# Parkinson’s Disease Public Forum

# Thursday 3 April 2025

## Speaker Bios

## Chair

### Simon Lewis | Professor of Cognitive Neurology | Parkinson’s Disease Research Clinic, Macquarie University

Professor Simon Lewis is a Consultant Neurologist and Professor of Cognitive Neurology at Macquarie University. He has published over 300 peer review papers, 2 books and 8 book chapters and has attracted over $10 Million in funding from various sources including the NHMRC, ARC and Michael J Fox Foundation to support his research interests targeting Dementia and Parkinson’s. He is the Clinical Lead for the Australian Parkinson's Mission.

In 2014, he was awarded the Leonard Cox Award by the Australia and New Zealand Association of Neurologists for achievements of an early career neurologist who has already made a significant contribution to neuroscience.

## Guest Speaker

### Roger Barker | Professor of Clinical Neuroscience | University of Cambridge, UK

Professor Roger Barker is the Professor of Clinical Neuroscience at the University of Cambridge and Consultant Neurologist at Addenbrooke's Hospital. He runs the regional NHS Huntington's Disease (HD) as well as clinics for Parkinson's Disease (PD). His research investigates the heterogeneity of these disorders and its basis which has informed work he has done on trialing new experimental therapeutics for these conditions including cell and gene therapies as well as drug repurposing. He is the lead academic scientist of the ARUK-funded Drug Discovery Institute in Cambridge as well as the John Van Geest Centre for Brain Repair. He is Co-editor in chief of the Journal of Neurology.

**Abstract: Improvements in the last 25 years**

Over the last 25 years our understanding of Parkinson's disease (PD) has changed dramatically. This includes a better understanding of different types of disease and their basis including genetic variants responsible for some of these differences. In addition, our ability to better study diseases in the lab has been transformed by this information and the capacity to make nerve cells using the patient’s own cells through so-called iPSC technologies and an array of tools to study in great detail pathology within individual cells. Linked to all this has been a deeper understanding of what might be driving the disease itself, including the idea that the protein that lies at the heart of the disease (alpha-synuclein) may spread from cell to cell seeding pathology as it does so, which in turn has led to a whole swathe of alpha-synuclein immunisation trials. In this talk, I will try and draw these different strands together to discuss how all this work impacts our understanding of PD today and the treatments of tomorrow.