Prof. Halliday is a career neuroscientist specialising in neurodegeneration. She has been a NHMRC Fellow since 1990, was appointed Professor of Medicine (2003) then of Neuroscience (2008), then NHMRC Senior Principal Research Fellow (2010) at the University of New South Wales, and now at the University of Sydney. She works on the pathobiology of different stages of neurodegeneration, knowledge necessary for the development of therapies and strategies for the prevention of neurodegenerative syndromes. She is highly productive (~400 publications) and leads a research program of 100 researchers tackling non-Alzheimer's neurodegeneration. Her laboratory developed a disease severity staging scheme for non-Alzheimer frontotemporal dementias, and in association with Professor Hodges and colleagues developed this scheme into a simple tool for clinical use. Her recent research has focused on understanding how critical proteins are involved in the pathogenesis of Parkinson’s disease, how memory circuits are affected in the different forms of dementia, and determined both common and different pathogenic mechanisms in frontotemporal dementia.