Text of the introductory address delivered by **PROFESSOR JOHN** G. HUGHES, Vice-Chancellor of the University, President, National University of Ireland, Maynooth, on 7 April, 2006, on the occasion of the conferring of the Degree of Doctor of Science, honoris causa, on WILLIAM C. HARRIS



A Sheánsailéir, a mhuintir na hOllscoile agus a dhaoine uaisle,

Dr Harris came to Ireland as Director General of Science Foundation Ireland in 2001 following a distinguished career in teaching, research and administration in the United States.

He earned his undergraduate degree at the College of William and Mary and his PhD in Chemistry at the University of South Carolina. This was followed by service as a tenured member of Furman University's Chemistry faculty where he was honoured for his undergraduate teaching as a Dreyfus Foundation Teacher-Scholar. Dr Harris then embarked upon an 18-year career with the US National Science Foundation, from 1978 to 1996, including a period as the director for the Mathematical and Physical Sciences Directorate where he was responsible for a federal grants appropriation of \$750 million per year. While he was at NSF, some of his many accomplishments included introducing and developing the first 25 Science and Technology centres in the US to connect university research in a focused way with long-term national for problems, and initiating the Research Experiences Undergraduates (REU) programme in chemistry, which became an NSF-wide activity.

From 1996 to 2000, Dr Harris served as founding president and executive director of Columbia University's 'Biosphere 2 Center', where he implemented an undergraduate education programme focused on earth systems science, management and policy. He also forged partnerships with almost 30 colleges and universities. In December 1999, the trustees unanimously endorsed a proposal he put forward to build the "Columbia West" campus in the Arizona desert, where undergraduates from throughout the world are being educated to become the next generation of environmental leaders.

Immediately prior to coming to Ireland, Dr. Harris was Vice-President for research and Professor of Chemistry and Biochemistry at the University of South Carolina, overseeing research activities throughout the USC system, several interdisciplinary centres and institutes, the USC Research Foundation, and sponsored research programmes.

Dr Harris has authored more than 50 research papers and review articles in spectroscopy and in 1997 became a Fellow of the American Association for the Advancement of Science. He is a recipient of the US Presidential Distinguished Executive Award. In 2004, he received the Wiley Lifetime Achievement Award from California Polytechnic State University. He was recently elected a member of the Royal Irish Academy and formally signed the book on February 14, 2005.

Under his innovative and visionary leadership over the past five years SFI has transformed the scientific research base in Ireland. It has:

- established globally competitive, comprehensive grants programmes for distinguished individual researchers and research groups and centres as well as awards that support the research learning of students and teachers.
- built a review system that bases all funding decisions on international peer review.
- awarded over 600 grants to assist in building research programmes in Ireland, providing support for more than 1,000 researchers and support staff from Ireland and countries around the world now working in Ireland.
- formed strong working relationships with numerous Irish government agencies to strengthen Ireland's research and development system.
- established major research partnerships in Ireland with Intel, Procter and Gamble, Wyeth, Bell Labs, HP, and Medtronic.
- forged R&D agreements with many US institutions and between China and Ireland and between India and Ireland.

An evaluation of the impact of SFI was recently undertaken by a review panel of internationally distinguished scientists and engineers and chaired by Professor Richard Brook, Director of the Leverhulme Trust in London. Presenting the report Professor Brook commented, "The Panel found that SFI has been a most positive driving force for change in the Irish research system in recent years. Impressive progress towards developing a strong research capability in Biotechnology and in ICT has been achieved in a very short time. Research of excellent quality is being funded by SFI and the existence of SFI funding is having a positive catalytic effect on the performance of research in Ireland in these fields. This report provides strong confirmation both of the need for SFI and of the contribution it has made, and continues to make, to strengthening our national research system, which is a fundamental building block for the knowledge economy to which we aspire. Ireland owes a debt of gratitude to the SFI Board and to Bill Harris and his colleagues for what they have achieved.

In a recent article entitled "Secrets of the Celtic Tiger: Act Two", Bill Harris wrote: "Ireland's recent experience with innovation and growth built on education has given it reason not to slip backward. It has begun to believe the potential truth of what Juan Enriquez of Harvard University wrote at the start of this decade, 'The future belongs to small populations who build empires of the mind.'

Ireland is acting as if it knows that empires of the mind emerge from the commitment to science and engineering that R&D requires, that powerful R&D starts with talent, and that a successful education system allows talent to flourish."

Ireland is indeed fortunate that we have had the talent of Bill Harris at the helm of SFI during its fledgling years. The benefits of his work will endure for many years to come and he is indeed a most worthy recipient of the highest honour of the National University of Ireland.

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