



## **Professor Emeritus Alan Mackay-Sim**

**Griffith Institute for Drug Discovery, Griffith University**

2017 Australian of the Year Alan Mackay-Sim is a neuroscientist and stem cell scientist. His research career has focused on how the sensory neurons in the nose are replaced and regenerated from stem cells. He is a world leader in spinal cord injury research. He led the Brisbane team in a world-first clinical trial in which the patient's own olfactory cells were transplanted into their injured spinal cord in the first stages of a therapy to treat human paraplegia. Alan established the National Centre for Adult Stem Cell Research in 2006. He developed an adult stem cell bank from over 300 people with different neurological conditions including schizophrenia, Parkinson's disease, mitochondrial mutation disorders, Hereditary Spastic Paraplegia, ataxia telangiectasia and motor neuron disease. These stem cells are used to identify the biological bases of neurological diseases using genomics, proteomics and cell function assays and this work is leading to new drug therapies.