

## **PRESIDENT'S RESEARCH AWARD, 2010**

### **Professor J. Oliver Dolly, International Centre for Neurotherapeutics (ICNT)**

Oliver Dolly is a world leader in molecular neurobiology who has performed pioneering investigations that helped decipher a molecular basis for neuronal communication, especially identifying and structurally-characterising SNARE ( an acronym derived from "**SNAP** (Soluble NSF Attachment Protein) **RE**ceptors") proteins responsible for the quantal release of transmitters.

He was responsible for discovering a family of potassium channels in the brain that indirectly control fundamental processes in neurochemical transduction and he has made seminal discoveries in biochemistry that have radically changed the way in which people think about ion channel structure and function in human nerves.

His research in elucidating the mode of action of toxins has led to significant clinical applications of major commercial importance and has resulted in many publications and patents. This work is being exploited in Ireland and in the US and exemplifies how fundamental research of the highest quality can lead to very significant medical-therapeutic developments with the capacity for industrial exploitation and job creation.

Professor Dolly graduated from NUI Galway with BSc and MSc degrees and with a PhD from the University of Wales at Cardiff. After positions at the State University of New York and University of Maryland, he was recruited by Imperial College London. Over almost thirty years at Imperial, he acquired a worldwide reputation for his work on molecular neurobiology. The importance of his papers is reflected by his numerous citations and invited lectures at premier international conferences. He was promoted to a Professorship at Imperial in 1989 and was awarded a DSc by the University of London in 2002.

He returned to Ireland in 2003 as a Science Foundation Ireland Research Professor and established the International Centre for Neurotherapeutics at Dublin City University. Over the intervening years he has received grants from SFI and IRCSET and very substantial non-exchequer funding from industry and US agencies. He is the Director of the successful HEA-funded PRTL I programme in 'Target-driven Therapeutics and Theranostics'. He was elected to membership of the Royal Irish Academy in 2007 and in 2008 he was awarded the Conway Medal of the Royal Academy of Medicine Ireland.

Professor Dolly has 263 publications including 179 refereed full papers with papers in Nature, PNAS and many leading journals. He has edited 4 books, contributed 50 book chapters and reviews and given many conference presentations. His work has been cited over 7,705 times. Fifty three Ph.D.s have graduated under his supervision and he is currently mentoring 4 Ph.D students and several Postdoctoral Fellows.

Oliver Dolly has and continues to make major contributions to our understanding of the basis of neuronal systems which are fundamental to our wellbeing. Recent peer reviews of his research at DCU have highlighted his achievements as a truly exceptional scientist in his field.

Professor Dolly's outstanding contributions to neurotherapeutics research make him a very worthy winner of the 2010 President's Research Award in Science and Engineering.

