



## Mark Hutchinson, The University of Adelaide, Australia

### Bio:

Professor Hutchinson is the Director of the ARC Centre of Excellence for Nanoscale BioPhotonics (CNBP) and a Professor within the School of Medicine at the University of Adelaide.

Professor Hutchinson's research explores the "other brain" or the other 90% of cells in the brain and spinal cord. These immune-like cells are termed glia. Mark's research has implicated the brain immune-like cells in the action of drugs of dependence and the negative side effects of pain treatments. He has pioneered research which has led to the discovery of novel drug activity at innate immune receptors. His work has enabled the translation of compounds at the lab bench to clinical agents used at the bedside.

He is now added Director of the CNBP to his roles. The CNBP is an ARC Centre of Excellence with \$38M of funding committed for 7 years, headquartered at The University of Adelaide, with nodes at Macquarie University, Sydney and the RMIT, Melbourne. We are partnered with universities and companies in Europe, the US and China, as well as other Australian institutions. Prof Hutchinson's work with the CNBP is to "Discover new approaches to measure nano-scale dynamic phenomena in living systems" and allow the first minimally invasive realtime visualisations of the "other brain".



### Presentation Title:

*Big biophotonics science: balancing the journey and the destination.*

### Abstract:

This presentation will provide an overview of biophotonics at the nano/micro scale level – including current status of the technology and applications, current directions, and challenges facing the field. Specific attention will be given to unpacking if biophotonics at the nano/micro scale has any challenges that are different to other big science? Additional topics that will be explored will include the unique and general issues of satisfying the funders of this work, engaging with politicians and end users to ensure the importance and relevance of this area is understood. And finally, some grand visions for what the market might look like in 10 years for biophotonics at the nano/micro scale level.