

Citation for the Degree of Doctor of Medicine (honoris causa)

Wednesday 25 September 2013, 11.00am

Faculty of Health Sciences: All Schools
Faculty of the Professions: School of Economics

Presenter: Professor Justin Beilby, Executive Dean, Faculty of Health Sciences

Chancellor, it gives me great pleasure to present to you Emeritus Professor Grant Sutherland AC

Professor Grant Sutherland is Emeritus Geneticist at the Women's and Children's Hospital (WCH) and, since 1991, has been an Affiliate Professor of the University of Adelaide, in the School of Paediatrics and Reproductive Health. He was Head of the Department of Cytogenetics and Molecular Genetics at the WCH for 27 years, and a WCH Foundation Research Fellow for the subsequent 5 years. His major work has been the cytogenetic and molecular characterisation of fragile sites on human chromosomes, including the Fragile X, for which he was awarded the 2001 Burnet Medal by the Australian Academy of Science.

In 1987 a fundamental decision was taken to learn all that is to be known about the approximately 85,000 genes in the human body at an estimated cost of \$3 billion. The body responsible for this program was the Human Genome Organisation (HUGO), the mission of which is to promote international collaborative effort to study the human genome and the myriad issues raised by knowledge of the genome. Professor Sutherland's study of fragile sites led to his involvement in the characterisation and understanding of the human genome. In recognition of his major scientific contributions, he was elected President of the HUGO in 1996. His was the only Australian group to be actively involved in the worldwide Human Genome Project.

Professor Sutherland has been acknowledged by his peers in many ways. In 1998 he was made a Companion of the Order of Australia. This was for "service to science in the field of human genetics research and to the human genome project and, in particular, for his contribution to the discovery of the importance of 'fragile chromosomes' in the field of inherited diseases." In the same year he was also a joint winner of the Australia Prize (precursor to the PM's Prizes for Science), in the Molecular Science Theme, for his research into fragile-X syndrome. Professor Sutherland was awarded a Centenary Medal (for service to Australian society and science in human genetics and genomes) in 2001. This award is for people who have served Australia and whose achievements in science, research or the arts made a notable impact at a national or international level. In that year, he was also acclaimed as an 'Australian Achiever' in the National Australia Day Council awards; a recognition given to eminent Australians for outstanding achievement in a particular field. In 2004, Thomson Reuters ISI included Professor Sutherland in a group titled 'The Magnificent Seventeen, Giants of Australian Research'. The 17 were selected for the number of times their research papers have been or cited by other researchers. Professor Sutherland was further acknowledged by Thomson Reuters when they included him in their ISI 'Highly Cited Research' list, under the category of Molecular Biology and Genetics.

Professor Sutherland is one of the world's leading molecular geneticists. He is distinguished for applying classical genetics, cytogenetics and molecular genetics to the analysis of genetic defects which underlie a number of human genetic diseases, including some forms of mental retardation, myotonic dystrophy, Huntington's disease and some types of epilepsy. He has also made significant contributions to human gene mapping, the Human Genome Project and the molecular genetics of epilepsy and intellectual disability. A particularly significant discovery was his demonstration and detailed investigation of the nature of fragile sites, unstable regions of human DNA which contain a repetitive three base pair sequence.

I am very pleased and proud to present to you Chancellor, for admission to the degree of Doctor of Medicine *honoris causa* — Emeritus Professor Robert Grant Sutherland.