



## In recognition of Ireland's clinical medical researchers: Noel G McElvaney, T Joseph McKenna, Noel Caplice and Bryan Hennessy

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Acknowledgement of transcendent talent in medical science in Ireland is a great pleasure. Where Google Scholar citations and academic chairs point towards the pinnacle of achievement, young emerging talents may be inadvertently under-recognised. In this edition, the quality of those featured is indisputably stellar.

### Professor Noel G McElvaney

Professor Noel G McElvaney schooled at CBS Monaghan Town and is a 1982 UCD Mater Hospital graduate. In 1998, he was appointed Professor of Medicine at RCSI. Previously, from 1986 to 1988, he worked in respiratory medicine and pulmonology at the University of British Columbia, at Vancouver, Canada; from 1988 to 1993, he was the Senior Investigator in Pulmonary Branch, NHBLI, NIH, Bethesda, Maryland; from 1993 to 1995, he was the Assistant Professor in Cornell Medical Centre in New York, Pulmonary Branch, NIH, Bethesda, Maryland, and a Visiting Associate Physician at Rockefeller University, New York; and in 1996, he was appointed as a consultant at Beaumont Hospital, Dublin.

Professor McElvaney has published widely in the areas of cystic fibrosis (CF), alpha-1 antitrypsin deficiency (AATD), infection, immunity, and lung inflammation.

Under his directorship, the Respiratory Research Division has attracted national and international funding, including grants from the Health Research Board, Science Foundation Ireland, the Higher Education Authority, the CF Association of Ireland, and the US Alpha-1 Foundation. In 1999, Beaumont Hospital was the first site worldwide for intravenous administration of transgenic alpha 1-antitrypsin to individuals with alpha-1 antitrypsin deficiency. 2004 saw the first phase 1 study in Beaumont Hospital of Lomucin, a medication developed to block abnormal mucin production from bronchial epithelium. This work arose directly from research carried out in the Respiratory Research Division.

In 2001, Professor McElvaney founded the Alpha One Foundation of Ireland. Subsequently, he received funding from the Department of Health and Children to establish the first targeted detection programme for alpha-1 antitrypsin deficiency in Europe. This genetic condition is associated with risk for lung, liver, and skin problems, and Professor McElvaney has been carrying out research into AATD for over 20 years.

His research priorities include protease/antiprotease interactions in the lung; signal transduction in bronchial epithelium; innate defences of the lung; and gene therapy for lung diseases.

There are 670 publications listed in Google Scholar. His *h*-index is 66, *i*<sub>10</sub> is 179, and total citations are 14,485. A search on Pubmed reveals 215 listings as of January 2018.

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## Professor T Joseph McKenna

Professor T Joseph McKenna worked at St Vincents Hospital, Dublin, 1978 to 2007. He schooled at Terenure College, Dublin, and UCD Medical School. He completed his residency in Georgetown University in Washington and following completion of this in 1972, he became a Fellow in Endocrinology at Vanderbilt University in Nashville, Tennessee.

He played a central role in the development of steroid endocrinology in Dublin. He has served as Registrar and President of RCPI. In 1988, he was appointed the first Director of the Education and Research Centre in St. Vincent's University Hospital, and in 1994, Prof McKenna was appointed Professor of Investigative Endocrinology at University College Dublin. He is heavily involved in post-graduate medical training and revalidation in Ireland and abroad. He is also a Member of the Irish Medical Council and of the Health Service Executive Committee. He served on the editorial boards of *J Clin Endocrinol Metab*, *Endocrinologist*, and *Clinical Endocrinology*. He has co-authored a book on Endocrinology and has 215 listed publications in Pubmed.

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## Professor Noel Caplice

Professor Caplice graduated from University College Cork in 1986. After internship, medical residency, and early cardiology training at Cork University Hospital, he did a PhD in Cell and Vascular Biology at the University of Queensland, Australia (1992–1994), and a fellowship in clinical cardiology at the Prince Charles Hospital, Brisbane, Australia (1994–1996). He subsequently completed a post-doctoral fellowship in Molecular Biology (1996–1998) and an interventional cardiology fellowship (1999) at the Mayo Clinic, Rochester, MN, USA. In 1999, he was appointed Consultant Cardiologist at Mayo Clinic (1999) and directed the Vascular Stem Cell basic research laboratory there. During this time, he won the prestigious Mayo Foundation CR75 award and was funded by AHA and NIH. In 2002, he won the National Merck Award for

Atherosclerosis Research and, in 2003, was awarded Young Physician Scientist of the year by the University of Kentucky, Lexington.

He holds Fellowships from the Royal College of Physicians of Ireland and Australasia. During his training, he became the first Queensland trainee to win the Young Investigator Award of the Cardiac Societies of Australia and New Zealand (1995). In 2005, he took up appointment as the Professor of Cardiovascular Sciences at University College Cork (UCC) and a consultant physician/cardiologist at Cork University Hospital. He won the Stokes medal in Cardiology and University Inventor of the year in 2013 and 2015 respectively.

He currently directs the Centre for Research in Vascular Biology at UCC, and his research programme is funded by the NIH, Science Foundation Ireland (SFI)—PI grant, and Health Research Board (HRB)—Translational research. He holds eight US/EU patents and has over 15 invention disclosures. He has recently completed a first-in-man trial on a novel cytoprotective agent for acute myocardial infarction in patients with poor systolic function post-infarction. He serves on the advisory board of a number of the world's leading multinational pharmaceutical and biotechnology companies and as a scientific consultant in the fields of vascular biology, experimental animal models, cardiac cytoprotection post-myocardial infarction, and vascular stem cell biology.

He has published over 160 papers in the scientific literature as manuscripts and conference papers and his work has been cited > 5800 times with an *h*-index > 40.

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## Professor Bryan Hennessy

Professor Bryan Hennessy graduated in medicine from UCD in 1997. He completed the medical oncology registrar scheme at St James Hospital in 2003. He is a consultant oncologist at Beaumont Hospital and Lourdes Hospital Drogheda and associate professor at the RCSI Medical

School. He continues as an Adjunct Professor at the Anderson Cancer Center at the University of Texas where he graduated from the Medical Oncology Fellowship programme in 2008. He gained a higher doctorate from UCD in 2008. Prof Hennessy is an international leader in the application of reverse phase protein arrays (RPPA) for quantitative protein profiling to interrogate predictive and prognostic markers in breast, colon, and other cancers and has established this technology at RCSI.

His research team has had considerable impact on the field of kinase signalling research in cancers including gynaecological and breast cancers as evidenced by his peer-reviewed publication record (including > 100 publications). In addition, Professor Hennessy was the co-Principal Investigator of the two US National Institutes of Health (NIH) Specialized Programs of Research Excellence (SPORE) grants while working at M. D. Anderson Cancer Center.

Since returning to Ireland in 2009, Professor Hennessy has been a co-PI on Molecular Therapeutics for Cancer Ireland (MTCI), an SFI Strategic Research Cluster, and BREAST-PREDICT, an Irish Cancer Society collaborative cancer research centre, as well as PI on a HRB/SFI Translational Research Award and HRB Health Research Award. He is currently the clinical lead of Cancer Trials Ireland. Professor Hennessy has established the first Sequenom and reverse phase protein array (RPPA) platforms in Ireland; these are powerful genomic and proteomic

platforms with tremendous utility in translational cancer research. Recent preclinical research by Professor Hennessy and his research team in trastuzumab-resistant HER2-positive breast cancer has led to the initiation of a Bayer-funded heavily translational academic clinical trial of trastuzumab and the PI3K inhibitor copanlisib in Irish women with advanced PIK3CA-mutated HER2-positive breast cancer.

His indices on Google Scholar are *h*-index 58 and I10-index 120 with citation number 18,822.

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