

OLLSCOIL na hÉIREANN

THE NATIONAL UNIVERSITY OF IRELAND

TEXT OF THE INTRODUCTORY ADDRESS DELIVERED BY:

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University College Cork on 6 June 2014, on the occasion of the conferring of the Degree of
Doctor of Science, *honoris causa*, on **DINESH SINGH**

Chancellor of the NUI, Registrar of the NUI, President of UCC, Ambassador of India,
Distinguished Guests, Ladies and Gentlemen.

Connections between Cork and India can be traced back to the eighteenth century. They resulted from the expanding network of commerce, trade and migration that was the British Empire. When the Indian travel writer, Abu Taleb Khan visited Cork in 1799, the city's residents already included prominent Indians such as the colourful Sake Dean Mohamed, who would later introduce Britain to shampoo and Indian cuisine through his famous 'Hindoostani Coffee Shop'. Khan was very impressed by Cork, and wrote glowingly of "this extensive sheet of water, the verdure of the hills, the comfortable appearance of the town on one side and the romantic cottages of the other..."

The relationship between University College Cork and India stretches back to the foundation of Queen's College in 1845. During its first 75 years, the university was a major centre for the intellectual formation of colonial civil servants, doctors and engineers, a significant proportion of whom served in India. UCC graduates had an often disproportionate impact on the administrative, educational and professional landscape of India. In the field of medicine, in particular, graduates such as Sir Edwin Butler (Imperial Mycologist), Charles Donovan (Professor of Physiology, Madras Medical College), Edward Cotter (Commissioner of Public Health, Government of India) and R.W.G. Hingston (Medical Officer to Mallory's 1924 Mount Everest Expedition) played key roles in the study and prevention of endemic diseases, such as Kala-Azar Fever, as well as in the expansion of medical education, public policy and research.

The acquisition and dissemination of knowledge also happened in the opposite direction. From the mid 1850s, Queen's College Cork offered specialised courses on Indian geography, history, languages and law, and professors were recruited to teach tropical medicine and the latest advances in public health. It also accumulated a large library and museum collection, donated by alumni, which provided students with knowledge of India's diverse cultural, linguistic and religious traditions. By the end of the century, the interconnectedness between Cork and India was felt even in rural communities, such as Timoleague, where the Maharaja of Gwalior commissioned an elaborate mosaic dedicated to his friend and surgeon, Colonel Aylmer Martin Crofts, a Queen's College alumnus and officer in the Indian Medical Service.

Today, University College Cork remains an outward looking international university – as it was in the nineteenth century. Our deep historical links with India have been reinvigorated by a growing cohort of Indian students coming to UCC, academic partnerships, and research collaborations with leading universities from across India. In the past few years, we have established connections in Delhi, Bangalore, Mumbai, Chennai, Pune, Kerala, Hyderabad, Karnal, and elsewhere. Our aim is crystallised in the notion of connectedness at all levels: within the higher education system in research, faculty interaction, and programmes of study, and externally, with government, industry, and enterprise. In the past year alone, over 20 UCC academic staff have made research visits to India and an equal number have come here from India. We have twenty or so students from India on short study visits and over 130 Indian students in full time programmes, about 50 of whom are pursuing PhD studies, and we are in the process of setting up a study abroad programme to allow UCC students to visit India.

One of the institutions that we have linked with is the University of Delhi, where we have connections in anthropology, the study of religions, biosciences, and ICT. Consistently ranked as the top comprehensive university in India, Delhi has 16 faculties, 86 academic departments, 77 colleges and 5 other recognised institutes spread all over the city, 10,000 academic staff, 225,000 regular students and a similar number again in non-formal education programmes.

This brings me to the point of this discourse which is to introduce to you one of the most remarkable personalities in the hugely diverse society that is modern India. Professor

Dinesh Singh is the Vice Chancellor of the University of Delhi. He graduated with bachelor's and master's degrees in Mathematics from St Stephen's College of that university, and a PhD from Imperial College London. (Incidentally, I just learned yesterday that his supervisors were Walter Hayman, who also supervised the PhDs of several UCC staff, and Jim Clunie, who acted as our external examiners in the late 70s and early 80s, so – academically speaking – he is already “one of the family”!) Dinesh returned as a lecturer to Delhi University in 1981, and progressed along the academic track until his appointment as Professor in 1997, having also spent periods as visiting scientist at the Indian Statistical Institute and visiting professor at the Indian Institute of Technology, Delhi. His research – in functional analysis and operator theory – is of the highest quality, with publications in journals such as the *Proceedings of the London Mathematical Society*, *Proceedings of the American Mathematical Society*, and *Mathematische Nachrichten*. His research was recognised by the award of the AMU Prize by the Indian Mathematical Society in 1989, and the Career Award in Mathematics by the University Grants Commission in 1994. He collaborates widely and in particular with faculty at the University of Houston, Texas, where he has been an Adjunct Professor since 1999, and from where he also recently received an honorary doctorate.

In 2005, following progressively more important administrative roles within the University, Professor Singh's career took a formal turn away from mathematics with his appointment as the Director of Delhi's South Campus, and in 2010, after a short time as Pro-Vice Chancellor, he was appointed Vice Chancellor.

Dinesh is a member of many committees of the Government of India, such as the Scientific Advisory Committee to the Cabinet, the Academy of Scientific and Innovative Research, the Steering Committees on Science and Technology, and Higher and Technical Education, and the Government Planning Commission. He is a member of the Governing Body of the All India Institute of Medical Sciences, Vice President of the Governing Body of the Institute of Human Behaviors and Allied Sciences and serves on the boards or executive councils of many other universities, institutions and professional bodies.

In recognition of his enormous contributions at the highest levels of science and education he was decorated in 2014 by the President of India with the third highest civilian award in India – *Padma Shri*.

Since being appointed Vice Chancellor, Dinesh has instituted a number of radical reforms. He began by inheriting, and bringing to fruition, a project to introduce a semester system, with a greater emphasis on continuous assessment rather than terminal examinations. That sounds like a very simple statement, but we know very well from our recent adoption of the same system here in UCC how difficult such a change is to implement.

Not content with that, he then went on to enter into an intensive and very wide-ranging period of consultation on the degree structures. The undergraduate programme at Delhi was largely based on three year degrees, with many students destined to achieve only a pass degree from early on in their studies. Under Dinesh's leadership, three year degrees were replaced by four year ones with accredited exit points at year 2 and 3 and full honours awards after 4 years. This reform was not just organisational change for the sake of efficiency. Rather it was motivated by the desire to optimise the experience of the students. The new four year degree programme is designed, not so much to put more material into the curriculum, as to give students more time to reflect on their studies, to provide them with the opportunity to participate in first year foundation courses, in areas such as philosophy, psychology, communications, and sciences, and to allow them to spend more time on project work, research and innovation, particularly in the final year of study. Again, in parallel with our own UCC journey in this arena, Dinesh would no doubt agree that our graduates should be not only "work ready" but also "world ready".

I should emphasise that these reforms were instituted only after very wide consultation with staff and students, for which Dinesh has gained quite a reputation. Indeed, at one event, which brought together 4,000 students in a sports stadium, he got a reception that was reported by a leading Delhi newspaper as being more akin to that accorded to rock stars than university Vice Chancellors! Following these consultations, other reforms followed: wide-ranging improvements in the student experience such as expanded access to computer technology (all 60,000 first year students in 2013 were provided with state-of-the-art laptops); improved internet connections across all the colleges and the city; enhanced conditions for students with special needs; a focus on the experience of women on the campus; more campus accommodation places; and more efficient administrative processes, which, for example, now guarantee that examination results are delivered to students within a clearly defined time frame. Remember that this is a city-wide, multi-

campus university of one quarter of a million students. The complexity of implementing this reform agenda cannot be overestimated!

And of course, as with all major changes in large organisations, especially universities where academic freedom is so highly prized, Dinesh met with no little opposition, internally and externally, to his initiatives. But he weathered those storms with his very characteristic self-deprecating modesty and an enduring sense of humour.

Professor Singh has also raised the profile of research throughout the university, bringing to it a new emphasis through the creation of an Innovation Centre for undergraduate students. In this programme, groups of 10 students from a range of disciplines participate in research projects of their own choosing, aimed at analysing and proposing solutions to some of the major challenges facing India in the 21st century.

In one astonishing venture Dinesh acquired an entire Indian Railways train – the Gyanadya Express – which has become a travelling classroom. It takes over 1500 students on a journey through some of the major provinces of India where they interact with local communities, observing and debating issues with them, and reflecting on these issues among themselves. Returning to the city the students write reports considering areas such as environmental issues and social problems, and proposing remedies and solutions. One of the first trips on the train was dedicated entirely to female students.

Once again to compare with UCC, this idea of the “the student experience” involving the whole of student life from study to sport, and from social development to personal development, has also been a central component of our own thinking for the past several years.

But Dinesh Singh takes this a step further. He constantly encourages students to “seek their inner voice”. In his view, the cultivation of the inner person is an essential element of the university experience. In a recent interview, he said: *I want to help the youth of India to find their inner calling. You must figure out who you are. What is inside you? And learn to do what you should do in society. Now that is what education is all about. And the rest is secondary. If we can do that with a student then we are successful.* I think we in UCC have a lesson to learn from that.

Following the recent election of Prime Minister Narendra Modi, India is destined to become more externally focused and will certainly play an increasingly significant part in both Asian and global politics. We have no doubt that Professor Dinesh Singh will take a leading role in that reorientation, and we will watch with great interest. As Martin Wolf put it in his Financial Times article following the election “*One thing is for sure: India has a new game. Pay attention.*” And that, Ladies and Gentlemen, is *precisely* what we are doing here...

Dinesh Singh is an ardent believer in living a balanced life. He is a dedicated family man; he and his wife, who is a specialist in nutrition, have an adult son and daughter. He continues to carry out research in mathematics (and by the way, we hope he will join us for the mathematics conference in celebration of George Boole’s 200th anniversary next year). He is an avid reader and loves to listen to music – both classical and Sufi. He is an adherent of Ayurveda, the ancient Indian science of health, and a keen student of Gandhian philosophy. And, as if that were not enough, he is – in his spare time (!) – also a painter on canvas.

Dinesh Singh: mathematician, dedicated teacher, innovator, radical thinker, and inspirational leader, it gives me great pleasure to invite you to receive the Degree of Doctor of Science, *honoris causa*.

Praehonorabilis Cancellarie, totaque Universitas!

Praesento vobis hunc meum filium, quem scio tam moribus quam doctrina habilem et idoneum esse qui admittatur, honoris causa, ad gradum Doctoratus Scientiae, idque tibi fide mea testor ac spondeo totique Academiae.