuanced picture.

So I congratulate Eda on this affectionate yet objective portrait of her father, and for contributing to our understanding of the years 1913 to 1925. I thank her for adding to Trinity's store of history.

And, like all of us, I am now most interested in hearing what she intends to do next!

Now ladies and gentlemen, please join with me in welcoming former Taoiseach, Mr Liam Cosgrave to formally launch "Kevin O'Shiel: Tyrone Nationalist and Irish State-BUILDER".



Mr Liam Cosgrave (speaking), with Professor Eda Sagarra (left) and Provost, Dr Patrick Prendergast (right)

Friday, 17th May 2013

Speech at the Alumni Awards 2013

Dining Hall, Trinity College

Good evening,

I don't want to interrupt your meal or your conversations, but as Provost I can't let this evening go without, first, thanking you all for being here tonight. Some of you have come from very far indeed. All of you have made a great effort and commitment to be here. It means a huge amount to us.

As I'm fond of saying, Trinity is a university of more than 16,000 students, 3,000 staff, and 92,000 alumni, living in 130 countries.

Trinity is a kind of community, linked by a common affinity for a place and an idea, and like all communities, Trinity works best when each member is participating - when each member is aware of being an individual who contributes to the greater good.

The pull of Trinity on its members is strong, magnetic even – because for so many of us, our student years here were quite simply some of the best of our lives. And we return in order to reconnect with that time and with our younger selves, in all our idealism and radicalism. I count myself blessed to work in Trinity, but I know that if I didn't, then I would still, as a graduate, remain strongly connected and strongly concerned about Trinity's future direction.

It's about more than just reconnecting with our pasts. Part of identifying with a place, an institution, a country, is wanting to safeguard and strengthen it. When you feel you have a stake in something, you seek to influence it for the better. I know that as friends and alumni you have a strong interest in this college's reputation and future. And as Provost, I feel a responsibility towards you, as towards staff and current students, to ensure that this university, which means so much to all of us, continues on its path of excellence.

Tonight's event honouring these four remarkable alumni is part of safeguarding and strengthening our path. A university which ignores the accomplishments of its alumni is not heading towards excellence. Alumni confer distinction on the university that educated them, and universities should recognise that.

All of you here tonight, by your commitment and your success, have a stake in our recent very good showing in the rankings. According to the latest Leiden rankings, Trinity is now 48th in the world and 9th in Europe. In a time

of austerity for Ireland, where education budgets are being cut, that is a truly magnificent showing which we can all be proud of.

I know you all feel a stake in Trinity, so I'd like to just fill you in, briefly, on some of the things we've been doing to safeguard and strengthen. I don't have time to go into all our initiatives – we'd be here all night. But let me just say that everything we do comes from our sense of confidence in what we have – in the traditional, multi-disciplinary, research-led education which has stood us in such good stead through the centuries.

As you can see around you, in the past few years Trinity has “burst” its campus, and has extended all the way up Pearse Street to the Lir Academy for Dramatic Art at Grand Canal Dock, and all the way to St James's hospital where the new National Children's Hospital is to be located. And on the south-east of the campus, by the rugby pitch, we are shortly to begin work on our new Business School, which will develop our reputation as an innovation campus.

It's not just about expanding the campus here. We are also busy extending our network around the world. Many of you will, I hope, have visited our Science Gallery on Pearse Street, where science installations are exhibited. It's where “science and art collide”, and since it opened in 2008 it has proved a phenomenal success, and has already welcomed over a million visitors.

In 2011, we received a gift from Google to launch the Science Gallery Network – a network of eight Science Galleries, which we are developing in partnership with leading universities in urban centres worldwide, including Bangalore, Moscow, and London. Trinity will soon be at the heart of an international drive to showcase the wonders of science.

This is, in many ways, a very different university to the one that you and I attended. And it has to be, because the world has changed. But some things have stayed the same: our values, our commitment to the university experience, and our determination to be internationally competitive – to be a university that truly ‘plays for Ireland on the world stage’.

If our foundations and values were not so firm, we would not be expanding in such a confident way. If we weren't secure in what we have to offer, we would be closing in defensively, rather than opening out.

We cannot stand still, and you wouldn't want us to. To quote Edmund Burke, whose statue I pass every day at Front Arch: “A state without the means of some change is without the means of its preservation”. Fortunately, in Trinity, we have the means of change and growth.

We're very proud of Burke, of course. Two hundred years after his death, he continues to confer distinction on his university. The latest book on Burke is by English MP, Jesse Norman, and he has asked to launch his book here, in the Provost's House, on Tuesday, to mark Burke's connection with Trinity.

Trinity's legacy through the ages is the legacy of its alumni. That legacy is further enriched tonight. I thank everyone here for the continued goodwill and support which keeps this university great.

Paul, Hugh, Siobhan, and John, you have each made your own permanent contribution in the worlds of business, arts, sports, and volunteering - on this island and beyond. I am proud that you are my fellow alumni – you inspire me, you inspire the students of today, and you reaffirm the purpose of a Trinity education.

Thank you.

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(L-R) Mr John Pearson; Ms Siobhan Parkinson; Provost, Dr Patrick Prendergast; Mr Hugh MacKeown; Mr Paul Coulson

Monday, 20th May 2013

Speech at the Open Innovation 2.0 Gala Dinner and Innovation Luminary Awards

Dining Hall, Trinity College

Ladies and Gentlemen, Good evening,

You are all very welcome to the Dining Hall in Trinity College for the inaugural Innovation Luminary Awards. These awards celebrate and recognise outstanding innovation role models. In so doing, they aim to inspire the next generation of innovators.

We're delighted to be hosting these awards in this place of education – because over the past decade or so Innovation has become integral to universities, alongside our core mission in education and research.

When we talk about innovation, we're talking about growing knowledge. That knowledge is often scientific and high tech, but it is not exclusively so. As long as you're creating knowledge at a faster rate and to a higher level than your competitors, then you're opening up opportunities for innovation – ultimately with the potential of creating jobs and wealth and improving society.

Innovation cannot be confined. In Trinity, as in other universities around the world, our education is interdisciplinary. We know that, today, the most innovative research happens at the interface between disciplines.

Since 2007 Trinity has averaged about seven new campus companies a year, to commercialise our research. These spin-outs range from interactive software for digital media, to air filtration devices, to DNA traceback systems. They showcase our interdisciplinary approach. Twenty percent of all spin-out companies in Ireland stem from Trinity – and that figure alone shows the importance of universities in the innovation ecosystem. I like the word “ecosystem” in this context: the biological metaphor is apt. The different players are like ‘organisms’ which interact within a region to sustain growth – individuals, enterprises, universities, and government bodies interacting in the right regulatory environment to open up entrepreneurial opportunities.

Within the innovation ecosystem, higher education institutions supply the bright, entrepreneurial graduates who are willing to take risks and forge ahead – creating new knowledge, or using that which is already there.

Also crucial to the ecosystem is of course the business community. As we heard at this morning's conference, innovation can be defined as the creative interaction between business, science, and the citizen. We also heard that

when we speak of healthy competition, then it's not just enterprises, or indeed universities, which are in competition with each other, but whole innovation ecosystems.

When we get used to thinking in this way about competitive ecosystems, we will stop differentiating between players and isolating the activity of, say, universities from that of enterprises. In healthy ecosystems there is "cross-pollination" and all the elements come together to work and support each other. Think of the way a good university interacts with its city or region.

The European Institute of Innovation and Technology, the EIT, recognises this. Founded in 2008 with the mission to foster a new generation of innovators and entrepreneurs, the EIT has conceived a knowledge triangle – with higher education, the business community, and research and education as the three sides of the triangle. The EIT has created structures, called Knowledge and Innovation Communities, or KICs, to integrate these three sides.

A Knowledge Triangle can be equated to an innovation ecosystem. Ideally, in Europe, each region will have a knowledge triangle in healthy competition with triangles from other regions, together building to a knowledge pyramid across the continent, creating growth and improving society.

It's exciting for universities to be so directly involved, like this, in economic growth. Our role has gone beyond educating people to get jobs – it now involves educating people to make jobs.

These jobs will, of course, be created in all sectors - technological, cultural, creative, health sciences, and in all the other industries and domains that help make Europe great. That's why the awards today take a broad view of Innovation. Tonight's awards have nine categories, including Business Model Innovation, Serial Entrepreneurship, 21st Century Industrial, Creative Innovation, and Social Activism. Just the titles of the different awards give us an idea of the range and diversity of the innovation being celebrated tonight.

I was delighted to see the category for 'Creative Innovation' because it's my contention that a region's innovation always derives from its particular strengths and traditions. For instance, the high tech revolution didn't come out of nowhere in Silicon Valley - it came out of the area's long 20th Century focus on electronics and radio transmissions.

In Ireland and Europe, we have particular strengths in cultural creativity. Our ground-breaking writers, artists and musicians have resonated round the world – from Samuel Beckett to Riverdance. The creative industries are important to us and it is good to see this specified in the awards.

Many of us who run universities are focused on what kind of ecosystem will emerge around us. In Dublin's case I think it will be a broad-based mix of high-tech, cultural, and other types of innovation. I think science, arts, and

the humanities will interact, whether in performing arts, or gaming technologies and visualization.

But we know that the clustering of great innovation doesn't just happen by magic. It needs to be strategized for, planned for, activated and incentivised.

The EU Open Innovation Strategy and Policy Group understands the importance of incentivising and activating. Today's conference has brought together thought leaders, CEOs, policy leaders, researchers, and social innovators. I would like to thank Professor Martin Curley and his colleagues, and our own Vice-President for Research, Professor Vinny Cahill, for making this happen.

These Awards, together with the enrolment of the recipients into the Innovation Luminary Academy, will incentivise future innovators. By designing such beautiful awards we are sending out an important message that this is what society values.

When I was a student here in Trinity in the early '80s, many of us were ambitious, certainly, but we weren't ambitious to be innovators or entrepreneurs because we had little real idea of what these were.

All that has changed. Within the university we now have various awards recognising student as well as staff innovation, and I know that among our undergraduates today are many who are already dreaming of, and will succeed in becoming, great innovators. Today's event is a further inspiration.

Thank you.

* * *

Tuesday, 21st May 2013

Speech at the Launch of Jesse Norman's Book on Edmund Burke

Saloon, Provost's House

Minister, ladies and gentlemen, good evening and welcome to the Saloon of the Provost's House.

I don't know what way you all came into college this evening. But if you entered by Front Arch, you will have passed John Henry Foley's statue of Edmund Burke, gazing over College Green beside his contemporary, Oliver Goldsmith.

Burke, the subject of the biography we launch today, needs no introduction, and his statue's position, at the college's main entrance and in the heart of Dublin City, is testament to his presiding position among Trinity graduates and among Dubliners. Even in this college, which boasts Oscar Wilde and Samuel Beckett, we have no graduate more essential than Burke, who continues to inspire not only in Ireland, but round the world.

There is probably no-one I quote more in speeches than Burke. It's not that I'm an expert on his views and policies - it's simply that, in my experience, when you are looking for something sensible to say, few say it like Burke. In fact I cited him on Friday at an Alumni Dinner - I wanted to get across that Trinity, while holding firm to its traditions, needed to initiate some changes.

But I know that certain alumni do not want to see change in their alma mater, so I cast around for a quote to help me deliver this message. I happened on this from Burke: "A state without the means of some change is without the means of its preservation".

Some would caricature Burke crudely as an arch-reactionary. And yet I found none among Trinity's more allegedly radical alumni to endorse the necessity for change in more simple, elegant language. This reminds us of the complexity of Burke's thought and why he remains so relevant.

Burke is not just a statue we nod to every morning - he is someone we seek guidance from. This goes not only for Trinity, but for political parties and organisations around the world. He is rightly considered the father of modern political conservatism. So it's fitting that, on the first occasion of an MP from the House of Commons choosing to launch a book in Trinity, it should be a biography of Burke. We welcome Dr Jesse Norman, Member of Parliament for Hertford and South Hertfordshire. We are delighted that he is bringing Burke's genius to a new generation, and that he has chosen to be here to launch it.

Dr Norman writes that when Burke entered Trinity in 1744, “there were no social activities or sports within the college”. The young Edmund, although at fourteen was two years younger than most of the other students, soon changed that, at least as regards social activities. He helped set up two student societies, and in Dr Norman’s excellent phrase, “each combined drinking and conviviality with a serious purpose”. Neither was long lived but the College Historical Society, or ‘The Hist’, founded in 1770 traces its origins back to one of them. Burke also began a magazine called the ‘Reformer’ which provided an early outlet for his political and literary talents.

Today, Trinity has over a 160 clubs and societies, and a dozen different student magazines. The philosophy of promoting student learning outside the lecture room remains intrinsic to a Trinity education. It may be pushing it to say that Burke started all this, but he certainly seems to have been a trailblazer in extracurricular activities. He also managed to be a good student, gaining a scholarship – which must have been down to natural flair because Dr Norman reports that for ‘assiduity and diligence’ he was ranked in the bottom quarter of his year.

After graduation, Burke went on to have a remarkable career in the British parliament and as a political thinker. His 19th century legacy was immense. Gladstone read Burke every day while working on Home Rule in the 1880s and thought his advice almost divine. When Woodrow Wilson, future President of the United States, visited Dublin in 1899 he came straight to this campus so that he could wander around, his thoughts full of Burke. In the 20th century, Burke was hailed as both the John the Baptist of militant anti-communism, and the prophet of a more just political system.

And about a year ago, while visiting the States, I was astonished to see in a bookshop a tome entitled *The Reactionary Mind: conservatism from Edmund Burke to Sarah Palin*. Burke would be turning on his pedestal in Front Arch! It’s hard to think of anyone less like Burke than Ms Palin! But it certainly testifies to his continued relevance! Fortunately, we now have this elegant biography from Dr Norman to do proper justice to his life and legacy.

Trinity is full of mementos of Burke. Downstairs in the library of the Provost’s house, we have a wonderful portrait by James Barry. While researching this book, Dr Norman visited Trinity, and his analysis of Barry’s painting opens his seventh chapter. He describes it excellently, as the portrait of “a man of action, caught in a moment of deep thought”.

Our largest lecture theatre in the Arts Building is named after Edmund Burke – a suitable tribute given that it requires a special kind of orator to speak effectively in that large chamber! And of course, the College Historical Society keeps his memory alive, and continues to develop students as orators. Tonight I’m also delighted to announce a new lecture series in honour of Burke, organised by Professor Jürgen Barkhoff, the Director of the Trinity Long Room Hub, our arts and humanities research institute.

This evening we're also delighted to welcome the Minister for Transport, Tourism, and Sport, Dr Leo Varadkar, back to his alma mater to launch this book. I'd have to ask my colleagues in the medical school if Dr Varadkar's student activities resembled Burke's! But certainly as Provost I take great pride in his achievements. Our two distinguished guests share a number of similarities – both are doctors - that both share Burke's fearlessness, especially when it comes to saying things in public, when it might be easier to remain silent. Before I call on the Minister to formally launch the book, I'd like to end with a story about Burke that is not well known.

Towards the end of his life Burke was approached about becoming the Provost of Trinity. However his health was not good and he was heartbroken over the recent death of his son, so he decided against allowing his name to go forward. Instead he threw his support behind the then Vice-Provost, who went on to get the job and be a great success. I came across the story when I was Vice-Provost, and I took it as a good omen for my future, and a testament to the enduring wisdom of Edmund Burke.

And now, to formally launch the book, I'm delighted to welcome the Minister for Transport, Tourism, and Sport, Dr Leo Varadkar.

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(L-R) Mr Tom Barry, T.D.; Dr Jesse Norman, M.P.; Dr Leo Varadkar, T.D., Minister for Transport, Tourism and Sport; Provost, Dr Patrick Prendergast

Tuesday, 28th May 2013

**Speech at the Reception for Trinity Supporters and
Volunteers: TCD Association & Trust**

Saloon, Provost's House

Friends, honoured alumni,

Welcome to the Saloon in the Provost's House. I'm delighted to see so many of you here this evening and delighted to have this opportunity to thank you for all your support, and to tell you a bit about what we've been doing here in Trinity, and about what we plan to do further.

This is the third alumni group I've had the pleasure of meeting in the past ten days. Some of you may have been present for the Alumni Awards, held in the Dining Hall, when we presented awards to four remarkable alumni from the worlds of business, arts, sports, and volunteering.

Meeting with alumni - whether to confer awards, or, as this evening, to offer thanks for support - has made me reflect upon the vital importance of the relationship between a university and its alumni.

A university's global reputation is, in many ways, dependent on its alumni's achievements, while alumni, in their turn, feel a strong stake in their university's success. This is why universities - at least good universities - feel a sense of pride in their alumni; while alumni, however high they might fly, or far they might go, often feel a continued connection with the 'mother ship'.

I don't have to emphasize this to you, our friends and supporters, members of the Trinity Association and Trust, and of alumni branches in Ireland and round the world. Among all our graduates, you have given clear proof of your attachment to this university. You have given your time and expertise to help keep Trinity great, and to help keep alive the worldwide Trinity community of 92,000 alumni in 130 countries.

We are extremely grateful. We are grateful to the Association & Trust committee for their careful management of the grant supports for College projects. We are grateful to the alumni branches for organizing the activities, social events, and networking that keep our global alumni in touch with us - and vice versa. We are aware that all of you, despite numerous other pressures on your time, provide such support on a voluntary basis.

Trinity: achievements

All of you here this evening have shown, through your commitment, a sense of solidarity with the challenges faced by the current leadership of the College. So I want to talk to you briefly about the 'state of play' in Trinity as we end this academic year and prepare for the next one.

I'm happy to be able to report that we've enjoyed an excellent year. The latest university rankings, the Leiden Rankings, out in April, placed Trinity 48th in the world and 9th in Europe. In a time of austerity for Ireland, where education budgets are being cut, this is a truly magnificent showing which we can all be proud of. It's a great feeling to have Trinity back in the top 50.

And you might have seen some of the recent excellent headlines pertaining to Trinity research - such as the launch, a fortnight ago, of the online digital atlas of the 17th century Down Survey of Ireland. The Down Survey was the first detailed land survey on a national scale anywhere in the world. Our new website overlays the old 1650s maps onto Google maps; it uses GIS technology, and it maps out murders and violent assaults reported during the Cromwellian period. Fintan O'Toole in the *Irish Times* called it "one of those projects that reminds us that cyberspace can still have a wonderfully democratic side."

And you might have seen reports of our study of bees living in oilseed rape fields, which increase the crop's yield by up to 30 percent. This study has, of course, widespread significance when it comes to the vital protection of the bumble bee.

And earlier in the year I hope you didn't miss the coverage of our new pilot scheme for admissions. This scheme, which we will test-run in the coming academic year in three departments, aims to diversify admissions away from a purely points-based system. This is important because it shows Trinity leading the way in an area which everyone, including the Minister for Education, agrees needs reform. And it's important because a Trinity Education puts emphasis on the extracurricular and on learning outside the classroom. So we need to admit the students who will most benefit from our type of education, and they aren't necessarily the students who accumulate the highest points.

These are just some of the initiatives and research projects which we've been working on this year, and which have received global attention. There are also of course numerous projects, just as vital, which don't make headlines. I don't need to remind this audience of the College's many essential activities in different areas.

Association and Trust

Through its management of monies received from the TCD Affinity credit card, the Association & Trust has enabled many activities, from helping student clubs and societies, to academic publications and travel, as well as College services, training, and charitable activities.

In the past academic year alone, the Association & Trust supported approximately seventy projects, ranging in value from €500 to €20,000. These included:

- Graduate Studies travel grants;

- Medical Overseas Voluntary Electives; and
- Saving the Treasures of the Long Room

The College is most grateful for these projects. We look forward to continuing to work closely with the Association & Trust to help promote the Affinity credit card, and to use the revenue to best realise Trinity's strategic goals.

The College also looks forward to continuing to work with the alumni branches in their vital activities - which include not just networking and fundraising, but acting as mentors to current students, and assisting with student recruitment.

Trinity: challenges

All here in this room can appreciate the challenges involved in running a university today. As universities look to increasingly engage society in their research, and as they become global competitors for talent, then the traditional role of the academic has changed.

The solitary scholar in the library is important today, as always, but today's academics also: set up campus companies, organise international conferences, manage boards, compete for research grants, and establish international research collaborations.

Given the range of activities that universities are now involved in, it will come as no surprise to hear that while Trinity has achieved great things, many challenges remain.

For instance while Trinity performs highly on research impact, we do less well on other criteria which count in the rankings - for instance staff-to-student ratios - things for which funding remains a crucial concern.

We are committed to finding the balance between public and private support, which means we need to bring on board more non-government revenue streams. This is already happening – almost 50 percent of Trinity's revenue is now from non-government sources, including of course our revenue from the Affinity credit card – but more avenues should be explored.

To this end, we are launching an exciting initiative which will be of interest to you. In early November we are holding the Trinity Global Graduate Forum. Some of the inspiration behind this was the successful diaspora events held by the government. We realise, as did the government, that our alumni, like the diaspora, are a resource of tremendous talent, expertise and goodwill.

We plan to invite 120 Trinity alumni - they will be individuals who have achieved remarkable success in their field globally, or have high potential to do so. We will invite a balanced mix of different disciplines/industries, genders, age, and geographic locations.

120 is of course a tiny percentage of our 92,000 alumni, but we need to keep this event small because we want to leverage our expertise, experience, and networks in order to generate innovative ideas which will help launch a new phase of growth for Trinity. As you know it's difficult, not to say impossible, to leverage good ideas when numbers get too large. The Forum can only be representative of alumni talents.

The Trinity Global Graduate Forum will, I am sure, yield wonderful ideas and initiatives which will help Trinity to strengthen its position on the world stage. We are proud of our alumni's expertise [and quick wits] – which we like to think we had some part in forming. To that extent, this Forum is about reaping what we sowed, in the best possible sense. The Forum sends out a message of our faith in, and our reliance upon, our alumni. Everyone in this room is already aware of the value we put on our alumni. With our high-level Global Graduate Forum, we tell this to the world.

Thank you.

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Friday, 31st May 2013

Speech at the Announcement of Computer Science Initiative with Google for the 21st Century Classroom

Oriel House, Trinity College

Minister, colleagues, I'm delighted to welcome you to Trinity – to Oriel House - for the announcement of our educational partnership with Google. I thank Minister Quinn for joining us, and I am pleased also to welcome the Head of Google Ireland John Herlihy who is also going to address you this morning.

This announcement builds on Google's long-standing support for Trinity College Dublin in scaling innovative concepts, through the Science Gallery, Trinity Access Programmes – or TAP - and Bridge21.

When I became Provost in August 2011 I said in my inaugural address that I was committed to reforming admissions to university for all students and to further developing the pioneering work of the Trinity Access Programmes.

The Minister too has set out an ambitious reform agenda - a reform agenda at national level. And what we are announcing today enables Trinity to make a significant contribution to the Minister's agenda over the coming years - through an extension of the work of both TAP and Bridge21.

It is widely recognised that we need additional investment to build our capacity in the Science, Technology, Engineering, and Mathematics – the STEM - area. These projects will facilitate the engagement of up to 1,000 teachers to further develop their computer science skills and to incorporate that new expertise within their pedagogical approach.

It will also involve a national coding competition, to create a stronger focus for teachers and students on building skills in this area. And Google will provide 1,000 'Raspberry pi's', which are small computers that help with learning coding.

Drawing on Bridge21 concepts, it will aim to ensure that our future leaders are now learning in a second level environment that supports them to develop 21st century skills, which will make them active, critical learners who are self-directed, team-focused, creative and adaptable. This all aligns closely with the great work being undertaken by the National Council for Curriculum and Assessment in re-developing the junior certificate curriculum.

Although there has been considerable progress in widening access to higher education, there remain considerable obstacles for students from socio-economically disadvantaged backgrounds. DEIS schools should be supported by universities, the corporate world, and the State in imaginative,

collaborative ways that will help the many talented, motivated students to fully develop their educational potential in preparation for life, and for a university education leading to satisfying and rewarding careers.

We are looking forward to developing this work in consultation with key educational stakeholders, many of whom are here today, and we are confident it will make an important, evidence-based contribution to the reform of our education system in the coming years.

In Trinity, we would like to thank the team in Google who worked with us on developing the proposal – Sue Duke and the Google Education Committee – as well as John Herlihy for leading it to project-confirmation beyond Google Ireland. We thank SUAS Educational Development, which along with Trinity were co-founders of Bridge21. We thank David Puttnam, for making it his business to broker this connection between Trinity and Google so that the project proposal was initiated. I thank Cliona Hannon, Director of TAP for her leadership, and all of the College’s many advocates for educational change. And finally, we thank the Minister for Education & Skills for once again showing his leadership and commitment to reform through his attendance and participation at today’s launch event.

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Monday, 10th June 2013

Speech at the Royal Irish Academy on 'Academic Freedom: A Provocation?'

Royal Irish Academy, Dawson Street

Uachtaráin na hÉireann Micheal D Higgins, Members of the Academy, Ladies and Gentlemen,

I would like to thank Professor Lizbeth Goodman for the invitation to address you this afternoon. When Lizbeth asked me to speak, she said I could give a 'provocation' as much as a talk and I've taken her at her word – so my title today is "Academic freedom: a provocation?" – and rather than delivering a sustained argument, my intention is to make a number of provoking comments which, I hope, can stimulate debate afterwards.

I should say that academic freedom is something I've been thinking about a lot and have touched on in a number of speeches. Some of the current tendencies to undervalue academic freedom are the product of recent developments, and like anyone dealing with the 'new world order' of austerity, so to speak, I'm feeling my way here. I'd like also to say at the outset that I can only speak as Provost of Trinity in my remarks that follow, but I'd like to open up this debate to the whole sector.

Academic Freedom in the Trinity Statutes

In Trinity College Dublin, we've written academic freedom into our Statutes. I won't quote the entirety of the passage – it takes up three paragraphs – but we define academic freedom as: *"The freedom, subject to the norms of scholarly inquiry, to conduct research, teach, speak, and publish without interference or penalty, no matter where the search for truth and understanding may lead."*

And the passage ends: *"The College will seek to develop the search for truth as a part of the experience of teaching and learning, relying not on the imposition of authority or acceptance of received knowledge but rather on the exercise of the critical faculties of the human mind."*

These statements are I think, uncontroversial. I expect most good universities have defined academic freedom in similar terms. But however universities define academic freedom, it's not something that commands attention day-to-day ... either within the university or outside. Sometimes academic freedom is equated with freedom of speech - we tend to think that as long as academics are not being censored outright or imprisoned for their views, then academic freedom is intact. We overlook the more subtle, the more insidious, threats.

So I think it's helpful to start by defining academic freedom more precisely.

Academic freedom: Scholarly Inquiry

If you look at the Statutes which I've just quoted, academics claim the freedom to *"research, teach, speak, and publish without interference or penalty, subject to the norms of scholarly inquiry."*

That 'scholarly inquiry' is crucial. We don't claim the freedom to research, teach and publish on any subject. I'm an engineer. If I were to start spouting on, say, theology or French literature, well I could evoke my right to freedom of speech, but I couldn't evoke academic freedom, because I'd be talking about something outside my expertise and using no 'norms of scholarly inquiry' to substantiate my argument.

So academic freedom starts with curtailment. We claim the freedom to research, teach, speak, and publish only in those areas to which we've devoted profound study, on which we have an expertise that we can share our knowledge for the public good, knowledge that is situated within the rigorous intellectual tradition of our discipline. Our sense of that tradition, of all the thinkers in our discipline who have come before us, makes us aware of academic freedom as a privilege and as something hard-won - an outcome of a thorough grounding as researchers and scholars in our field. In fact, academic freedom brings such a weight of responsibility that it's not something we claim lightly - but we know that it's not something we can escape. It is part and parcel of university life.

The Academic Agenda

This is a crucial point because when we talk about "the freedom to conduct research, teach, speak, and publish", what we're really talking about is the freedom to set the academic agenda - that is, the freedom to decide what and how to research and teach.

I emphasise 'research and teach' because in Trinity, as in other research-led universities, the two are inextricable - they do not run along separate tracks. What we research ultimately decides what we teach - and what we teach inspires the research our students get involved with.

It may seem, again, uncontroversial to claim the freedom to set the academic agenda, but this entails the freedom to decide on which staff to appoint to academic posts and how to remunerate them, subject of course to sound budgetary discipline. Ultimately who you appoint determines the research direction and the curricula of your institution.

Constraints: Government

I became Provost of Trinity just under two years ago, and at my inaugural speech in September 2011, I raised concerns about what I called ‘constraints acting on higher education’. Let me quote what I said then:

“To compete globally, I need to have flexibility and decision-making powers – the same flexibility that other presidents of leading universities can count on. Particularly with regard to hiring and promotions. At the moment I need to get permission for what I do.”

In the two years since that speech, things haven’t got better. The Universities Amendments Bill and the Employment Control Framework represent more control, tying the hands of universities and preventing us from competing globally. And global competition between universities, and between cities in which they are embedded, is not a myth, certainly not in a world where talent – of staff and students – is increasingly highly mobile.

When a university’s independence to take decisions on hiring, remuneration, research funding and tuition fees is curtailed, then the direction of third level education is being subtly controlled. This means that universities are not free to set their academic agendas, and to add maximum value to the society in which they are embedded. Their academic freedom is insidiously compromised.

When I say ‘insidious’ - I don’t mean it in the sense of ‘treacherous’ or ‘perfidious’ but in the sense of ‘gradual, subtle, but harmful’. I am sure that those who propose and back the Employment Control Framework and the Universities Bill do not intend to threaten academic freedom. I’m sure they’re motivated by a sense of doing good for the country in these difficult times. But I do think the full implications of these measures simply haven’t been considered.

I believe these measures are proposed because people are unclear about what universities are accountable for, and who they should be accountable to.

Universities in the Public Good

An alternate sub-title for today’s speech, suggested by the organisers, was ‘Whose universities are they anyway?’

I didn’t go with this title because I think it’s too explosive to try and answer this question – Ireland is not ready for such a debate.

Do universities belong to the government? Do they belong to the people? To the students? Are they here to serve the market and produce commercial research?

There are all kinds of models for higher education. There’s the ‘dirigiste’ model - one where government identifies skills gaps in the market and directs universities to concentrate resources on those disciplines currently in

demand, while cutting off resources to disciplines where there is less immediate need. Government is the owner, the planner.

On the other hand there's the 'student-driven' model, which treats universities as service-providers and students as the end-users who get to decide what's working and what isn't. The student, thought of as a customer, drives the system.

Do universities belong to students or to government? When I consider the role of universities, my answer always comes back to their dual function.

Universities confer both a private and a public good. They confer a private benefit on the individual student who gains the skills to pursue an interesting career and lead a fulfilling life; and they confer a public benefit in terms of educating the citizens and workers who provide essential services, drive the economy, and safeguard democracy.

So whose universities are they anyway? They are society's universities. They operate in the public interest. They are among the key civic institutions – like the judiciary or the media – which keep society going, and without which it is quite impossible to imagine a functioning modern democracy.

Separation of Powers

You are all familiar with Montesquieu's separation of powers into the executive, the legislature, and the judiciary. And you all know that to these three, was added a 'fourth estate' – the press or the media, which should also act independently in a democracy. It seems that Edmund Burke was the first to use 'fourth estate' to describe the press in 1787. I'm delighted a Trinity alumnus contributed to this great debate.

Montesquieu came up with three powers and Burke added a fourth, but of course it's not about numbers. What counts is proper 'separation' between the different actors in civic society. Each must function independently, and must be enabled – indeed compelled – to take responsibility for their actions.

Industry could be another example of such democratic players – in democracies, we don't see State-control of industry as the best route to economic success. And another example is universities and centres of higher learning.

So when we talk about the independence of universities and the freedom to set the academic agenda we're tapping into something deep and fundamental to the way our democracies are run.

Universities today are expected to play a key role in driving the economy. They are encouraged to commercialise research and grow the 'innovation ecosystem'. This is unequivocally a good thing. But curtailing in the independence and room for manoeuvre, and academic freedom, of

universities has a distortionary effect, preventing them from sustaining the cultural ecosystem in which they exist.

No Innovation Without Independence

Good universities, such as Trinity and other Irish universities, seek to develop critical thinking, independence and initiative in students. They do this in a variety of ways, such as through original research, extracurricular activities, and encouraging innovation.

There is consensus that the skills gained are beneficial to the individual and to society at large. Everyone is agreed on the need to nurture independent thinking and leadership skills in students, and on the need for university research to feed into the economy.

But how can universities encourage independence and responsibility in students, unless they are themselves independent and accountable? How can they encourage decision-making skills when they cannot themselves take decisions on staff hiring, budgets, and research? How can they innovate and come up with exciting new products and services in an environment of control and curtailment?

If you look at the great universities of the world, the universities that support vibrant and successful innovation ecosystems, what characterises them is a high degree of autonomy. I could go so far as to state that universities with the ability to act independently is a key indicator of innovation. This is recognised even in countries where independent autonomous universities would not have been the tradition – in this respect Ireland seems to be, in relative terms, going in reverse.

This is not only to do with mentoring innovative, independent students. It reaches beyond to the question of the long-term research agenda.

Research: Long-Term Sustainability

We all know how research funding works. You can effectively silence commercially unviable research, not through censoring it, but through denying it funds, and one insidious way to do this is to separate it from the teaching function.

That said, we aren't naïve and utopic - we know it's impossible to prevent inequality in funding. At any given moment in history there's always going to be a particular demand for particular research. That's just what happens.

But if we accept this, we also accept that what is profitable, important, and in demand today, may not be so tomorrow.

Today, as we suffer the most savage global recession of the post-war period, we understand only too well the problem of focusing on short-term profit. Corporations and institutions round the world now seek long-term sustainability. And as third-level research feeds more directly into the economy than ever before, the need for long-term sustainability in research becomes ever more pressing.

Who can say which research will prove important in the future? The answer is, of course, that no individual, corporation, or institution can claim to hold the key to long-term sustainability.

But it's fair to say that experience and expertise go a long way. An excellent researcher is in the best position to predict what might be long-term trends and growth areas in his or her discipline. He or she can identify the innovations which may prove ground-breaking.

When it comes to the research which will power the future, universities collectively have great experience and expertise. Of course there's always an element of risk, but there's less risk than when this decision is taken out of their hands and given to people without direct responsibility for it, for university teaching.

This, of course, ties into what I said about academic freedom as a hard-won privilege. Universities claim the freedom to set the academic agenda, including the research agenda, not from any sense of entitlement, but because we know we are best positioned to determine the academic agenda so as it delivers the public good of higher education. Universities are also, I believe, well-armoured against the seduction of the short-term.

Successful knowledge economies are those that put trust in their universities and research centres. They trust that what may look like strange, maverick research decisions will eventually add to the sum of human knowledge and as well as wealth creation – and lead maybe in the end to some wisdom as well. Successful knowledge economies give their universities freedom to set their own academic agenda.

Conclusion

I believe that in Ireland we understand the importance of an independent university sector. All our traditions are geared towards autonomy and independence. This can be to Ireland's great advantage in a time when higher education is becoming even more important to our prosperity and well-being.

Edmund Burke coined the phrase 'Fourth Estate' at a time when the press was gathering importance and becoming a professional force. Naturally, governments sought to influence this new force, and sometimes succeeded. But the press was able to articulate the value of its being separate and independent of government.

Today, with the growth of online media, the fourth estate faces unprecedented challenges. But it is helped in confronting those challenges by the distinct sense of identity it has carved out over the past two hundred and fifty years.

The fourth estate has been able to do this because it understands its importance as a key democratic player. It understands that the public interest is best served by press autonomy. It understands that media is one of those 'powers', like the judiciary, which must operate freely if democracy is to operate well. The phrase "an attack on the freedom of the press" is a rallying cry – the implications are immediately understood by all.

I'd like to see universities gaining this kind of identity. I'm not saying we should refer to ourselves as the fifth estate, but the phrase "an attack on the freedom of the press" resonates in our society and my provocation to you is now can we make "an attack on the freedom of universities" resonate similarly. Isn't it a profound threat to education, research, and ideas when universities come under government control.

Whose universities are they anyway? They are universities for all society, acting in the public interest, according to the best judgement, experience, and expertise of their governing boards and academic councils, to use academic freedom in an accountable way for the public good. Like all key democratic players, universities need to have the trust of the public to operate effectively.

I believe our universities have that trust. The standard of our third level, the excellence of our graduates is something the whole country takes pride in. It's up to the sector to draw on that pride and trust to articulate the vital importance of what we do. We must come together to uphold academic freedom - in the full understanding that such freedom is inseparable from the freedom to act independently in the best interests of those the university is designed to serve.

Thank you.

* * *

Tuesday, 11th June 2013

Speech at the Launch of Rosa Pilcher's Book 'A Woman's Space? A History of Trinity Hall 1908-2008'

Oldham House, Trinity Hall

Good evening,

On behalf of the College, I welcome you all to Trinity Hall – this hall of residence which has now been housing Trinity students for over a hundred years.

As Rosa Pilcher explains in her excellent history, which we launch tonight, the establishment of Trinity Hall in 1908 followed swiftly on the admission of women to the university in 1904. Indeed the history of Trinity Hall is in many ways the history of women in college, which can be seen as a progression from a situation of segregation and division, to the situation of equality and inclusion we know today.

At the start of the 20th Century, it was one thing to admit women to lecture halls and tutorials, quite another to allow them to reside in College. In fact, women were not allowed on campus after 6pm until the late 1950s; they were not allowed to take rooms in College until 1968.

However, in 1908 the college governing board, while worried about the dangers of allowing male and female students to mix, was concerned to accommodate its female students. Residential life has always been central to the Trinity education – and to this purpose, the College purchased this plot on Dartry Road.

Rosa Pilcher contrasts amusingly two contemporary accounts in the *Irish Times* – one article refers enthusiastically to the male accommodation “housed” “in the magnificent block of buildings which occupy the finest and most central site in the city”. The other article writes of the new female accommodation which “will be in one of the most healthy and quiet residential quarters on the outskirts of Dublin”. This contrast between male centrality and female seclusion gets across the flavour of the period. Trinity was, of course, simply reflecting contemporary values in its concern to protect its women students.

However if Trinity Hall was initially secluded and protective, it was also vibrant, intellectual, and pastoral. Its ethos was set by its first warden, Miss E.M. Cunningham. Miss Cunningham had been educated in Girton College, Cambridge, the first purpose-built College for women in Britain, and she brought this background to the role of warden.

During her long tenure, which lasted until 1940, Trinity Hall enjoyed a well-stocked library, afternoon tea, formal dinner (always with Latin grace and often with distinguished guests), and open fires in study bedrooms.

Reading this, you're reminded that the history of Trinity Hall, like all histories, is not one of straightforward progression. If it now seems antiquated to have had a curfew and lights out by 11pm, many of Trinity Hall's early traditions and customs were desirable.

Rosa gets across very well in this book the sense of camaraderie that prevailed among Trinity Hall residents, and the relief some of them felt in having a female-only sanctuary where they could speak freely and relax.

However, change which is inevitable, came to Ireland, Trinity, and Trinity Hall - although it seems to have come to Trinity Hall rather late. The Swinging Sixties largely by-passed it, but once women were admitted to rooms on campus in 1968, it was only a question of time - in fact four years - before men were admitted to rooms in Trinity Hall. This brought great changes, which were excellently managed by Trinity Hall's first male warden, Dr Fred Aalen.

Trinity Hall has been lucky in its wardens. Most served for lengthy periods and made their mark. They seem to have been characterised by warmth, firmness, and tolerance, and to have continued the friendly collegiate atmosphere established by Miss Cunningham. I'm delighted that we have with us this evening:

- former wardens Professor Fred Aalen, Professor Petros Florides, and Dr Carmel O'Sullivan,
- the niece of Leila McCutcheon,
- as well Sally Crawford, daughter of former warden, Clarissa Crawford,
- and Vincent and Hugh Denard, husband and son of Anne Denard who was warden in the 1960s.

As warden in the 1990s Professor Florides was instrumental in preventing what I believe would have been a huge mistake: the sale of Trinity Hall. The Hall was felt to be a financial drain, and the decision was actually taken to sell. But Professor Florides, with the help of some Fellows and other protestors reversed this decision. The philanthropist Chuck Feeney then stepped in, with his legendary generosity, with a grant which enabled the expansion of the Hall to its present intake of 1,000 students.

Trinity Hall has been fortunate in its benefactors through the generations, and tonight I'd especially like to thank the Trinity Trust, which provided funding for Rosa to do her dissertation on the history of Trinity Hall. The dissertation led to this book.

I'm delighted that Trinity Hall was saved. Residential life is part and parcel of what Trinity values. I have learned from this book that until 1972 Trinity undergraduates were not permitted to live in flats unsupervised by landlords. While I don't regret the end of that restriction, I do think there is something particular about sharing accommodation with student peers. I never lived in Trinity Hall but I had rooms first in Botany Bay, and later in New Square – I know that the collegiate atmosphere I enjoyed then could not be replicated by flat-sharing with just one or two others.

Trinity Hall, by its nature, has a particularly diverse cross-section of students, coming from all over Ireland and all over the world. Students arriving here get an introduction to the richness of college life, meeting people from different countries, religions and backgrounds, and studying different disciplines. The Hall today allows freedoms which previous generations of female students couldn't have imagined, but it also continues to provide what Rosa calls "a safety net of support, should it be needed".

I congratulate Rosa on this book. As well as giving a history of the Hall and *inter alia* of the college and of Irish society, it adds to the growing literature on the history of women's education in Ireland.

It's good to be reminded that those pioneering women students who entered a much smaller and more restrictive Trinity Hall in 1908 were not in the end so different to those who enter today. As Rosa notes, the students that have arrived every September since 1908 share "a similar mindset" – a mindset of youth and passion, ever ready to make waves and initiate change.

Thank you.

* * *

Wednesday, 12th June 2013

Speech at the Provost's Teaching Awards 2013

Saloon, Provost's House

Ladies and Gentlemen,

Welcome to the Saloon of the Provost's House for one of the key events of the year, the Provost's Teaching Awards.

These awards mean a great deal to me personally. Since becoming Provost I've constantly emphasized – in speeches and discussions – that teaching and research are inextricable and indivisible. Just two days ago in a speech to the Royal Irish Academy on academic freedom, I made the point that “what we research ultimately decides what we teach – and what we teach inspires the research our students get involved with”.

This was part of a wider point that universities must be allowed to decide their own staff appointments and remunerations because ultimately who you appoint determines the academic agenda of your institution. Universities need to evaluate for themselves excellence in research and teaching, and make appointments accordingly.

Excellence in research and teaching – one is not more important than the other. However, one is more easy to assess than the other. World university rankings and other measurement systems are well able to evaluate research impact through publications and citations.

There are no such concrete measurements for teaching. If we don't recognise excellence in teaching, we risk elevating research and downgrading teaching. And let's be honest, that is what began to happen in universities round the world when research performance indexes were first applied seriously. The emphasis was on meeting publication targets, and teaching was something you did but didn't get praise or recognition for. This threatened to have a distortionary effect and to deviate universities from their core mission in education and research.

The first Teaching Awards were held here in 2001, and the Awards are now part of the annual calendar, and receive a great deal of attention. The Provost's Teaching Awards are rigorous. They start with nomination by students and peers. A Review Panel then examines each candidate's teaching philosophy and their practice and scholarship, as well as assessing supporting evidence. This panel comprises representatives of the academic staff, of undergraduate and postgraduate students, as well as an external reviewer. Because the process is so rigorous, multi-faceted, and backed up by

external review, the Teaching Awards are serious marks of career achievement.

This explains why we are parsimonious with our Teaching Awards. Every year only four, at most five, people win an award. That is very few. We know that there are infinitely more than four excellent educators in college. But – and I think everyone agrees – for the award to continue to have such impact, it needs to be hard-won and rarefied.

However, precisely because there can be so few winners, there is widespread recognition that to be nominated is in itself a significant achievement. As with literary and other awards, there is a longlist and a shortlist, and anyone on these lists should feel very proud that their students and colleagues put them forward.

This year a total of 91 staff members were nominated from 176 nominations. Of these 25 went forward to the Provost's Teaching Award Review Panel, and 12 were shortlisted, eventually resulting in our five winners tonight. I know that at no stage was it easy to make the decision of who should go through to the next round. I commend all our nominees for their achievement.

Six of our short-listed candidates are here tonight. To be shortlisted in such a competitive field is a great honour. I'd like to call on each candidate to receive a certificate of commendation:

- Ms Michelle Leech – School of Medicine
- Dr Kathleen McTiernan – School of Linguistic, Speech & Communication Sciences
- Dr Ciarán O'Neill – School of Histories & Humanities
- Mr David Prendergast – School of Law
- Dr Ian Sanders – School of Natural Sciences
- Dr John Walsh – School of Pharmacy & Pharmaceutical Sciences

and

- Dr Paul Tierney – School of Medicine,

who is not present this evening.

I thank each and every one of you. Your commitment and dedication to teaching and learning, your innovation in creating learning environments which both support and challenge individual students, and your contribution to the College's high reputation for its teaching quality are greatly appreciated by our academic community.

* * *

As is clear from my short run through of the nomination process, the Provost's Teaching Awards entail a great deal of time and commitment from College staff, students, and from the external reviewer. I'd like to extend my thanks to the members of the Review Panel for supporting teaching excellence within College. I thank our external reviewer, Professor Ray Land, from the University of Durham. And I thank our Centre for Academic Practice for contributing to the interpretation, contextualisation and implementation of this award process, and for enabling academic staff in Trinity to promote effective, high quality teaching and student learning.

The Review Panel for the past two years has been chaired by Professor Veronica Campbell, the Dean of Graduate Studies. Veronica, it's my pleasure to present you with these flowers as thanks for your excellent chairing of the panel.

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It now gives me great pleasure to announce the recipients of the Provost's Teaching Awards for 2013:

DR ROBERT ARMSTRONG – SCHOOL OF HISTORIES & HUMANITIES

Robert Armstrong wants his students to understand and debate political thought as it would have existed at the time. His seminars and tutorials take advantage of a huge range of materials, including historical records, literature, art, political pamphlets and even the occasional song. He believes in the virtues of small group teaching, of research-led teaching, of asking penetrating questions, of probing the evidence, of encouraging his students to think, to analyse, to argue and to criticise.

To quote a student nominator:

"He has high expectations of his undergraduate students, expecting them to be capable of original thought and opinion, and to contribute to discussion rather than simply rehashing material learned by rote. Combined with his outstanding calibre of teaching, this allows students to truly understand historical material and make real contributions to historical scholarship, whilst igniting a passion for political history many never previously had."

DR NICHOLAS JOHNSON – SCHOOL OF DRAMA, FILM & MUSIC (EARLY CAREER AWARD)

Nicholas Johnson is our worthy winner of the Early Career Award. His career has spanned stage acting, theatre directing, and academia. His practice and teaching philosophies are intertwined and based on accessibility, reciprocity and the integration of theory with practice. These three approaches acknowledge that the most powerful tool for creating understanding is the imagination of the individual listener.

Nicholas is active in pedagogical research and has developed a research project on "Performance in Pedagogy". His involvement with the College's Disability Service has enabled him to embrace teaching strategies that are of value to a wide range of student capabilities.

I was struck by the words of a student nominator who points out that: *“confidence is arguably the most vital attribute for the aspiring director, playwright or actor. Dr Johnson instils his students with the creative lifeblood of confidence, filling them with the belief necessary to pursue their creative and academic endeavours.”*

DR CHRISTOPHER NICHOLAS - SCHOOL OF NATURAL SCIENCES

Christopher Nicholas' infectious enthusiasm and talent for inventing student-led, problem-solving tasks on field trips, where students often have to persevere in high wind and frosty temperatures, have enabled students to take their first quantitative steps in dealing with rocks, on a large scale, out of the lecture room.

He aims to make Geology accessible to students by using a variety of teaching approaches and resources; either as digital lectures, a series of experiments, a discussion forum, or as problem-solving exercises.

A peer reviewer notes: *“The most essential ingredient to excellent teaching is passion for the subject. This is rarely more true than when faced with the challenge of bringing 'boring' and 'dead' rocks alive. Chris has demonstrated that he has this skill in spades.”*

A student nominator says simply that Dr Nicholas is *“the lecturer that inspired me to be a keen scientist”*

DR ZULEIKA RODGERS – SCHOOL OF LANGUAGES, LITERATURES & CULTURAL STUDIES

Zuleika Rodgers' modules on Jewish culture draw from material culture, literary texts, political treatises and feature films to help students gain disciplinary knowledge and skills, and to provide them with the confidence and critical dexterity to engage with their world. She has made excellent use of e-learning strategies to make a wealth of valuable resources available to students and to encourage their active and collaborative learning.

Zuleika does not confine teaching to the classroom – her students visit cultural institutions, attend synagogue services, and make study visits to European destinations so that their learning is stimulated by engaging with Jewish history in different contexts.

A peer reviewer says: *“I know of no other colleague who is more motivating and enthusiastic in relation to her teaching and research than is Dr Rodgers. But her personal charisma is also backed up by an exceptionally strong critical intellect and a deep knowledge of her discipline and research area.”*

PROFESSOR LUKE O'NEILL – SCHOOL OF BIOCHEMISTRY AND IMMUNOLOGY

Luke O'Neill exemplifies the idea of the scholar as teacher. A world-class researcher who has won numerous awards, he is a passionate teacher, who strongly believes that the research of the lecturer should inform the teaching. He ensures that his classes discuss up-to-the-minute breakthroughs and discusses how his own lab has contributed to the field. His philosophy is that a good teacher enables the student to self-learn, and that the best way to do this is to be inspirational and informative.

In the words of one peer reviewer, he is famous for “*always having new jokes to crack, clever ways of illustrating his ideas and data, and a turn of phrase that regularly raises a laugh.*”

A wonderful endorsement of Luke’s influence as a teacher came when another candidate was informed that Luke had won this year - she replied that she was delighted, as ‘*Luke was the teacher that had most inspired her as a student*’.

* * *

Now I’d like to share a short video with you which shows this year’s winners in action. We’d like to thank Dr Gary Baugh from the School of Engineering for his excellent work in filming the DVDs for all the shortlisted candidates. And also I would like to recognise the work of Jade Concannon who does a great job administering the process each year. Please enjoy the rest of the evening.

Thank you.

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(L-R) Provost, Dr Patrick Prendergast; Ms Jade Concannon; Dr Christopher Nicholas; Dr Robert Armstrong; Dr Zuleika Rodgers; Dr Nicholas Johnson; Prof. Luke O'Neill; Prof. Veronica Campbell

Thursday, 13th June 2013

Speech at the Reception for Research Theme Champions

Saloon, Provost's House

Welcome everybody to the Saloon in the Provost's House,

Tonight we celebrate your collective achievement in establishing nineteen interdisciplinary research themes, which deliver research of global consequence.

As you know, we have in place a research strategy from the Strategic Plan, and our aim is to build on this - to get ready for a new phase of Trinity's growth. The Dean of Research, Vinny Cahill has made this a particular priority since he came into office in September 2011.

Research is a traditional and a continuing strength for Trinity. In the most recent rankings - the Leiden rankings - Trinity was placed 48th in the world and 9th in Europe. And that's higher than we've been placed in any rankings in recent years – and it's because Leiden only measures research impact, which is an area where we shine.

But we should never become complacent about this: we want to grow our research impact. Back in 2009 when we were formulating our five-year strategy for the college, we identified a number of actions to develop our research. These included:

- attracting world-class Principal Investigators;
- promoting excellence;
- strengthening Research Institutes and Centres;
- diversifying funding;
- and fostering multi-disciplinary research consortia.

This last action – fostering multi-disciplinary research consortia – draws on what is distinctive to Trinity. We're a university of 24 Schools with a strong tradition of collaboration. We're able to put together groups in a way that facilitates doing multidisciplinary work. Such groups enable us to have impact beyond our resources – to punch above our weight.

Back in 2009, eight multi-disciplinary research themes (or research programmes as they were then called) were identified:

- Globalisation,
- Digital Arts and Humanities,

- Telecommunications,
- Nanoscience,
- Neuroscience,
- Ageing,
- Immunology, and
- Molecular Medicine or Cancer.

To these initial eight, a further eleven themes have now been added, and in less than four years. For this, we must thank Vinny, who has been a brilliant and untiring strategist, holding ‘Town Hall’ meetings - the effect of which has been not only to identify themes but to get the whole college behind this initiative.

By September this year, all nineteen themes will have been launched, with Globalization renamed as “International Integration”. In addition to the ones just mentioned, they are:

- Identities in Transformation,
- Sustainable Environment,
- Smart and Sustainable Cities,
- Inclusive Society,
- Next Generation Medical Devices,
- Creative Technologies,
- The Mathematics of Complexity,
- Creative Arts Practice,
- Intelligent Content and Communication,
- International Development, and
- Genes and Society.

It is, I think, a wonderful-sounding list. Exciting and diverse.

With these themes, we identify areas of global challenge, where Trinity has the expertise to make scholarly impacts, to expand the debate, to be the source now new and potentially disruptive, radical ideas.

In the coming years, I would like all nineteen of our research themes to be immediately identified with Trinity. No matter where in the world people are, if they want to know about, say, Creative Arts Practice, they will think of Trinity as the first port of call. This is a big ambition – but we can achieve it.

This is, of course, already the case with Ageing, one of our first-established research themes, which is not only inter-disciplinary but inter-institutional.

The other themes are more recently established – we have similar expectations for them.

* * *

Each of you was asked to take on leadership of a research theme, with each theme as the cornerstone of college strategy. Leadership in this area is incredibly important. You are in the role because you have the respect of your peers, and because you have the leadership skills to pull things together within in the college, and - more importantly - to represent the university outside in collaborations with other institutions. And, most crucially, to meet our ambitions for funding and philanthropy.

We don't underestimate the size and difficulty of the task you've taken on. Ideally every research theme will have its own institute, as of course Nanoscience does already, and Digital Arts with the Long Room Hub. We seek to develop more such flagship Institutes; to draw on more inter-institutional collaboration; and to attract significant funding for all our research themes.

All this will require great skill, hard work, talent and, of course, that elusive quality, luck. Napoleon is supposed to have said being a good general is one thing, but what we need is lucky generals.....

On behalf of the college, I thank you most sincerely for what you have already done and what you will do further. In your hands is the future success of the college's research strategy. As we approach the period to devise a new Strategic Plan, I know that the Dean of Research will be consulting with each of you. For my part, my door will be open to you - for advice, for strategising, and indeed also for fundraising – do not hesitate to ask for this, if you need it. Nick Sparrow, Director of the Trinity Foundation is also here because fundraising for research themes is important.

* * *

Yesterday, in this room, we announced five winners of the Provost's Teachers Awards. All five are also excellent researchers. They include Luke O'Neill, who is of course recognised globally for the quality of his research. Luke has always made the point that the research of the lecturer should inform the teaching, and that this is what makes the Trinity experience so special for our students.

These nineteen research themes will inform the direction of, and illuminate, our teaching. Clustering of expertise in themes will ultimately make learning in these areas unique for our students.

* * *

In conclusion, anything that works well generally looks simple, and has the quality of seeming self-evident. But behind that simple clarity is huge effort and intricacy. Yeats caught this when he wrote:

*“A line will take us hours maybe
But if it does not seem a moment’s thought
Our stitching and unstitching has been naught.”*

The College Strategy, where we link up all activities, to contribute to Trinity’s mission in education and research – well I believe this Strategy looks ever clearer, ever more simple. The benefit will come not only in the next few years when these themes attract funds, principal investigators, and institutional collaboration. It will come not only in the next College Strategy, but in the one after that again, as we will build on and extend our ambition. Thank you for the work you are doing to put this in place.

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Friday, 14th June 2013

**Speech at the Derry and Antrim Branch of the Trinity
College Dublin Association Dinner**

Masonic Hall, Derry

Mr President of the Antrim and Derry Branch, Your Grace, Distinguished
Guests, Ladies and Gentlemen,

It's a privilege and a pleasure to be here at your annual dinner, and I say that on my own behalf but also of Sheena, and of Eimear, Eilís, and Pierce. This is my second visit to Derry in the past few months. In April I addressed the Londonderry Chamber of Commerce here, and I promised myself then that I would come back and spend some time walking the City walls and visiting exhibitions. I'm now here for the weekend with my family – I look forward to taking my kids around tomorrow.

The programme of events for the City of Culture is wonderful, which makes this a particularly auspicious year to be meeting with you, Trinity alumni from Derry and Antrim. And it is, of course, a very special time to be in Northern Ireland, with the G8 summit about to take place in Fermanagh in a few days' time. On Monday I'll have the great pleasure of welcoming to Trinity Michelle Obama and her daughters who will be visiting the Old Library and the Book of Kells. Of course we get many dignitaries in Trinity, but in truth this is the most exciting visit since the Queen's in 2011.

In Trinity, we're incredibly lucky to have a heritage that everyone, including the First Lady, wants to visit. Our buildings and treasures bring us worldwide attention, and this is something we have to live up to. Increasingly we're also making headlines round the world for the quality of our research, and I'd like to tell you about some of the things we've been doing, since I know – by your presence here tonight – how much you value your alma mater.

Trinity is a university of some 17,000 students, 3,000 staff, and 92,000 alumni, living in 130 countries. It's a kind of community linked by a common affinity for a place and an idea. I'm a Trinity graduate myself, so I know what it is to feel a lifelong stake in Trinity's reputation and in its future. As Provost, I have a responsibility towards all alumni, as towards staff and current students, to ensure that Trinity, which means so much to all of us, continues on its path of excellence.

Trinity College and Northern Ireland

In my almost-two years as Provost I've had the pleasure of attending alumni events all over the world – places like Beijing, San Francisco, London, and Moscow, and many others. Just a week ago I was in New York speaking to alumni. But Northern Ireland is special. About seven months ago I was in

Belfast addressing the Alumni Association. Perhaps some of you present were there then. At that dinner I extolled the long, rich connection between this province and Trinity, going back to Isaac Butt in the 19th century, and earlier.

One of our 1970s graduates, Kathy Gilfillan, who is from Eglinton, just out the road here, is now a publisher with Lilliput Press, one of the best small presses in the country. In the past few years Lilliput has published a series of books, *Trinity Tales*, which are reminiscences of students from the 1950s, '60s, and '70s – and the 1980s is coming soon!

These books attest to the centrality of Northern Irish students in Trinity. You can read Michael Longley's account of "inhaling poetry with our Sweet Afton cigarettes", or Derek Mahon's acute distinction: "Trinity in those days wasn't much about work, although quite a lot of reading got done." I do like that distinction, I must say - in Trinity we want our students to read, and think, outside the curriculum. An environment which gives space and freedom to learn is the well-spring of creativity and innovation.

Some of you were students at the same period as Gilfillan, Longley or Mahon. And all but the very youngest of you will remember the historian and Junior Dean, R.B. McDowell, a Trinity fixture, who was educated at the Royal Belfast Academical Institute. He entered College as an undergraduate in 1932 and resided there until he was 94 years old. Every alumnus, certainly every arts alumnus, has an "R.B." story.

However, in recent decades, two separate admissions systems have been introduced on this island - the CAO and UCAS, and this has inevitably impacted on admissions: Northern Irish schools and applicants know little about the CAO system and it's difficult to equivocate between A Levels and Irish Leaving Cert results. The result is that we have fewer students applying from Northern Ireland, and this is a cause of regret and concern to us.

We regret that the long historical link between this province and Trinity has been weakened, and we regret that we are not enjoying the dynamism of Northern Irish students. It's crucial to our whole mission that we admit a diversity of students who approach life and its challenges in different ways.

Other parts of the island of Ireland are also under-represented in Trinity, for various reasons. And if you look at the situation globally - again certain countries are well-represented in Trinity, while others aren't. Since diversity and a certain cosmopolitanism are intrinsic to our core mission, we need an admissions system that makes it attractive for students from all over Ireland, and the world, to apply to Trinity.

Under my Provostship, we are starting to change the way we do things. I'd like to talk about this briefly tonight, because I know our admissions policy is of interest to you, but first, I guess I should introduce myself properly. Though I'm no longer a new Provost – I will soon be two years in office - I am new to some of you.

Personal Context

I'm an engineer - BAI 1987 - from Wexford, a small place called Oulart, known mainly to hurling enthusiasts and historians of 1798. I'm delighted to learn this evening that I am a fellow countyman of Dean Victor Griffin, one of your distinguished members who is here this evening. While most of my school-friends opted for NUI colleges back in the early '80s, I was an untypical Trinity student. This may be why today I put such emphasis on a diverse student intake.

I've spent most of my career in Trinity, but I had two long stints abroad, doing post-doctoral work in Bologna and the University of Nijmegen in the Netherlands, and I've also held visiting professorships in Warsaw, Delft, and Barcelona.

My experience abroad left me with a zeal that all Trinity students have a similar experience of living and studying abroad. At the moment the proportion of students who spend time abroad is about one in twenty. A goal of my provostship is to improve that figure.

My own research has been in the area of bioengineering. This has been most rewarding, not only because Trinity is at the forefront of next generation medical device research and the sector is a key one for economic growth in Ireland, but also because this research is interdisciplinary, combining the strengths of engineering and medicine.

Interdisciplinarity is a key strength of Trinity search and scholarship, and in recent years it has been deepened and formalised across our 24 Schools.

We recently identified nineteen interdisciplinary thematic research themes, which focus on areas of global challenge, such as 'Ageing', 'Immunology' and 'Telecommunications'. Each of these themes draws on the expertise of different researchers across our Schools. Some of the themes, such as Nanoscience and Digital Arts, already have their own research institutes on campus. Ideally, all nineteen will. This will, of course, take huge strategizing and funding, but it's the right thing to do.

In the coming years, I want all nineteen of our research themes to be identified with Trinity, so that people the world over who want to know about, say, 'Smart and Sustainable Cities' think of Trinity as first port of call. This is a big ambition – but we've already achieved it with one research theme, 'Ageing', on which Trinity is now a recognised global expert. And we can achieve it with the others.

If you're interested in what we're doing with the research themes, there is more information on www.tcd.ie. Of course, we always want to hear from alumni with suggestions and advice about Trinity developments.

I put myself forward as Provost in 2011, having served as Vice-Provost, and before that as Dean of Graduate Studies, because I was excited about some of the changes I saw in the College, which pointed to what Trinity could achieve.

Admissions

A key priority on becoming Provost was to do something about admissions, for the reasons I've mentioned – we seek a diverse, multi-skilled student body. In fact, the entire Irish admission system is in need of reform, not just as regards the geographical spread of applicants.

There is widespread agreement, not just in Trinity but across the sector, that the CAO system needs reform and diversifying. The Minister for Education, Ruairi Quinn, has made this an issue.

Trinity has taken a leadership role here. We've embarked on a two-pronged attack – or 'initiative' if 'attack' sounds too aggressive - to encourage diversity at admissions stage. We're launching a feasibility study, on behalf of the whole third level sector in Ireland, which will take into account personal and contextual data, as well as the applicant's relative performance compared to every other applicant from their school. We are piloting this study in September 2014 in three of our most popular courses - Law, History, and Classics.

We're also launching Trinity Explore. This initiative involves student volunteers or 'ambassadors' from every county in Ireland giving honest accounts of college life to the camera. The short films are now online, and the ambassadors are returning to their home counties to talk directly to schools about their experiences. In phase 2 of the project, we'll recruit students from other countries to play a similar ambassadorial role.

This is an initiative of the students, by the students, for the students. The response from schools round the country has been excellent. If you go online to the Explore website you can hear the students in their own words talk about their fears before coming to Dublin, and how they've now seized the opportunities of college life.

The student from Derry tells how he was the only person from his year to come to Trinity and how nervous he was initially, but how he has relished meeting new people and joining societies.

The student from Antrim relates how she had her bags packed to go to university in England, before accepting a place in Trinity to study Law. She says: "Little is known in my home county about what a special place Trinity is - the unique campus atmosphere, the overwhelming variety of societies...the experience and enthusiasm of excellent lecturers."

Voices like these, together with our new admissions route, will help bring in students from all over Ireland and the world, who break the mould and contribute their dynamism to continuing Trinity's great traditions.

Expansion and Research

Admissions is just one area where we're showing focus and leadership. We're engaged on a huge number of projects and initiatives, all geared towards copper-fastening Trinity's position as a world-class university.

I don't know if you've had a chance to visit Trinity recently. If you have, you'll have seen that the university has, in a sense, "burst" its campus. We've extended all the way up Pearse Street to the Lir Academy for Dramatic Arts at Grand Canal Dock, and all the way to St James's Hospital where we have our Centre for Health Sciences and where the new National Children's Hospital is to be located. On the south-east of the campus, by the rugby pitch, we will shortly begin work on our new Business School, developing our reputation as an innovation campus.

And it's not just about expanding the campus, we're also busy extending our network around the world. Many of you will, I hope, have visited our Science Gallery on Pearse Street. It's a place where "science and art collide", and since it opened in 2008 it has proven a phenomenal success, and has already welcomed over a million visitors.

In 2011, we received a gift from Google to launch the Science Gallery Network. We're developing a network of eight galleries in partnership with leading universities in chosen urban centres, including Bangalore, Moscow, and London. Trinity will soon be at the heart of an international drive to showcase the wonders of science.

Then there's our multi-faceted research. Our research record has meant that in the latest university rankings, the Leiden rankings, we were placed 48th in the world and 9th in Europe – a phenomenal result considering that we don't command the resources of other top-ranking universities. The Leiden ranking was based on publications and citations in peer-reviewed journals.

But even in non-academic publications, our research makes waves. For instance, just yesterday, reading the newspapers, I found one report on a Trinity feasibility study into cycle paths in the west of Ireland, and another on a new toolkit to prevent workplace bullying from our Anti-Bullying Centre. A few days ago there was widespread coverage of the European Space Expo held in a dome erected in Front Square. There was also mention of Trinity research into proportional representation electoral systems, and the *Daily Mail* had an article on a Trinity investigation into Vitamin A's protection of the immune system.

Going back a month, there was blanket media coverage of the new online Down Survey of Ireland. You may have read or heard about this. To showcase

the 17th Century Down Survey - the first detailed land survey on a national scale anywhere in the world - our new website overlays the old 1650s maps onto Google maps, it uses GIS technology, and it maps out murders and violent assault reported during the Cromwellian period. Fintan O'Toole in the *Irish Times* called it "one of those projects that reminds us that cyberspace can still have a wonderfully democratic side."

So those are just some of the things we've been doing.

Alumni: Trinity Global Graduate Forum

The university is, in many ways, very different to the one that you and I attended. And it has to be, because the world has changed. But some things have stayed the same: our values, our commitment to the student experience, and our determination to be internationally competitive – to be a university that truly 'plays for Ireland on the world stage'.

If our foundations and values were not so firm, we would not be expanding in such a confident way.

Our ambition is high. As universities round the world look to increasingly engage society in their research and as they become global competitors for talent, then the traditional role of the university has changed.

Given the range of activities that universities are now involved in, it will come as no surprise to hear that while Trinity has achieved great things, many challenges remain.

When it comes to facing these challenges, our alumni are a wonderful source of support. Alumni networks are key to the success of the contemporary university. Alumni associations, such as yours, carry out vital activities - in networking and fundraising, and also in promoting Trinity's reputation, and in assisting with student recruitment.

We recognise the tremendous power of our alumni to positively influence our future. To this end, we are launching an exciting initiative I'd like to tell you about. In early November we're holding the Trinity Global Graduate Forum. Some of the inspiration behind this was the successful diaspora events held by the government.

We plan to invite 120 Trinity alumni - they will be individuals who have achieved remarkable success in their field. We will invite a mix of people from different disciplines and industries, and balanced across gender, age, and geographic locations.

120 is of course a tiny percentage of our 92,000 alumni, but we need to keep this event small because we want to leverage our guests' expertise, experience, and networks in order to generate innovative ideas which will help launch a new phase of growth for Trinity. As you know it's difficult, not

to say impossible, to leverage good ideas when numbers get too large, so we need to keep this Forum representative rather than inclusive.

The Trinity Global Graduate Forum will, I am sure, yield wonderful ideas and initiatives which will help Trinity to strengthen its position on the world stage. We're proud of our alumni's expertise and quick wits – which we like to think we had some part in forming. To that extent, this Forum is about reaping what we sowed, in the best possible sense. The Forum sends out a message of our faith in, and our reliance upon, our alumni. Everyone in this room is already aware of the value we put on our alumni. With our high-level Global Graduate Forum, we tell this to the world.

Thank you very much.

* * *

Tuesday, 18th June 2013

Speech at the Book Launch of 'Ireland's Civil Engineering Heritage' by Ronald Cox and Philip Donald

Saloon, Provost's House

Good evening, and welcome to the Saloon in the Provost's House.

I'm delighted to be here this evening, helping to launch this wonderful book - both in my capacity as Provost extolling the scholarship of Trinity staff, and as an engineer celebrating the achievements of my fellow engineers.

I must say - and I speak as a mechanical engineer - that of all branches of engineering, none showcases just like civil engineering. In fact - never mind branches of engineering, few academic disciplines anywhere in the university are as visual or engaging as civil engineering. I was almost going to do civil engineering myself - but I could never get more than 6 out of 10 for any drawing!

But, when it comes to canals and bridges, railways and harbours, aqueducts and lighthouses, I have never lost my sense of romance and excitement.

That's not only because I'm an engineer. I think my excitement is more universal. I think everyone feels that thrill of excitement when contemplating a great bridge, or a railway station, or a harbour. Why? Because they speak to us of travel, of voyages, of journeys.

As a species, we have a compulsion to travel - perhaps it's our nomadic genes. If we don't have that possibility of release and escape, we feel hemmed in. Try and picture living somewhere, where there are no roads, no train tracks, no bridges, no canals. Even the thought is claustrophobic.

When James Joyce sat down to write his grandson an amusing letter, he began by depicting a terrible situation: a people who live by an enormous river where there is no bridge to cross. This dilemma is so extreme that only the Devil can sort it out. This suggests, now that I think about it, that civil engineers are devilish - well insofar as the devil is known for his fiendishly quick wits, we'll go with that...

Bridges, railways, viaducts - they capture not only Joyce's but all of our imaginations. When I can, I like to experience the miracles of civil engineering. Last summer holidays, I insisted that my kids and I take the overnight train through France to Spain. My kids loved it I'm happy to say. And a few weeks ago, we took the barge on the Barrow Navigation - passing under many wonderful old stone bridges - and a motorway, and indeed

across a canal over a river – the Grand Canal crossing the Barrow at Monasterevin.

I now know, from this book, that on that journey we were witnessing an engineering feat. The authors write that: “The Bog of Allen presented a problem that no engineer had ever had to face in England.” John Smeaton, who oversaw the project, felt the canal should be built at the same level as the bog, and this was done back in the 18th century. Breaches sometimes occurred in the canal sides, so later “the method of cutting longitudinal and transverse drains and then allowing two years for drainage and subsistence proved successful.” This gives some idea of the difficulties of terrain!

I believe this book – which is an update of Ronald Cox’s 1998 book - is the first comprehensive overview of Ireland’s civil engineering heritage. It is also a stunning example of how excellent scholarship – in a technical discipline like engineering – can be made accessible to the general reader.

The writing is, throughout, warm, engaged, direct, informative and free of jargon. Some technical terms are necessary and these are explained in the very useful glossary. I sincerely congratulate the authors. Ronald Cox is a former Senior Lecturer in Civil Engineering in Trinity, and founder of the Centre for Civil Engineering Heritage. Philip Donald is a retired civil engineer who has been involved in major projects including a dam in Argentina, the Belfast Cross-Harbour bridges and the Foyle Bridge in Derry, which I drove over last Saturday.

These two editors, were joined in the writing by Dermot O’Dwyer, Associate Professor in our Department of Civil Engineering, and by Frank Robinson, chartered Fellow of the Institution of Civil Engineers and a member of the Northern Ireland Engineering Heritage Committee. Ronald and Dermot are Dublin-based and Philip and Frank are based in Northern Ireland – I’m delighted that this is a ‘cross-border’ publication and of course, like any engineer on this island, I salute Belfast’s astonishing civil engineering heritage.

As a Wexford man, I was fascinated to read that Hook Head, where I’ve spent many a sunny day, is the site of one of the oldest lighthouses on these islands. A tower was built as far back as 1172, and a light in the tower was established in the thirteenth century – it was an open fire maintained by local monks. From 1791 lighting was by oil lamps; in 1871 this was replaced by oil gas, which was in turn replaced by vaporised paraffin in 1911, and finally by electricity, but not until 1972.

I’ll be thinking of this next time I’m in Hook Head – and trying to imagine what might one day take over from electricity as the source of lighting.

In conclusion, I congratulate the editors, the authors, and Collins Press on this wonderful publication - and also the Institution of Civil Engineers, and the Electricity Supply Board, who helped sponsor it.

It's now my pleasure to hand over to Dr Dermot O'Dwyer who will introduce to you our guest speaker, Jonathan Hegan, President of the Irish Academy of Engineering.

* * *

Wednesday, 19th June 2013

Speech at the Launch of Hay Festival Kells Programme

Long Room, Old Library, Trinity College

Cathaoirleach of Kells Town Council, Mr Oliver Sweeney; President of Kells Chamber of Commerce, Mr John V. Farrelly; Distinguished guests; Good afternoon and welcome.

We're delighted and honoured that the Hay Festival in Kells starts with a launch here in the Long Room in Trinity College.

The coming of one of the world's great literary festivals, Hay-on-Wye, to Kells is a wonderful event, and came about as a result of the commitment and enterprise of both Kells town and the Hay festival. This is not a one-off; it is to be an annual event, and Trinity's association is likewise to be a long and sustaining one.

Trinity is indelibly and forever associated with Kells through the greatest treasure in this library of treasures, the Book of Kells. The Book of Kells is one of world's great masterpieces and, like the Mona Lisa or the Acropolis, it every day receives queues and queues of visitors.

On Monday this week it received a visit from the First Lady, Michelle Obama and her daughters, and they were as thrilled and awestruck as everyone is, viewing this miracle of early medieval art and scholarship.

The Book of Kells has great powers – just look at the part it played in bringing the world-famous Hay festival to the town of Kells. It is right and fitting that Kells should be the location of the festival in Ireland. It is right that authors and readers from round the world should make of this town a literary hub.

The Hay festival is always a varied and unusual one. It is never just about readings. It looks at all kinds of different ways people can experience books. This philosophy has come to Kells – so next week we can expect:

- ECO walks,
- creative writing workshops,
- a rare and antiquarian book auction, and
- a type trail, looking at typography as an art form.

A key event is a talk by our Head of Research Collections here in Trinity, Dr Bernard Meehan, whose name many of you will recognise as the author of the landmark Thames & Hudson publication, *The Book of Kells*, which was called by the *Irish Times* “a deep beautiful and essential guide to what the great

Celtic text is about”. Dr Meehan will bring his vast expertise to the talk – which will of course have extra resonance for taking place in Kells.

Many other Trinity people are connected with this festival, I am happy to say, so that our association goes beyond the Book of Kells. A number of our recent graduates are on the programme:– John Boyne and Sarah Webb for example, are giving talks. The British author and MP, Jesse Norman, is to talk about his new biography of Edmund Burke. Burke is of course among our most distinguished alumni and Jesse Norman launched his biography here in Trinity just a month ago.

And one of the most popular events at the festival will be Lisa Dwan performing Beckett’s ‘Not I’ – a performance for which she received rave reviews earlier this year when she appeared at the Royal Court in London. I am sure this will not be the only performance of Beckett in ‘Hay at Kells’ over the years – something which, again, will cement Trinity’s connection with the festival.

But this college’s connection with ‘Hay Festival Kells’ is not just about the prominence of Trinity graduates - all those great authors, living and dead, of whom we’re immensely proud; and it’s not just about the Book of Kells. It’s about celebrating writing and reading. Trinity, which has an excellent global reputation, has particular strength in English language and literature, for which we are ranked in the top 1 percent of worldwide.

This is down to excellence in both academic and creative writing and in dramatic performance. Trinity has always had great creative writers on the staff. I think of Brendan Kennelly, Eiléan Ní Chuilleanáin, Deirdre Madden, Iggy McGovern, and Martín Ó Cadhain. And the Trinity Players have been famous for decades for the quality of their performances. In 1998 we established the Oscar Wilde School for Irish Writing, and in 2011 we opened the Lir Academy for Dramatic Art which trains actors, directors and playwrights.

Creativity is central to our education and research in language and literature. And this is why we really treasure the connection with Hay Festival Kells. The festival puts the focus on readers and writers of all types and variety. It will, this year and in the coming years, be a source of inspiration for aspiring writers and for devoted readers in Ireland and round the world.

Hay-on-Wye is famous for its many bookshops – in this way the festival has had lasting impact on life in the town. I am hopeful that, as in Wales, bookshops will spring up in Kells.

I find it, therefore, greatly appropriate to launch this festival here in the Long Room, which one of our students one memorably described as ‘a cathedral of books’. Thank you very much.

* * *

Thursday, 20th June 2013

Address at the SCONUL Conference 2013: “Adapt and Thrive: Regional and National Innovation in Response to Change in Higher Education”

Blue Royal Hotel, Golden Lane, Dublin

Ladies and Gentlemen,

It's my pleasure to welcome you all to Dublin on this unusually sunny morning. My great thanks to Sara Marsh and the other organisers for inviting me to address you today.

As Sara has said, I'm here in my capacity of Provost of Trinity College Dublin, and I should say that I'm also here as a Governor of Marsh's Library.

Marsh's Library is just round the corner, towards St Patrick's Cathedral – it's very beautiful and well worth a visit, since it was the first public library founded in Ireland. It was established three hundred years ago by the then Archbishop of Dublin, and a former Provost of Trinity, Narcissus Marsh.

As Provost, Marsh took a great interest in Trinity's library – which during his time consisted of 15,000 books. He was successful in improving the classification, shelving, and numbering of books - but he wasn't able to change the statutes of the college and give students un-chaperoned access to the library. Students had to be accompanied in the library by the Provost or a Fellow.

It was in response to this restrictive practice that Marsh founded, at his own expense, Ireland's first public library. It's still in use and the 26,000 books are shelved in their original places. The link with Trinity has been preserved – many of the Keepers of Marsh's library have been academic staff at Trinity.

One of the central responsibilities of libraries is of course managing access to knowledge. Undergraduates were not admitted un-chaperoned to Trinity library until 1850, more than 250 years after the foundation of the college. If that seems horribly exclusionist, it was – though I guess we should recall that until mass printing, books were rare and costly items.

The twentieth century was the great century of access to knowledge. In the course of the century, women, different ethnic groups, people from economically deprived backgrounds, mature students, and those with physical disabilities were admitted to universities - and therefore allowed access academic libraries.

Today with all the possibilities of open online access, universities are faced with a whole new set of challenges: how to make available our catalogues, archives, manuscripts, and depositions in a way which takes advantage of revolutions in technology but also respects and contextualises knowledge, and protects copyright.

This and other issues which impact on academic libraries will be discussed over the next two days in this very full programme of panel sessions, talks, and workshops.

* * *

When we talk about “issues which impact on libraries”, we’re talking of course about issues which impact on universities.

About the best definition of a university I’ve ever read was from the American historian, Shelby Foote who said: “A university is but a collection of buildings around a library”. For Trinity at least - that’s perfectly put; if you walk round Trinity’s lovely campus, or any of the world’s great university campuses, and you admire the fine buildings, but take away the libraries, and they’re no longer universities. They’re deconsecrated – a church without the tabernacle, if you like.....

So the whole debate around libraries, and ways to innovate, adapt and thrive, is a debate around the future of universities. How will we manage and transfer knowledge? Who will we transfer it to? Just to our students or to the whole world? How will we preserve knowledge for future generations?

* * *

We’re in an exciting period for universities. Of course we’re also in a challenging recessionary period where there is less money to invest, but in the past decade or so, universities round the world have begun to realise their capacity to innovate and to commercialise their research. In Trinity, for instance, we’ve averaged seven ‘spin-out’ companies a year for the past six years.

Innovation is not just about commercialisation – it’s about new research, which often takes place at the interface between disciplines, and it’s about using new technologies to showcase that research.

When it comes to innovation practices, librarians are at the forefront. A month ago Trinity made headlines round these islands for the new online Down Survey of Ireland. The 17th Century Down Survey was the first detailed land survey on a national scale anywhere in the world - although the reasons for such a detailed survey aren’t too attractive. It was just after the Cromwellian invasion and the survey sought to measure all the land to be forfeited from the Catholic Irish in order to facilitate redistribution to merchant adventurers and soldiers.

Copies of these 17th century maps have survived in dozens of libraries and archives throughout Ireland and Britain, as well as in the National Library of France. The Project brought together for the first time in over 300 years all the surviving maps, digitised them, and made them available as a public online resource.

The new website overlays the old 1650s maps onto Google maps, it uses GIS technology, and it maps out murders and violent assault reported during the Cromwellian period. The response from the press, academics and the public to this resource has been overwhelmingly positive.

The Down Survey is a website that only academic libraries could produce. It draws on deep research and has the authority to contextualise and explain its findings. In an age of information-overload such as this one, where anyone can set up a website to disseminate their views, then conversely the work of academic libraries have, if anything, grown in authority. The stamp of a great university library sends out a calm note of authority, objectivity, and reliability. It says: this is information you can trust.

And just before Christmas, Trinity showcased its most precious library holding – the Book of Kells. A new annotated version, with full-colour reproductions and accompanying essays was produced for Thames & Hudson by our Keeper of Manuscripts, Bernard Meehan.

To accompany this landmark publication, a Book of Kells ipad app was created by one of our spin-out companies, X Communications.

The app took six months to complete. It was challenging to create because of the huge amount of content from an organisational perspective and a program efficiency point of view. But ultimately all 680 pages of the Book of Kells were digitised by the Digital Resources & Imaging Services in Trinity Library from transparencies provided by Faksimile-Verlag Luzern.

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Just this week, on Monday, we had the pleasure of welcoming Michelle Obama and her daughters to Trinity. They were there for one reason: to see the Book of Kells and also 17th, 18th and 19th century documents – marriage and birth certificates - relating to Barack Obama's Irish ancestors. Michelle Obama had all of Dublin to choose from for her short visit. Had we not had the Book of Kells, she would not have chosen Trinity.

All our publications and apps are nothing without the original Book of Kells. And that's also true, if less glaringly, of the Down Survey and 1641 Depositions websites. The original manuscripts are the supporting edifices.

Libraries are, of course, protective of precious manuscripts. But I think we are also realising the importance of other holdings, of old newspapers, letters,

and out-of-print books. They may not have monetary value, but they have a scarcity value, and we have a duty to preserve.

At the moment we are digitising knowledge. This is working for the present - but will it preserve knowledge for the future? I don't think anyone could begin to answer this with any confidence. I'm an engineer, so I've some idea of what's involved here. When you're dealing with very new technologies, it's difficult to know how they will develop or how they will be preserved long-term. The library of Alexandria went up in flames. A virus could conceivably bring down our online libraries – and their back-ups. And once the libraries are down there are no universities.

Except in the case of stunningly beautiful and aesthetic documents, I don't have any brief about how knowledge is preserved. I just know that it must be kept. In Trinity, as in other old libraries, our librarians are known as Keepers of the Manuscripts. I like that word 'keeper' – certainly I think of librarians as the 'keepers' of the university.

* * *

Trinity College was founded in 1592 with thirty books and ten manuscripts. Today it has over 4.25 million books, over 20,000 collections of manuscripts and archives, over 350,000 electronic books and access to over 30,000 electronic journals – and those are figures from a few months ago so they have certainly just got bigger.

As it says in Ecclesiastes: "To the making of many books there is no end"! Our library, like all of your libraries, is a "work in progress" – and it's a work with no end – we don't want it to have an end.

Libraries are memory banks. They acquire, preserve, curate, and make available human knowledge - in past, present and emerging formats.

As long as the library holds, in whatever form, we still have a university, rather than a mere collection of buildings. We rely on all of you, our Keepers, to preserve our knowledge, and to continue finding ever more fascinating and exciting ways to transfer, explore and explain that knowledge to us.

Thank you.

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Thursday, 20th June 2013

Speech at the Five Year Celebration of the Science Gallery

Garden, Provost's House

Good afternoon, Welcome all, to the Provost's Garden. This has been quite a week in Trinity. On Monday we welcomed Michelle Obama and her daughters to the Long Room. And later this evening, after this event, Mary Robinson will be unveiling our new 'Benefactors through the Centuries Roll of Honour' in the Dining Hall.

On the Wall, alongside names of ancient prestige including Queen Elizabeth the First and James Ussher, are more recent names, many of them associated directly with support to the Science Gallery. I'm thinking of Google, the Wellcome Trust, Martin & Carmel Naughton, Dr Beate Schuler, Mark Pigott and PACCAR.

It's fitting that on this day when we honour our benefactors, we also celebrate five years of the Science Gallery, this remarkable Trinity flagship initiative which would not have been possible without the significant philanthropy of individuals, trusts, and corporations.

* * *

Let's remind ourselves of just what a magnificent achievement the Science Gallery is, and what it has meant not only to Trinity, but to Pearse Street, to Dublin, and soon, - what it will mean to the world.

Back in 2007, the Pearse Street end of our campus was unloved and little used. A derelict car park stood by the pedestrian entrance from Westland Row dart station. This was the unpromising site for this remarkable initiative.

From its opening in 2008, the Science Gallery has seized the public imagination. "Where science and art collide" as the slogan goes – these are hands-on exhibitions which look good, and which you can also experiment on and learn from. I know as a father of three that it is a great place for a family day out. In fact "Where parents and children collide" could be the alternative slogan.....

We are now on, I think, the 25th exhibition, which means the Gallery has averaged five exhibitions a year, a tremendous amount. The current exhibition RISK looks at the psychology and maths underpinning the risks we take. There are experiments showcasing risky driving, betting, moral dilemmas, and balancing risk and reward.

Other exhibitions I particularly recall were INFECTIOUS which, back in 2009, looked at epidemics and the way viruses - and fear - spread; also SURFACE TENSION, two years ago, a beautiful exhibition on the physical properties and the politics of water.

The Sunday Times wrote of the INFECTIOUS exhibition, that it *“reaches places that neither art galleries nor science exhibitions normally reach.”*

Critical endorsement is matched by public attendance. Last year the Science Gallery received its millionth visitor. I cannot emphasize how much this has revitalised a once forgotten corner of Pearse Street. What is particularly special about these visitors is that so many are secondary school children, and younger. This has made the Science Gallery an international leader in terms of engaging young minds with science, something which countries everywhere are keen to do because science graduates are key to boosting innovation and competitiveness.

In Ireland our traditional strengths lie in the Arts rather than Science – we have four Nobel prize winners for Literature and just one for science – Ernest Walton for Physics. To have succeeded in interesting so many Irish young people in science is a great achievement. I guess it’s no accident that art is involved! I do like that the current RISK exhibition features a quotation from Goethe: *“The dangers of life are infinite, and among them is safety.”*

We soon realised what we had with the Science Gallery – something we needed to share with the world. So we began plans for international development, in which we were greatly assisted with a donation for this purpose of €1 million from Google in 2011. The Science Gallery has already brought exhibitions to New York, Singapore, Manila, and Bergamo, and in ten days it will open GAME in Moscow.

Travelling exhibitions is not the extent of our international ambition. We are also as most of you know, planning to open a network of Science Galleries round the world in partnership with leading universities in urban centres, including Bangalore, Moscow, and London. I would like today to formally welcome our new partners from King’s College London, where work is well advanced to open the second Science Gallery.

I know how excited King’s is by this – not only because they will be engaging with the public and young people, but because of the opportunity afforded to staff and students to work with international scientists, artists, and curators to extend and test their ideas. Science Gallery exhibitions are frequently staffed by undergraduates who act as crucial mediators to the ideas. Some are here today. Thank you for your support, and your input into this great initiative.

* * *

A key aspect to the Trinity education is that it is interdisciplinary. We believe exciting research takes place at the interface between disciplines so we encourage our Schools and departments to collaborate. The Science Gallery is de facto interdisciplinary, and so many of our Schools, from Maths to Engineering to Psychology to Linguistics to Physics have been involved in the exhibitions. This encourages our young visitors not to compartmentalise, but to allow ideas to flow.

The Gallery is also of course global in outlook which, again, ties into our Global Relations Strategy of increasing international research collaborations and student exchanges, and building global partnerships.

Whenever I'm talking about these things, I bring in the Science Gallery. It's a flagship initiative. And on a whole range of diverse issues, I find myself referencing information taken from Science Gallery talks and exhibitions. A few months ago I was addressing an FP7 conference on career progression of women scientific researchers, and I drew on a Science Gallery event which brought together universities, schools, government, media, and the private sector to discuss attracting more women to science careers.

* * *

The Science Gallery has been an unqualified success. We are immensely proud of it. As we look to the next stage of our development, it's time to thank the generous and inspirational donors who have believed in this initiative and made it possible.

Today we formally announce two major donations: the Wellcome Trust has made a strategic award of €1.8 million to assist development over the next five years. This is not, of course, the first award the Wellcome Trust has made to Trinity. Just three weeks ago the Taoiseach opened the new Wellcome Trust-HRB Clinical Research Facility in St James's Hospital, a joint initiative between St James's and Trinity. It is an honour to have the confidence of such a globally recognised foundation.

I'd also like to announce ICON plc's award of €250,000. This brings ICON's investment in the Science Gallery to €500,000. Again, we're honoured to have the support of this international clinical research organisation – and we're delighted that you have felt encouraged to invest in Science Gallery for a second time.

Among our public supporters, I must thank the Department of Arts, Heritage and the Gaeltacht, as well as Science Foundation Ireland, the ESB, Culture Ireland, and Dublin City Council.

Among our private sector supporters, I thank Deloitte, Dell, Intel, Pfizer, Google, NTR Foundation, IBM, and Glen Dimplex.

The entirety of your support has been invaluable and I hope it has also enhanced your own societal missions. I believe that your involvement with Science Gallery sends out a strong message of your values, your philanthropy, and your belief in progress and the improvement of the human condition through education.

Science Gallery would not be possible without the expertise of talented leaders from a range of backgrounds - science, technology, the arts, media, education and business. The Leonardo group is made up of 40 inspirational leaders who act as a 'brain trust' for the Science Gallery, helping to inspire new exhibitions and spark collaborations. We thank all our Leonardos for giving of their time and energy to support the work of the gallery. We mention in particular our Founding Leonardo's chair, Aoife McLysaght from Trinity's Smurfit Institute of Genetics.

I'd also like to thank our external board members, past and present: our founding Chair Chris Horn; Colm Long and Sonia Flynn, both of Facebook, David Martin of Google, Fergal Naughton, Rachael Naughton, Ken Arnold of the Wellcome Trust, John Climax, and Niall O'Donnchu of the Department of Arts, Heritage and Gaeltacht. Through your expertise, commitment, and prestige, you enhance the reputation of the Gallery and you support and develop our work.

We single out three individuals for their immense support and commitment: Martin Naughton, Beate Schuler and Mark Pigott. All three are named on the new Benefactors Roll of Honour.

Finally, I thank of course Michael John Gorman for his magnificent leadership of this initiative, and his staff. And I thank all our supporters, volunteers, and the wider Trinity community for all they have done to make Science Gallery a success.

Science Gallery belongs to the whole extended Trinity community, and it belongs to Dublin and to Ireland. I launched my Provostship with a stated desire that Trinity "should play for Ireland on the world stage". We have achieved this nowhere more spectacularly than with the Science Gallery.

Thank you.

* * *

Thursday, 20th June 2013

Address at the Unveiling of the ‘Benefactors through the Centuries’ Wall

Foyer, Dining Hall, Trinity College

Councillor*_ , Chancellor, Pro-Chancellors, Distinguished Donors, Friends and Colleagues;

Welcome to the Dining Hall in Trinity College on this momentous occasion: the unveiling of the ‘benefactors’ roll of honour. This is our permanent and public testament to the generosity of individuals, foundations, trusts and corporations through the ages.

This roll of honour is our tribute to those who, since the foundation of the college, have helped make Trinity great.

Trinity owes its very start to benevolence. It was founded in 1592 by letters patent of Elizabeth the First. The grant of a site by Dublin Corporation allowed the college to open here – a place then outside the walls of the city but now in the heart of the capital. So, Elizabeth the First and Dublin Corporation are the first two names on our roll of honour. They initiated the cycle of giving – of bequests, of grants of land, of trust funds and endowments – a cycle which has continued unabated to the present time.

Some of the great names on this roll of honour are those of Trinity staff and alumni, animated in their benevolence by an affection for their alma mater, and by a deep understanding of what Trinity achieves for each individual student. I’m thinking of James Ussher, Archbishop of Armagh and a Trinity Fellow, who bequeathed the college his valuable library of some 10,000 volumes of books and manuscripts.

Some benefactors are Irish; others are from countries closely connected to Ireland. Other names on this list are indelibly associated with philanthropy. I would like to single out one of them.

Like other Irish universities, Trinity has been a beneficiary of the tremendous generosity of Mr Chuck Feeney. When Ireland launched the Programme for Research in Third Level Institutions in the mid-1990’s, it ushered in a new era for research and innovation in Ireland and in Trinity. Atlantic Philanthropies invested in major infrastructural projects that have enabled us to aim higher. With over €100 million investment in Trinity, Chuck Feeney became the most generous benefactor to Trinity since its foundation. He is also the biggest giver to countries like Vietnam and Australia. His life story is an inspiration to philanthropists around the world.

One of the most exciting initiatives with societal impact that goes far beyond Ireland is our Science Gallery, whose 5th anniversary we celebrated earlier today. It is a great example of the power of philanthropy, and how individuals, corporations, trusts and foundations, and government came together, united in their vision to create a dynamic new exploration of the interface between science, technology and culture – ‘where art and science collide’. We are proud that this initiative has attracted worldwide attention and is now establishing a network of science galleries around the globe.

The 61 names up on the benefactors roll of honour represent 421 years of philanthropy! What unites all the people and organisations on this roll is their impetus to make Ireland a better place through the power – the transformative power - of education.

It’s a source of pride to me - and it is, I think, an important point - that those who wish to benefit Ireland and Dublin should choose Trinity College – The University of Dublin - as the vehicle. This shows recognition of Trinity’s vital place in Ireland’s history, its culture, and its future growth.

Trinity is a university which currently educates over 16,000 students and employs over 3,000 staff. It has 92,000 graduates worldwide. A Trinity education opens opportunities for our graduates many of whom have gone on to make great contributions the arts, or business, or public life – literally changing the world. Many Trinity staff have also changed the world with their research and scholarship, and entrepreneurship and innovation is now embedded in Trinity’s DNA: twenty percent of all Irish spin-out companies now originate from Trinity research. We are Ireland’s highest ranked university, and in the latest rankings, the Leiden rankings, we were placed 48th in the world and 9th in Europe. Our research makes global headlines. Trinity is an institution of which all Irish people can be justifiably proud. We are here to serve the whole country - to be Ireland’s university on the world stage.

In Trinity, we recognise our seminal position in this country, not just as its leading university but as one of its foremost institutions – and we recognize the responsibility that comes with that leadership position. We are all aware, in Trinity, of being part of a great force - which is nothing less than this country’s growth and renewal and the realization of the tremendous potential of the people.

It’s difficult – impossible even – to think of Ireland and Dublin without Trinity, the university that educated Jonathan Swift, William Rowan Hamilton, Oscar Wilde, Samuel Beckett, Ernest Walton, Brendan Kennelly, and Mary Robinson. It is similarly impossible to think of Trinity without the philanthropy of all the names on this roll of honour. A Trinity which did not draw on these vast reserves of goodwill and benevolence would be a much diminished place – it would, quite simply, not be the world-class institution we know today.

Our benefactors have transformed Trinity, and through Trinity, they have transformed Ireland. The college and the country owe them a great debt.

* * *

When we speak of support, we do not for a minute forget the principal supporter of Trinity: the Irish State. Successive governments have made enormous investment in Trinity, and in other Irish universities. Our governments have prioritised education, even during difficult times. The continued worldwide reputation of Irish graduates is tribute to successive governments' support and farsightedness.

I know that our generous private donors are, like the government, inspired by their wish to benefit the public good. They have seen in Trinity a place where their support will be maximised. We are honoured that they placed their trust in Trinity and fully understand the responsibility that comes with this.

* * *

As I've said, we are now in our 421st year of philanthropy - and counting. Trinity does not take this support lightly. It is our pleasure to have named institutions and endowments after our benefactors, thereby keeping their link to this university for perpetuity. But today, for the first time, we bring the names of our benefactors together on this wall to commemorate their generosity. By this action we hope to both thank them, and to honour the principle of public philanthropy which they embody.

When our students and other young people from all over Ireland and the world, come to the Dining Hall and see these names, I want them to feel a sense of awe and a desire to emulate.

I want people looking at this roll of honour to feel inspired by the concept of giving. It was Anne Frank who wrote in her diary with the beautiful clarity of the young: "No one has ever become poor by giving".

I'd like to give the last word here to one of the great orators of our time, Robert Kennedy who said:

"But history will judge you, and as the years pass, you will ultimately judge yourself, on the extent to which you have used your gifts and talents to lighten and enrich the lives of your fellow men. In your hands lies the future of your world and the fulfillment of the best qualities of your own spirit."

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*Councillor Kieran Binchy, Representative of the Lord Mayor of Dublin



The Provost, Dr Patrick Prendergast and Dr Beate Schuler

Wednesday, 26th June 2013

Speech at the Reception Celebrating AMBER and CRANN

Garden, Provost's House

Welcome everybody,

This week, as last week, we celebrate Nanoscience, one of Trinity's key research themes, and one where we are ranked eighth in the world.

We've been celebrating nanoscience across the board - through public awareness events like NanoArt and NanoWeek, and with the wider research community through the EuroNanoForum, and indeed through some of the sessions in this week's symposium with the Indian Institute of Science.

Today is an opportunity to come together, among ourselves, to draw breath, and recognise and celebrate the achievements of the past decade. Thanks to CRANN, our contribution to Nanoscience is now known the world over.

Today we also celebrate the launch of AMBER, the new SFI-funded research centre, which is to be housed at CRANN. AMBER - or, to give it its full name, the Advanced Materials and Bioengineering Centre - links CRANN with the Trinity Centre for Bioengineering. AMBER will help to further establish CRANN's capability to interact with industry.

Just a fortnight ago we gathered together the leaders of our nineteen interdisciplinary research themes. These are research areas where Trinity has clustered expertise, where we believe we have the scale, resources, and ability to address research challenges in crucial areas such as Ageing, Immunology, Digital Humanities, Creative Arts Practice, and indeed Nanoscience. It's hard to believe that CRANN was only established a decade ago, so great has been its success.

It doesn't matter what criteria you use to evaluate success, CRANN comes out strongly:

- When it comes to attracting research grants and finding partners, CRANN has had 28 FP7 projects awarded, totalling €21m in grants since 2009. Within these collaborations, CRANN partners with 180 academic institutions and 75 companies throughout Europe.
- When it comes to contact with industry, CRANN is involved in collaborative support or contract research with over 100 companies, including Intel, Hewlett-Packard, Johnson & Johnson, Medtronic, and Merck Millipore.

- When it comes to campus companies, CRANN has had five spin-outs: one of them – Glantreo - has signed a \$10 million deal to supply silica based materials to a US company, and Miravex was awarded the first Eircom University Challenge Award at the Irish Technology Leadership Forum.
- And in terms of postgrads, CRANN has graduated over 150 PhDs in the last five years, with approximately 50% of these going directly to support Irish industry.

All this has been achieved in a hugely competitive environment. Nanoscience is an area of such potential that academic institutes the world over are investing heavily in it. For Trinity – which cannot command the resources of other high-ranking universities – to be a leader in this growth area is a tribute to the remarkable work that all the Principal Investigators and researchers have done at CRANN, and it's also a tribute to College the strategising and prioritising of interdisciplinary research areas. My predecessor John Hegarty understood the vital importance of interdisciplinarity, and of Nanoscience, and we have continued to build on this legacy. I thank the Dean of Research, Vinny Cahill, for his work in this field.

AMBER is, if you like, the prize for CRANN's success and it will build on it further. With €50 million funding from SFI, with academic partners in UCC and RCSI, and with 19 industry partners to co-fund and co-define the targeted research programmes, AMBER will enable the continued ambition of putting CRANN and Trinity on the global stage for nano and materials science in the coming years.

AMBER has six European Research Council (ERC) award winners –

- Prof Jonathan Coleman and Prof Valeria Nicolosi for their work on 2-D nanomaterials;
- Prof Stefano Sanvito in computational physics;
- Prof Daniel Kelly and Prof Fergal O'Brien from the Trinity Centre for Bioengineering; and
- Prof John Boland, who was recently awarded CRANN's first ERC Advanced Grant for his work on nanowire networks.

This represents the largest critical mass of ERC holders in the nano-domain in any centre in Europe.

After a remarkable decade as director of CRANN, John Boland will now be concentrating on his ERC-enabled research. And CRANN's executive director, Diarmuid O'Brien has just been made director of Trinity Research & Innovation, a role he will take up full-time from October. John and Diarmuid provided exemplary leadership in a crucial period. We could not have hoped for a better team to put Trinity on the world map for Nanoscience, and we now look forward to the next stage with confidence and security. On behalf of the whole Trinity community, which takes such pride in CRANN's success, I thank John and Diarmuid for their tremendous efforts and achievements.

CRANN, and now AMBER, are a cause of great excitement - for nanoscience and for Ireland. Quite simply, what's being done in CRANN and AMBER is something the whole country can celebrate. By delivering research of global quality, these centres will support the development of advanced manufacturing in Ireland, and they will work with industry to attract additional foreign direct investment, thus supporting a research mandate for Irish-based companies.

In short, Ireland's future growth will owe something to CRANN's success – and we cannot say prouder than that.

Thank you.

* * *

Thursday, 27th June 2013

Speech at the 2013 Tutors' Reception

Saloon, Provost's House

Good afternoon and welcome. I was hoping that, as last year, we would be in the garden, but I trust you find the Saloon acceptable.

Since last year's tutors' reception, I have done a lot of travelling, and when I'm trying to get across – to Irish audiences and abroad – the distinctiveness of a Trinity education I often talk about our long-established tradition of tutors and pastoral care.

I do so because I was the beneficiary of it myself, and because it's something we're very proud of, and which we don't take lightly. In recent years it has become customary to hold this annual reception to thank you for your work as tutors. But this year, however, it's particularly important to meet – not only to thank you, but to reassure you of our continued commitment to the tutor system, and to ask, in turn, for your continued support.

It will come as no news to anyone here that, among the 'death by a thousand cuts' – among these, is the instruction to cease the payment of a salary to tutors. Since the Universities Act (1997) we don't have the authority to pay this additional salary, but we had been doing so anyway assuming the value of it would be recognised as part of the distinctive education we offer – not so, unfortunately.

I have, of course, strongly petitioned against removing the payments to tutors. I've pointed out that there is extra work involved beyond what a lecturer does and that, in any case, the very small saving being made here is hardly commensurate with the very high negative impact which removal of this service would have on our students. I fully appreciate that we're in recession and that government needs to make savings – but ceasing this payment will make no difference either way to the money coming to the university from government sources.

What's happening doesn't make sense. Ireland, like most developed democracies, rejoices in a diverse third-level sector. We don't take the "one size fits all" approach. We know that people have different skills and needs, so we offer choice at third level – a mix of vocational colleges, technical colleges and universities.

I don't think it's possible to, on the one hand, celebrate diversity and, on the other hand, condemn particularity. The two are part and parcel. Trinity's Tutor system is part of our distinctiveness and Trinity's distinctiveness is part

of third level diversity - and no university in Ireland should be penalised for personalising and particularising its service.

That was my spiel – my unfortunately unavailing spiel! But I'm glad to have focused on what's crucial about the Tutor system; and I'm glad too that we were able to count on the support of students in maintaining the tutor system. Certainly the government's decision to remove the tutors' payments did not have the effect of making me think that all this time we'd been offering a superfluous service. On the contrary.

I could now start waxing lyrical over the Trinity education. But I guess to this audience I don't need to.

The Trinity education we aspire to delivering is about uncovering individual talents and encouraging people to make a contribution using their unique gifts. We always stress that education is more than what takes place in the classroom. That's why we make space for the extracurricular and for pastoral care.

I don't think it's coincidence that this year three of the five recipients of the Provost's Teaching Awards are currently tutors, while a fourth was previously a tutor. In Trinity, teaching, research and pastoral care are strongly linked, as indeed they always must be in the holistic development of the full human being.

All this is a perhaps round-about way of saying that the work you do is vital to the students and intrinsic to the Trinity Education, and thankfully we have found a means of continuing our commitment to it through the Tutorial Service Support Fund.

I hope very much that you, in your turn, will continue to serve as Tutors. I know that this is a position that entails much effort and commitment – I was a tutor myself once. And I would like to recognise that this year marks the retirement from College of four long-standing Tutors:

- David Singleton,
- Ian Sanders,
- John Graham, and
- David Abrahamson; David having also served as Senior Tutor.

Each is distinguished in his field as a scholar, lecturer, and researcher – but today we also pay tribute to their work as tutors. So I thank Ian, John and David S and David A., as I thank all of you for taking on this vital role, without which the education Trinity offer would simply not be possible.

I'm most thankful that I do have not to stand here and announce the doleful tidings that support for this service is to be cut off, and for that I'm grateful – as I know we all are – to the Senior Tutor, Dr Claire Laudet, and to other

members of my administration for finding a solution in the form of the Tutorial Service Support Fund – for proceeding on the excellent premise that not finding a solution was simply not a possibility.

Thank you.

* * *

Friday, 28th June 2013

Speech at the Honorary Degree Dinner

Dining Hall, Trinity College

Chancellor, Pro-chancellors, Honorary Doctors, Distinguished Guests, Ladies and Gentlemen;

As we end this academic year, and as I come to the end of my second year as Provost, it's a pleasure to be here at this wonderful annual event where we pay tribute to exceptional individuals by bestowing on them our highest honour.

After the last months of the academic year spent strategising and policy-making, it's always good and salutary to take this opportunity to step back and honour excellence and achievement.

Since the Middle Ages, universities have had the privilege of granting degrees '*honoris causa*' on individuals of merit. This privilege reminds us that a university's primary purpose is to nurture great talent – to enhance the public good by educating the thinkers, the doers, and the reformers that society needs, as well as yielding the research and scholarship which improves our way of being in the world.

Today we confer honorary doctorates on four 'thinkers, doers and reformers' - each one a giant of his or her field. Our four new honorary doctors represent a range of disciplines and talents. Between them, they have illuminated the fields of arts, language, history, and music, and they have upheld the true values of the human spirit. Their excellence has been demonstrated in diverse fields, and Trinity welcomes this opportunity to celebrate this diversity, and as I go through the singular achievements of these four honorary doctors, I'd like to briefly look at some of the recent ways in which Trinity has enhanced the fields in which they work.

Because by honouring these four, we also assert our continued commitment to work and improvement in these areas.

* * DOCTOR IN LAWS (LL.D.) * *

Michael D. Higgins was elected as Ireland's ninth President in 2011. He faced considerable competition for this great position and his election by the Irish people was testimony to his significance as poet, academic, human rights advocate, and champion of the arts – as well as to the importance which these roles continue to hold in Irish society. His presidency has been consistent with his life's work and priorities - he has focused on

youth, education, and the creative arts, as well as on promoting Ireland abroad and continuing to build strong connections with the Irish diaspora.

Our President was a particularly engaged and effective Minister for the Arts, Culture and the Gaeltacht in the 1990s. He helped frame the current strategy which makes the arts central to the economic and social well-being of the country. In Trinity, we have made creative arts intrinsic to our curriculum. The Lir Academy of Dramatic Art was launched eighteen months ago and 'Creative Arts Practice' has been named as a priority research theme. These are research themes where Trinity has clustered expertise, where we believe we have the scale, resources, and ability to address research challenges in a range of crucial areas.

President Higgins was with us this afternoon for the conferral ceremony but is unable to attend the dinner.

Liisa Kauppinen is President Emeritus of the World Federation of the Deaf. And she served as the Federation's permanent representative to the United Nations for twenty years. A native of Finland, she was Chief Executive of the Finnish Association of the Deaf for 30 years. She is a strong advocate of the need to explicitly state the human rights of deaf people at national, European and global level. 'Explicitly stating' the rights of deaf people means of course stating them in signed languages, and Dr Kauppinen has been a tireless campaigner for the official recognition of signed languages, and of the importance of this in improving deaf people's opportunities for education, training and employment. One of her signal achievements was the recognition of signed languages in the UN Convention on the Rights of People with Disabilities.

Trinity owes much to Dr Kauppinen because, in 2001, she was a key supporter of establishing a Centre for Deaf Studies at Trinity. This year, 2013, we celebrate the graduation of the first group of students with a Bachelor in Deaf Studies. With this new Bachelor course, Trinity becomes the only university on the island of Ireland offering an undergraduate programme in Deaf Studies, and in signed languages interpreting and teaching.

To give you an idea of the road travelled: in 1981, the UN International Year of Disabled Persons, there were no professional sign interpreters in Ireland. By 1992, two deaf students were registered at Irish universities, working without interpreters. Today, over 200 deaf and hard-of-hearing students access third level education in Ireland, and are facilitated by interpreters.

Dr Kauppinen has been instrumental in this extraordinary development. We honour her work, and we thank her for helping us in Trinity to broaden participation – something which remains a key objective.

* * DOCTOR IN LETTERS (LITT.D.) * *

A Dominican sister, **Sr Margaret MacCurtain** is a most distinguished historian, human rights advocate, feminist, and social activist. She has made a major contribution to social issues since the 1960s, always demonstrating an extraordinary ability to tackle controversial and difficult issues in a compassionate and diplomatic manner.

One of her great projects has been writing women into history. When she first proposed a woman's history course in UCD in 1971 the proposal was rejected; she was too far ahead of her time. Now, of course, there are centres for women's studies in universities all over Ireland and the world. Just a fortnight ago, I launched a history of Trinity Hall, an exclusively women's hall of residence from 1908 to 1972. This engaging book was written by a PhD student from our Centre for Gender and Women's Studies. I think it's no exaggeration to say this book would hardly have come about without the pioneering work of Margaret MacCurtain.

She has been recognised worldwide for this work. In 1997, she received the Women's International Center Living Legacy Award, joining a distinguished group of recipients including Mayo Angelou, Jehan Sadat and Mother Teresa.

She remains passionate about history, and to her belongs the marvellous quotation: "History pays dividends to maturity. If you start young you will reap dividends throughout life".

* * DOCTOR IN MUSIC (MUS.D.) * *

John Sheahan is one of Ireland's most distinguished musicians and composers as well as a poet and wood sculptor. Fifty years ago next year he joined a band called The Dubliners and the rest, as they say, is history. Today, John is the only surviving member from the early days. It's impossible to overstate the importance of The Dubliners to Irish and world music. They've been cited as an influence by everyone from Bob Dylan to the Pogues, from Roy Orbison to U2.

John was unique among the original band members in being formally trained – he studied classic violin in Dublin's Municipal School of Music for five years. A virtuoso, he excels on the tin whistle as well as the fiddle and was able to apply the classical technique to his traditional playing. His best-known composition is probably 'The Marino Waltz' which commemorates his birthplace, Marino in Dublin. Over the years, as well as his work with the Dubliners, he has been much in demand as a studio musician, and has contributed to the recordings of artists as diverse as Kate Bush, Rod Stewart, Dolly Parton, Terence Trent D'Arby, and The André Rieu Orchestra.

Two years ago we established in Trinity a Centre for Music Composition. We have had a Chair of Music since 1764 but with this Centre we prioritised not just the study but the composition of music. Of course a composer and performer like John Sheahan is always unique and surprising. If we could create the 'laboratory conditions' that automatically produced artists like John, then art would not be so unexpected and miraculous. But I am happy

that Trinity has foregrounded creative practice in arts – and that, through this, we are contributing to dissolving the old Yeatsian distinction between “sensual music” and “monuments of unageing intellect”.

* * *

These four men and women are true role models of what can be achieved in their fields. I congratulate each and every one of you. We are privileged to have you join the roll of graduates of the University of Dublin.

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Before I ask Dr Margaret MacCurtain to reply on behalf of the new graduates, I would like to pay special thanks to Dr John Graham, Senior Proctor, who undertook his final Commencement ceremony this afternoon having served as Senior Proctor for four years. I would like to thank him for his service and for the calm and dignified manner in which he carried out the role. He always reassured the PhD students as they nervously lined up in the Provost’s House to process into the Public Theatre and always ensured the Caput were in the correct order! Thank you John.

May I now ask you all to rise and join me in a toast to our new Honorary Doctors.



(Back Row, L-R) Sr Margaret MacCurtain; Chancellor Mary Robinson; Dr John Sheahan. (Front Row, L-R) Dr Liisa Kauppinen; President Michael D. Higgins; Provost, Dr Patrick Prendergast

Monday, 8th July 2013

Speech at the Damage Assessment of Structures (DAMAS 2013) and Health & Condition Monitoring of Wind Turbines and Renewable Energy Systems (SYSWIND) Conference

Joly Lecture Theatre, Trinity College

Thank you Professor Foley for your introduction. Good morning all;

I'm delighted to welcome you to Trinity College Dublin for this joint event – the tenth international conference on Damage Assessment of Structures, or DAMAS, which comes to Trinity for the first time, and to Dublin, I believe, for the second time. And it's also the inauguration of the international SYSWIND workshop on Health Monitoring of Wind Turbines and Renewable Energy Systems.

The subjects of the conference and workshop – assessment and monitoring, particularly vis-à-vis renewable energy systems - are of ever-increasing importance, so it's no surprise to learn that DAMAS has this year attracted the largest numbers of participants ever. Present are almost 200 international participants - from the US, Japan, Australia, New Zealand, China, Egypt, India, South Korea, Brazil, and from all over Europe – and representing industry, universities, engineering journals, and research institutes.

It's always a pleasure to see international conferences coming to Dublin and to Trinity. In this instance, as an engineer, I'm particularly pleased - although I should say that my area is bioengineering and medical devices so I do have idea of some of the ideas being presented at the conference, but I'm not an expert on the issues under discussion.

Over the next three days you will be engaged on in-depth talks, workshops, and sessions. The programme is extremely full. It's also of course very technical and specialised, but the issues you confront are ones that have a direct, obvious, and immediate impact on people's day-to-day lives.

This has always been the case – but it's increasingly so now costing governments huge sums of money, and confronting engineers with new structural challenges. Last year the federal government in the United States spent more money repairing the damage from extreme weather, like hurricanes, floods and storms, than it did on education. Climate change is already hugely impacting on civil engineering, which is one of the reasons why it seems so appropriate to focus on renewable energies in a conference on damage assessment of structures.

Investment in renewable energies is vital for the economy since it will give rise to new jobs and products. More importantly again, it is vital for the future of the planet in combating climate change and relieving dependency on fossil fuels. It is a priority area for governments everywhere, and also a highly political and, at times, controversial area.

Fortunately, engineers are not required to debate the politics – many do anyway of course - but let's make no mistake, policy- and opinion-makers draw on the kinds of findings that will arise from this week's conference. Renewable energy has to be safe and it has to be sustainable and it has to be produced cost-effectively if it's to be a viable alternative to fossil fuels.

It sometimes seems like everyone has an opinion on renewables, but you're providing the crucial data, which will allow informed decisions to be made.

That's a big responsibility, but of course engineers are used to dealing with the big themes, and finding solutions to issues of global concern. They are used, at international conferences such as this, to pooling expertise and sharing best practice – it's nothing less than an instrument of world cohesion, opportunity and improvement.

DAMAS, and now SYSWind, are conduits for industry-academic exchanges. Present today are researchers from the world's top universities, representatives from key public bodies, and representatives from the world's main engineering and ICT firms. All of you are coming together, pooling interest and expertise to improve the way we live in the world.

The issues under discussion at this conference benefit from an interdisciplinary approach. When it comes to condition and health monitoring and damage assessment, disciplines like mechanical and civil engineering and bio-medical have to interact. Some of the most potent interaction, in Trinity at least, has come from ICT, sensors, and new materials.

In Trinity, interdisciplinarity is another cornerstone of policy. We believe some of the most exciting research happens at the interface between disciplines and to this end we have recently launched nineteen interdisciplinary research themes. These are areas where Trinity has clustered expertise, where we believe we have the scale, resources, and ability to address research challenges in crucial areas such as Ageing, Nanoscience, and Telecommunications.

When it comes to some of these thematic research areas – for instance Sustainable Environment and Smart and Sustainable Cities - the connection to renewable energies and to monitoring and assessment of structures is clear. What is discussed here over the next few days will feed into our thematic areas. And I hope that fruitful encounters between researchers will continue well beyond this week's conference.

I thank the supporters of this conference and workshop – the Institute of Physics, Fáilte Ireland, Polytec, and the EU (through FP7 funding). I congratulate the organisers on what looks like a most comprehensive programme. I think that Professor Basu, Head of Civil, Structural and Environmental Engineering, has done a tremendous job. I wish all present a most enjoyable and instructive conference and workshop.

I know that your programme is very full – if you have a spare moment, I hope you'll take the opportunity to visit our Science Gallery, which is just very nearby this lecture theatre. Science Gallery is a place where, as we say, "science and art collide". At the moment it's unique in the world but we are shortly to open Science Galleries in partnership with leading universities in eight urban centres worldwide – we've just opened one with King's College London, and other potential cities include Bangalore, Moscow, and Melbourne. The exhibition currently running is called "Risk". I know you are all working in areas where managing risk is crucial — insofar as this exhibition looks at assessing risk, I think it must be of interest to engineers everywhere. I wish you an enjoyable and successful conference and workshop.

Thank you very much.

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Sunday, 28th July 2013

**Transcript of Interview between Dr Patrick Prendergast,
Provost of Trinity College Dublin, and Aoibhinn Ní
Shúilleabháin**

“Aoibhinn & Company”, RTÉ Radio 1, 11.00, Sunday 28th July 2013

Aoibhinn: Good morning! This is a particularly special time of the year for everyone who recently sat the Leaving Cert. The exams are long over and now the quiet countdown is beginning to the exam results and to all of the big decisions to be made by these students about their future. For tens of thousands of students, that future includes an education at one of the Universities around the country. So I am very pleased to welcome Professor Patrick Prendergast, Provost of Trinity College Dublin, to studio. As leader of that University, he plays an influential role in Irish education, in the life of the University and the city of Dublin. And I have to declare my *own* interest here, because I’m a postgraduate student at Trinity and this is my first time to meet him. That makes me doubly pleased to spend some time in his company. Paddy, you’re very welcome.

Paddy: Good to be here.

A: Provost is a very old-fashioned title. First of all, can you explain to me what a Provost is?

P: Well, the Provost in Trinity College is the head of the University; equivalent to President in other institutions. Or Vice-Chancellor is often used in universities abroad. Or in Europe, the word “Rector” is often used. It’s the boss, basically.

A: Why doesn’t Trinity then use the term of President or maybe, like in an organization, use Chief Executive?

P: Well I suppose the statutes in 1592 called the head of the University the Provost and we’ve stuck with that title ever since. I think it’s a good title; I like to use it.

A: There are some lovely traditions associated with the job, including a residence on campus. Can you describe the home that comes with the position of Provost?

P: Many people who live in Dublin actually don’t realize it’s there, but if you stand at the Molly Malone statue and look over towards Trinity College; in behind the walls and the railings, is a Palladian Mansion and that’s where the Provost of Trinity College Dublin *must* live. My contract says I must reside at Number 1 Grafton Street for the ten years of the Provostship. Which, of course, is a privilege for me to do and I’m glad to do. My family loves living there.

A: (laughs) And is it an urban myth that you’ve got a fantastic wine cellar as part of being the Provost?

P: There's a lot of talk about this wine cellar.. Y'know, it wouldn't be much of an urban myth if I told you the truth of the matter.

(A: laughs)

P: There would be room for a good cellar if I wanted to stock one.

A: (laughs) Very good! You've mentioned your children, Paddy. They were photographed recently with the Obama children on their recent visit to Dublin. So how are they coping with the public aspect of your role?

P: I think they love it, actually! They were very pleased to meet the Obama girls. Eimear and Eilis are my two eldest and they're the same age as the Obama girls, so it was nice to do. They're mostly in the background. Although my son Pierce does get out on his bike and cycles around the College. Looks on it a bit like his backyard!

A: That's some playground to have in the back garden! Just going back to the Provost's title and the election - it's almost as old-fashioned a process as.. as, y'know, the Vatican selecting a Pope. Can you explain to me how the election system works?

P: All staff that have a vote assemble in a large hall and the door is locked. Those that want to be Provost have had their names declared previously. The voting begins, ballot papers are handed out and people put an "X" beside the name they want. Whoever gets the least number of votes is eliminated and a totally fresh ballot is held. So it's not 1, 2, 3, 4, 5, or 6 in the order of your choice; it's multiple ballots and that's why it takes so long. So there's a lot of counting going on and between ballots might take one or two hours to count all these votes and re-check them. So there's canvassing going on in the Hall and nobody can leave until the thing is all over. So as you can imagine, we're all there for four or five hours by the time it gets to the final ballot.

A: Is this all of the staff in Trinity?

P: All of the staff that have a vote. About, I suppose 800 staff and student representatives.

A: How was it announced that you were the.. the winner? Was it down to two people at the end of it?

P: It was. It was. Now, there's a unwritten rule, I suppose that we don't talk about who came where in the various different votes. But yes, it was down to two people in the end. Great tension! You could cut the tension with a knife. I think the people who were there - certainly the candidates - but all the electorate as well, will never forget the tension and at the end, the head of the count whispered to me that I had won and he was going up to announce the final vote.

A: And what was going through your mind when you were chosen?

P: Well, I suppose the responsibilities that were coming onto my shoulders *with* this job. I mean, it's Ireland's leading university. I was elected on a particular manifesto of leading this university. And the challenge that came onto my shoulders in doing that for the next ten years; I felt that very strongly at the time. And, I suppose, the *honour* that had been conferred on me

through the election process and how I was going to have the challenge of facing up to that in the coming years.

A: Because you're.. you're an engineer by trade, Paddy? But going in to the administration of a University is actually.. is very different. So.. when did you decide that you *wanted* to try and be Provost?

P: Well, I didn't come into Trinity in 1995 as a Lecturer thinking; "I'm going to become Provost."! I really didn't really know what the Provost was then, actually. But sometime later, in 2004, my predecessor John Hegarty asked me to become a Dean – Dean of Graduate Studies. When I took that on, I thought; "Well, this will be interesting. I'll do it for a few years and see how it goes and then I'll go back to my research." But sometime after that, in 2008, John Hegarty asked me to be Vice-Provost, which is the number two in the College administration. If I was going to be a Vice-Provost, I would certainly be in pole position to run for Provost when his term would come to an end. So I suppose that's when I decided that it was time to get serious about this.

A: And during the election, a Professor of Psychology asked all of the candidates a very relevant question: "Do you want power?". How did you answer that one?

P: Well, he asked us *all* this question at a hustings, actually - Professor Ian Robertson. And I think we all gave the wrong answer. Because we all said, y'know; we want to serve the community, we look forward to working with our colleagues, and so on. That's, more or less, the kind of answer we all gave. But *he said* that that's wrong, actually. You have to *like* the power that comes with the job. If you don't like the power – if you don't like, in a way, exerting the legitimate authority that comes with a leadership position, then you won't be able to do the job effectively. And I think that's... I've had cause to reflect on that since then, really, and I think it's true. In any position of leadership, a person, I suppose, has to get "a kick" out of it and out of making the decisions that come with it, because sometimes the decisions are difficult and can create a lot of stress. If you're not comfortable with decision-making; if you don't get some inner satisfaction, I suppose, out of it then I think you'll find it difficult to make the decisions and you'll find it difficult to execute a leadership role effectively.

A: And is there politics in your blood then Paddy?

P: Well, none of my family have ever been elected politicians. So I don't think there's politics in the blood. My father had a role, once, as President of the Irish Road Haulage Association. Which I expect - although I didn't know it at the time - but I expect that it involved quite a lot of the kind of "politicking" that you have to do to come to a leadership role in an organization. But I don't think explicit politicking – what happens in politics with a big "P" - is my cup of tea.

A: What's the satisfaction in the leadership role that you're in, then?

P: I think that the satisfaction is, of course, leading an organization, an institution like Trinity; that exists for four hundred and twenty years. The satisfaction comes from doing one's best to ensure that that organization continues to succeed, continues to contribute effectively to Irish society and continues to be an exemplar, in a way, of what Irish people can do when they work together effectively. Because Trinity College is an organization that has

a worldwide reputation. An organization that plays for Ireland on the world stage, if you like, and is well-known. It's a great challenge and sense of satisfaction that comes from ensuring that that continues into the future.

A: And, you, yourself studied as an undergraduate in Trinity. Can you take me back to that first day in October 1983 when you went to Trinity? Because this will lead us to our first piece of music which is Dexys Midnight Runners.

P: I went to St Peter's College in Wexford and from there I came to Trinity College Dublin. My careers guidance teacher, Mr Phillip O'Sullivan recommended that I come to Trinity College to study engineering. He recommended many others to go to UCD and UCC, but me to come to Trinity and I've never really figured out why! But it was a good choice and when I came up to Dublin, in fact, I stayed with my aunt in Cabinteely for the first couple of months. I remember my parents driving me up: they were in the front and I was in the backseat. They had the tea with my aunt and then they were going down home and asked my father "How do I get into Trinity?" and he said "I don't know, get the bus, I suppose!". So I got the 45 bus the next morning and asked somebody how to get to Trinity and that's.... I remember I was it was a newspaper-seller at the corner of where the Screen cinema is and she pointed me to the green railings – they were painted green, then – and she said "Follow that around to the front. That's Trinity College." That's exactly what I did and I looked in the Front Gate and I said "My God! This is really big, this place!" and I went in the Front Arch and out into Front Square and the rest is history.

A: Every time I walk in there, I'm just flabbergasted by it. So how did that make you feel?

P: Well it gives you an adrenaline rush, I suppose, because there's so much going on Front Square in that week. This is Freshers' Week – so all the student clubs and societies have their stalls set out. There's so much going on and you think "My God! I've come to this wonderful place! It's so cosmopolitan, there's so many interesting things to do!" It was great; I thought "this is it, I've really arrived now."

A: And for all of the tens of thousands of young people who are going to be going to College for the first time this Autumn, is there any particular advice you'd give them?

P: Well, it's important to be doing a course that you enjoy, because if you enjoy it you'll be good at it. It's absolutely key to focus on your academic studies, but also take the time to meet people outside your own Department or discipline of study, or field of study. Your university years are important times to develop your social network as well. I would say, for people who are coming up from the country like I did – stay in contact with home. Keep your parents involved. When young people go to university, it's absolutely right that they become very independent, but it's also important to keep contact with family and friends back home because they're one of the important rocks that you have in your life as it goes on.

A: Good advice. Now. So why did you choose *Come on Eileen*?

P: Well, this was the song that was number 1 in the UK charts, I think, when I came to Trinity in 1983. It was played non-stop in all the student parties we

went to during that Freshers' Week and in First Year, this was the one that was played time and time again. So that's why I chose it.

Plays "Come on Eileen" by Dexys Midnight Runners

A: Can I.. Can I say to you that I *didn't* want to go to Trinity because I thought it was too posh and too snobby. So I went off to UCD and I had a great time doing my degree there! But do you think that some people hold that notion of Trinity, that it's too archaic

P: Unfortunately, some people do. They think Trinity is full of snobs, but I can tell you it is absolutely not the case. Neither among the students nor the staff. Trinity is very diverse. Trinity draws its students from all 32 counties in Ireland and from 130 countries worldwide. What matters in Trinity, really, is not your social background but how smart you are, your commitment to your work and your ability to interact with others and to be a bit radical and a bit pushy. That's the kind of student we want to see in Trinity. But it's not in any way correlated with people's perceived notions of snobbiness.

A: I want to talk, first of all, about the financial element because I know there'll be a lot of parents listening and, y'know, wondering about how they're going to pay for their sons and daughters to go to college in the Autumn. So, first of all, can you explain to parents and students why you think they might have to end up paying more for their university education?

P: Well. Firstly; all educational institutions have to be adequately funded if they're to continue to deliver quality education. Now, it seems to me that the ability to raise taxes to pay for higher education is reducing; the funding that comes from Government to higher education institutions is reducing. Only 50 percent, now, of the funding that Trinity would get is Exchequer funding. 50 percent is non-Exchequer funding.

A: So you're getting 50 percent from the Government and 50 percent from private funding.

P: From private sources – either postgraduate students paying their fees, or student from outside the European Union paying fees, or commercial activities that the University engages in, or philanthropy. Or industry research contracts, as well. That would account for 50 percent of the total budget of the University. And I expect that will increase beyond 50 percent in the coming years. So what we're seeing is a reduced investment, I suppose, from the public purse into higher education institutions. It's the same for all higher education institutions in the country.

A: Should it be the responsibility of Government to pay for university education? Is it a public endeavour?

P: Well, I think university education is a public good. Society benefits from having doctors and nurses and engineers and entrepreneurs and so on. So it is right that the State subsidises what universities do, but it's also a private benefit. A university degree also confers a private good on an individual; allowing them to earn a better salary, perhaps, have a happier life in the long-run. A more satisfying career and a happier life. So it's a mix of a public good and a private good. So really, funding a university education should be a mix of private and public funding. Now, when it comes to what individual

students pay, the tuition fee for the students is actually paid in Ireland – undergraduate students. It's paid by the State – so called “free fees”.

A: But it's not really free. I mean you're paying €2,000/€2,500..

P: Yeah, but that's a very small proportion of the total cost. So if we're talking about a balance that I referred to - the balance between a public good and a private good, you could say that balance is not properly struck at the moment and that the individual that benefits from it could pay more. Many countries do this through student loan systems, or graduate taxation systems. In Ireland we haven't really faced up to the fact that we need to increase the amount of private funding from individuals into universities. There are many, I suspect – maybe not many, but there's a good proportion – that could well afford to pay the tuition fee themselves, or their parents to pay. That would seem rational, that they would pay if they can afford to pay.

A: So do you foresee that the structure will have to change in the next couple of years. Like, it won't happen immediately, I presume, but..

P: Well, either the structure changes, or the quality of what we offer goes down. And we'll find that more of our young people will choose to go to universities abroad; in the UK, in the US, where the quality of higher education provision is higher than what we are able to offer in Ireland. That's what could happen if we continue on both reduced public funding *and* stop universities from charging fees. That's the inevitable consequence.

A: So would you prefer, then, that either Government removes itself from that funding so that you have more control over it, or what do you see as the best way forward?

P: I think we need to face up to the fact that some people can afford, and it would be appropriate for them, to pay fees. There should be some ramped system, so that those on very high incomes pay a fee and those on very low incomes pay no fee and those on median incomes pay a proportion of the total cost of the education. And I think some loan system should be in place to allow students to borrow if they can't afford to pay. Many countries have developed this system to allow them to finance higher education and I believe we should address that kind of system here as well. We have to understand what the consequence is if we don't. The consequence is, if we don't, that the quality of our universities will reduce. A low-quality higher education is no good to anybody. The ratio of students to staff is about, in many Irish universities, *more* than 20 students per staff member. Now that's way out of kilter with international norms. Most universities in the UK would have, maybe, fifteen – maybe even twelve – students per staff member. So we're out of kilter and we haven't got sufficient academic staff for the number of students that we have. And this, in the context of Government's targets - which are right, in a way - to increase the number of students going into higher education. Increase both the percentage of school-leavers going into higher education, and we know that the number of school-leavers is going to increase in the coming decades. So how are we going to address this increased demand for higher education, whilst we know that the public coffers are under severe pressure? Something's going to have to give, somewhere, and we haven't figured this out yet.

A: So we do need more academics, to be working in our universities.

P: I absolutely think we do. We need to expand our universities and not what we're doing at the moment. Under the various austerity measures, we're contracting the size of our universities by reducing the number of lecturers we have in them.

A: But you've got other strategies for funding, because philanthropy is now an important part of Trinity College Dublin.

P: Philanthropy is important, and it's becoming increasingly important to all Irish universities. In fact, it has always been important and great philanthropists like Chuck Feeney and Atlantic Philanthropies have put tens of millions – hundreds of millions – into Irish universities to expand them and help improve quality. The important thing, though, I think, to understand is that many generous people are prepared to put money into universities, but only to propel them towards excellence. They're not going to put money into universities to shore up the funding that's missing from government or individual sources. Excellence is what many philanthropists are after and they're *right* to look for excellence. For example, Martin Naughton recently funded our Centre for Nanotechnology, the Naughton Institute, and this is great. We've been able to attract some *top* academics from around the world, and brilliant students, to study, work and do research in the Naughton Institute. But the idea, there, was to create something in Ireland; a research institute that was excellent by world standards. It wasn't to shore it up to a median level. So, a healthy, financed university system is a combination of good public funding, good private funding from the individuals that benefit, *plus* philanthropy, driving excellence in certain areas.

A: Do you think it would be possible and beneficial for the university to just be purely privately-funded?

P: Well, you've asked me a very difficult question!

A: (*laughs*)

P: One which I'm happy to try and answer. I've asked myself that question many times. The best universities in the world, the highest ranked universities, are the private ones: the Harvards, the Yales, the Stanfords. Clearly the flexibility that comes with being a private university is part and parcel of what can generate great excellence. And I think it's important, also, to note that these private universities contribute greatly to the public good. They're universities that are world-renowned for the quality of their research and the education that they provide for their students. Could Trinity emulate that? I absolutely believe it could. However, it's not really the Irish or the European model, to have solely private universities. There are some private institutions here in Dublin City. For example Griffith College is private and does very well. And it's growing, whereas the public universities are contracting in the number of academic staff they employ. Some of the private institutions, such as Griffith College, can expand to meet demand. So the flexibilities given to private universities allow them to meet the contemporary challenges of globalization more "head on". I think that we should be more flexible about how Irish universities are run and perhaps there can be elements of how private organizations work, that can be incorporated into how universities that are public bodies work. So I wouldn't see it as just bi-modal – either public or private and nothing in between. There are universities around the world that have.. that combine both the private and the public model very effectively and maybe that might be the kind of

environment that Irish universities could prosper in, and then be truly globally competitive. Particularly in the context of decreasing ability of public funds to fund universities.

A: Is it something that might be difficult, though, because we don't have that history of philanthropy in Ireland. We don't have that history of, if you graduated from somewhere that you kind of invest back in to that university.

P; Well, people say that we don't have any history of philanthropy, but people give a lot to the church, for example. And they give a lot to certain church bodies over the generations; hospitals, for example. People often give legacies to such organizations. There are certain Irish wealthy individuals now who have imbibed the philanthropy gene, if you like, because it's so current around the world. Many of these individuals are networked around the world and they run global businesses so they see philanthropy in other countries and they want to see it work to the benefit of Irish society. So I wouldn't rule out philanthropy. I think we're going down that road.

A: So if you were Minister for Education for a week, Paddy, what would you do?

P: Well, there's always a question that's a surprise, and that one is a surprise!

A: (*laughs*)

P: Minister for Education for a week... If I had Ruairi Quinn's job for a week.... Well, I suppose I would tackle the issue of fees and the fact that individuals should pay fees into Irish universities. I think that this needs to be addressed more directly than it is being addressed at the moment. Other things that the Minister is doing, I quite agree with, such as his opening up the whole issue of admissions into higher education. He's being quite tough on this, in saying that we need to make university admissions fairer and remove roadblocks to admissions.

A: Well what a lot of people say about the CAO is that it is fair, because it's a blanket exam, everyone has to go through the same pressure and it's completely anonymous. So what do you think we could do instead of the CAO system?

P: Well, the CAO system is certainly transparent, but whether it's fair or not is an interesting question. Personally, I don't think it is fair. I think it only measures one kind of ability, really, and this is because the Leaving Cert. exam itself is an exam where rote-learning is prioritized over other kinds of learning. Now, let's not say rote-learning is all bad; a little bit of rote-learning is a good thing. But it prioritizes the kind of intelligence that "works" with rote-learning. So we must find a way to examine students to take in other kinds of aptitudes, other than rote-learning aptitudes, and *that's* where I think the Leaving Cert. falls down and where we need to consider alternative kinds of admissions. Very few countries, if *any* indeed, would admit solely based on one exam, as we do here. One exam – typically held over a couple of weeks when a student is 17 or 18 – and that determines their whole life..? I think we need to use other contextual information when admitting students into universities. In the UK system, they use interviews. Now, I'm not suggesting we would do that here – it might be problematic in Ireland – but it just goes to show that there are other methods. In Trinity, too, we admit some students into courses based on auditions for example: for Music or for

Acting. So we have a history of using other methods than purely points-based systems and I think we should expand that out more broadly.

A: And Trinity are piloting a scheme that's an alternative to the CAO?

P: Yes. Next year we are going to admit students, a small number of students, into our courses – Law, for example, and History – using contextual data. For example, one of the elements of contextual data will be where the student is placed in their school. So, if you come first in your school and get 500 points, that's interesting. You might come twentieth in your school and get 500 points – which student would you admit?

A: Obviously the first!

P: Well, that's the sort of contextual data that we think can be brought to bear on a fairer admissions system; admitting more broad aptitudes of talent into our universities. Trinity is doing this pilot – this feasibility study, rather – for the whole higher education sector and we will share the results of this feasibility study with all other universities and Institutes of Technology.

A: that sounds very promising. So – as “Minister for Education”, you're going to look at fees and you're going to look at admissions. Is there anything else that you'd like to do for that week as a hypothetical Minister for Education?

P: Well, this sounds very much like telling Ruairi Quinn how to do his job, so I think I'll... since I don't know what he would do, were he Provost, I won't presume to tell him any more about what he should do as Minister for Education!

A: *(laughs)* Okay! Well Paddy, our next piece of music is from Josh Ritter and it is *Bright Smile*. It is actually something that I imagine that you don't get very much time to do, but when you go walking and relaxing, you like to listen to this. Why?

P: Because I don't have a commute from my address at No.1 Grafton Street into my office, I sometimes walk up around St. Stephen's Green and listen to music like this. I don't particularly know why I like Josh Ritter. He appeals to something. Maybe I have a romantic streak...

Plays “Bright Smile” by Josh Ritter

A: That was Bright Smile from Josh Ritter, chosen by Paddy, the Provost of Trinity College Dublin. But before you were Provost you had a career as a biomedical engineer so can you explain to me the work and the research you did?

P: The work I did was on the design and the development of medical devices, all kinds of medical devices... eh... orthopaedic devices, implants that people would be familiar with, hip implants and knee implants. I would have been involved in the design, development and testing of those kind of implants. Cardiovascular devices, such as stents that are put in to the arteries to open them when they're blocked, a revolutionary technology that's largely displaced bypass operations. Particularly what interested me was what we would call *in silico* simulation of these devices.

A: What does that mean?

P: Well *in silico* means in the computer, in silicon, rather than in the body. Now you're a long way from ever needing any orthopaedic implants...

A: Touch wood!

P: ...but if you did, we might want to simulate how that implant would behave in your body, how long it would last... what would be the best design for you...

A: So it's computer programming with it?

P: Computer programming and simulation, that's particularly what I was interested in. A computer simulation of how these medical devices perform in the individual patient.

A: So that must be quite satisfying, that your research is really having a direct impact on the health of people?

P: Yeah, and a lot of people do biomedical engineering for that reason, they want to help people, they want to help the sick. I must say, for me, it was really the challenge of the engineering problem rather than helping people. Oh maybe that sounds terrible now but really it was about the challenge of doing these computer simulations, I suppose the intellectual challenge of it. Now, that being said the work we did was very beneficial to patients down the line but the primary purpose for me, what gave me a thrill was to be able to do these simulations that would match up with the clinical reality.

A: And tell me, what is that thrill when you have a problem that no one else has solved before and you're tackling it?

P: It's, um, someone sort of described it once to me like when, and I think it's right, that when a circuit closes and some light comes on and you say "God, I've discovered something that nobody in the world who has ever lived before has known" and that's great, it's a great, eh... I get anyway, and I know that many other scientists and engineers do too, a great thrill out of such discoveries. It's like coming over the top of a hill and seeing out into some new vista and you say "I've done that and nobody else has." And that's what motivates a lot of people to continue to work at the frontier of science and engineering. It certainly motivated me, and I miss not having... I miss, as Provost, not having that opportunity.

A: You don't get to research anymore as Provost?

P: Yeah, you know, if you want to do research at the frontier of your discipline you have to be going to conferences a lot, talking to people, writing grants to get the money for researchers to come and work with you on projects. It's very hard to get the time to do that, and run a university as well.

A: Do you imagine that you'll return to it once your time as Provost is over?

P: I'd like to imagine that, although, things move quickly, and even talking to colleagues now in the last two years, medical device technology has moved on a lot and I think it'll have moved on quite some distance in ten years so I might be able to get back into it or I might not but, you know, we'll see.

A: But Paddy, considering all of the contributions that you made in this research, you didn't really show much promise in your early years in secondary school, if you don't mind me saying that

P: Hmm... Well, I don't mind you saying it, I think you're referring to the fact that when I came to St Peter's College, Wexford...

A: Yes, they put you in one of the lower streams, for some reason.

P: They did, yeah. There was A, B, C, and D and I went into C. So that was me categorized, but thankfully that didn't define my academic career forever.

A: And I know we've already discussed the CAO system, but do you think that that's possible another issue with it, that it is only examining one part, whereas obviously you're incredibly successful at solving problems, maybe school, and the way we're taught, doesn't always encourage that?

P: Yeah, and despite the valiant efforts of many teachers, of course, and at the end of the day students have to do well in this particular exam, the Leaving Cert, and when it all boils down to it, the teachers have to teach the students to do well in this particular exam. And doing well in an exam is not the same as learning broadly. So we find that when students come into university, and I'm sure other universities are the same, but many of us in Trinity would find that the students need a little bit of rehabilitation to get them into a 'learning mode' that suits a university education after having gone through the Leaving Cert system.

A: Because we should really be learning to understand and learning to have independent thought rather than learning how to get the best points in this exam.

P: Well, yeah, that's it. And I know students even learn off essays for the Leaving Cert, I mean, what's the point in that? That's rote-learning at its extreme. And presumably there's some examiner there, reading all of these very same essays from some class, and while the individual essay might be very good because it's written by, presumably, a teacher, all these students get high marks. But when they come into university and find that this is not an acceptable way to proceed, they have to learn for the first time, really, how to develop their critical thinking skills and they have to see the value and priority that's placed on that in a university education and, indeed, for later in life. The problems they'll solve, or the work they will do when they're starting their careers won't have some teacher handing them the solution and they just have to regurgitate it. So, Irish society needs people who are creative, critical thinkers, innovators... in a way sometimes people who are critics of the system and a university education is about developing those attributes whereas getting into university is about developing the exact opposite, it seems to me.

A: Paddy, you'd an opportunity as well to travel after your undergraduate degree?

P: Well, after my PhD I did a stint in Bologna and then I moved to the Netherlands and I worked in a city called Nijmegen in a hospital there, again, an orthopaedic hospital and I worked very closely with a man called Professor Rik Huiskes and I think he probably was the greatest single influence on my academic career. In Ireland in the early 1990s, when I did my PhD, there was

a lot of good research being done, but there wasn't much by way of equipment, it wasn't highly financed... it was completely the opposite in the Netherlands. This guy ran a lab with maybe 3 or 4 post-docs and maybe 15 PhD students, big resources, tied into international networks, and that's where I really learned how top-quality international science really works. So he taught me a lot, this guy Rik Huiskes.

A: And Paddy, did you set up a biomedical institute in Trinity?

P: I did. We set up, myself and colleagues in various other department, the Trinity Centre for Bioengineering.

A: Was that following meeting this professor in the Netherlands?

P: Here's what happened, when I came back to Ireland in 1995 as a lecturer in mechanical engineering, I came back with all this ambition because I'd picked it up from Rik Huiskes and I said "Right, we're going to set up a big, international research lab here and we're going to make a worldwide impact with our research." And at that time we were just coming into the boom, the Celtic Tiger, so there was money starting to come into Irish science. I got a very big grant from the European Union at the time, which Rik Huiskes helped me to get, so we were immediately able to set up a very significant biomedical research facility into the area of bioengineering and medical devices and we got going quickly. Then Science Foundation Ireland came along and we applied for money there and got more funding, more European Union funding as well, and the whole thing expanded. And then PRTL, which is the Programme for Research in Third Level Institutions, came along with philanthropic funding which really catapulted Irish science on to the international stage. I was fortunate to be able to be part of that in Trinity College.

A: You must be very proud, then, of having that legacy?

P: I am, yeah, it's going well, and there are many others taking on that responsibility now and working again with international collaborators in bioengineering and medical devices, not just in Trinity but in other universities in Ireland as well.

A: So it must be very important to have that international network?

P: It's very important. I think we sometimes forget how far we've travelled over the... since the early 1990s. Irish science and scholarship, and research and scholarship in general, has moved on greatly and we've got to ensure that even now when we're in austerity and funding is tight that we don't lose the great gains that we've made over the last ten to fifteen years in science and in research because that's where the future is, that's where the future high quality jobs are. We've got to continue to invest in research and in science, to create and develop the knowledge economy that is going to give the high quality jobs to our young people in the future. We can't slip back, we can't go back to being what we were in the 1980s. We've to continue to invest and grow and research and technology infrastructure.

A: Paddy, you're a Wexford man, can you tell me a little bit about your family?

P: Well, I'm the eldest of six, I have four brothers and one sister and my father had a haulage business, he owned lorries and drew beet as we would say for local farmers and did work like that and had sheds for storage and growing beet was a profitable activity for many farmers. There was a big sugar factory in Carlow that my father drew beet to. And then he was involved in distribution for shops and supermarkets as well.

A: Were you ever interested in taking over the business?

P: Not really, actually, though I think I got my interest in machinery and engineering from being at home but I think my parents had me earmarked at an early stage to go to university and that one of my younger brothers would take over the business.

A: Well they were obviously very aware of education and very committed to education of their children.

P: Well, my mother did quite well and she became a nurse, a registered nurse, and did very well working as a nurse in Dublin before she got married and then moved back down to Wexford because she was originally from Enniscorthy. My father didn't have much by way of education himself, he went to the local tech., the very same tech. that my brothers had gone to in Kilmuckridge. I think that when I got to secondary- school-going age, they had decided supposedly that they would do the best and send me to St Peter's College, Wexford.

A: You were a boarder there, is that right?

P: There's no boarding there anymore but when I was young there was and I came in from my home parish of Oulart only about 15 miles away but I boarded in St Peter's College, Wexford for five years.

A: And was it difficult to leave home at the age of twelve to go to be a boarder?

P: I suppose it was, you're taken out of your family environment and put into this rather strange institutional environment run by priests. It is, I think, difficult, I wouldn't want it for my own children.

A: Was it lonely?

P: It's not lonely, exactly, but you're taken away, I suppose, from your parents, your father and mother, and mothers in particular, mothers always loomed very large in Irish lives in those times, fathers were often out working, but you're taken away from your family home environment and put in this different environment. It's not exactly lonely, because there's plenty of people, plenty of boys your own age, so no, I wouldn't say lonely, but boarding schools, I think, do tend to have an effect on people, I know how much you can spot people who've been to boarding school.

A: How do you spot them, tell me?

P: Well, I remember being out, maybe a few years ago, with some colleagues of mine, and you go to these very good dinners sometimes when you're Provost, and all the dinners were put down in front of people, and I got my dinner, but I looked at the guy next to me to see did he get more than me! And he looked at me, and other people around the table said "What's going on here?" and it turns out we two had been to boarding school! So there are

little giveaway signs, I think boarding schools for boys, or for girls, they may have been necessary one time and for some families maybe still are necessary, but I think that is kind of an artificial and strange environment for a young person to be brought up in.

A: Does it make a difference, do you think, with your family, your parents that you're away?

P: It certainly does, sure, they don't know what you're doing, you're not talking to them at the end of every day like you would be, were you living with them, but I've no real reference point for it, I suppose, because I went to a boarding school. But I see now with my own kids, that I probably would know more about what they're doing in school, generally speaking, than my parents would have, and I think that's because I was in a boarding school.

A: So it's good to maintain that contact?

P: Well, someone said to me once, "You have to talk about the ordinary, basic things before you can talk about the very important things in life," so if you don't talk about the most routine and basic things, when it comes to the really serious issues, you've no way to get to them.

A: Paddy, your late father died when you were only 20 years old, what do you think he'd make of you as head of Trinity College Dublin now?

P: Well, I'd like to think he'd be proud - and I think he would be proud. That's what my mother tells me now anyway, that he would be and I think it's true. But he was a man of his own ambitions as well. He probably wouldn't have said that he was proud, he probably would have said that had he got the same opportunities he would have been Provost in his day. And that may have also been true.

A: And your mother, is she enjoying your role as Provost?

P: I think she absolutely loves it, frankly. She was there on the day of the election, as were all my family members in Front Square when the announcement was made that I was elected Provost.

A: They were waiting outside, were they?

P: Waiting outside at the end of the Dining Hall steps and were overjoyed and partied for weeks on the news. Now she's moved actually, and she's up every weekend, most weekends, living in No. 1 Grafton Street. She has her own room there and she's well-ensconced and I'm happy to have her and she's a great help to us with managing the house and looking after the kids.

A: And Paddy, you've returned to the smaller schools in Wexford as Provost, do you think that's important to do?

P: I do, it was a particular pleasure recently to go down to St Peter's College, Wexford, to do the prize giving there for the final year students. The year before that I had been back to my old primary school in Oulart. They were raising the green flag and I was the person that they invited to do that and I enjoyed that greatly, having tea and buns and talking to the teachers afterwards. I think it's also important, not just for the pupils in the school, but for the whole parish and the parents as well, to know that I value my connections with my home parish of Oulart. I think that the education I got

in Oulart National School, as it was then called, that that school set me off on the road that led me to where I am today.

A: And Paddy, is there any advice you can give to students who are waiting for their Leaving Cert results, because they'll be opening those envelopes, it'll be a very tense and emotional day, but what about those who are disappointed, who maybe don't achieve the points they've been looking for?

P: I think the main thing to know is that there are many opportunities that present themselves in life, and you may have in your mind a particular path, a particular course, and you might not get your first choice, so to speak, but there are many good choices and many good avenues to be taken in life. It's how you react to the challenges that are faced, on the multiple issues that face you in life, that's what's important. It would be absolutely the wrong thing to open the envelope, if you didn't get your first choice, and think that this was a doomsday scenario. Be positive, and face the challenges of life openly and you will succeed.

A: And how about you facing your own challenges? You have 8 years left as the Provost of Trinity, what would you like to say that you have achieved when the moving van pulls off from No 1 Grafton Street in 8 years' time?

P: I want, like my predecessors have done, to leave the university in a strong position, in a position where it's offering the very best of education. Over a ten year period, Trinity College will graduate maybe 20 or 30 thousand students, and I can have an influence on the education that they have received and to make sure that it's as good as it can possibly be. I would like, also, to have robustly faced the financial challenges that the university has because I firmly believe we cannot have a top-tier international university on the kind of financial footing that it's set on at the moment. We have to find a way around this. We have to I think agree, almost as a country, what we want for our young people. I'd say a key job of the Provost of Trinity College, as indeed for leaders of other universities and higher education institutions, to argue for the value of investing in higher education. It is the way to give our young people the best chance in life and if we can all understand that, universities, politicians, funders of various kinds, then I think I'll have done my job well.

A: And our last piece of music from your very eclectic selection this morning and it's called 'Diamonds on my Windshield'. Why have you chosen this song?

P: This song invokes in me something about travelling, particularly travelling in a car. We do a lot of our thinking as we drive around in cars, and obviously so does Tom Waits.

A: Well - Paddy Prendergast, Provost of Trinity College, thank you very much for being my guest this week on Aoibhinn & Company. Thank you very much for listening at home. Beidh mé libh ag an am chéinne an seachtain seo chugainn.

Plays "Diamonds on My Windshield" by Tom Waits

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