# CAI Annual Symposium 2021

## Speaker Profiles

### Dr. Rebeka R. Zsoldos

Rebeka R. Zsoldos is an animal bio mechanist who graduated at the Animal Science Faculty of the University of Kaposvar/Hungary (2008). In Vienna/Austria, she then completed her PhD on the biomechanics of the equine cervical vertebral column at the Movement Science Group at the Veterinary University (2011), followed by her own collaborative research project titled “Generic Motion Models based on Quadrupedal Data” at the University of Natural Resources together with the Veterinary University and the University of Bonn/Germany (Multimedia, Simulation and Virtual Reality Group). During this time, she taught Animal Biomechanics to undergraduate and graduate students. Having completed the project, she continued work with her collaborators at the University of Bonn in Germany. After that she worked on a mathematical approach to the elastic behaviour and shape of the equine spine as a postdoctoral research fellow at the Computational Sciences Group, King Abdullah University of Science and Technology (KAUST) in Thuwal in the Kingdom of Saudi Arabia.

## Prof. John Hooper

Professor John Hooper is a Mater Foundation Fellow and a Senior Research Fellow at Mater Research. John leads the Cancer Cell Biology Research Group and is the author of over 70 publications with his research currently focused on understanding molecular mechanisms underlying cancer. John's lab has a particular interest in aggressive malignancies, including cancers of the prostate, colon/rectum, pancreas and ovary, and works closely with Mater clinicians to identify key areas of need in these malignancies, with an ongoing emphasis on the role in cancer of cell surface receptor systems. The lab's work is underpinned by molecular, enzymology and cell biology approaches, analysis of human tissues and pre-clinical models of cancer to identify cancer promoting molecular pathways and to test new anti-cancer drugs. Since 2010, John has helped to drive the establishment of gynaecological, urological and breast cancer research teams at the Mater Hospitals. These are closely aligned with Mater's clinical multidisciplinary teams and involve surgeons, medical oncologists, pathologists, palliative care physicians, nurses and basic researchers. John is grateful for the more than $6.5 million in research funding that has supported his research from a range of agencies including the National Health & Medical Research Council (NHMRC), Mater Foundation, the Australian Research Council, Cancer Council Queensland, the Wesley Research Institute and The Prostate Cancer Foundation of Australia.

## Dr. Hongfu Sun

Dr Hongfu Sun completed his PhD in Biomedical Engineering at the University of Alberta in 2015, followed by postdoctoral training at the University of Calgary until 2018. Hongfu then joined the BME team in the School of ITEE at UQ in 2019. He was awarded an ARC DECRA fellowship since 2021. His research interests include developing novel MRI contrast mechanisms, e.g. Quantitative Susceptibility Mapping (QSM), fast and multi-parametric MR acquisitions, as well as advanced image analysis techniques, e.g. machine/deep learning, to study neuroscience and neurological diseases.

## Professor Paul E. Dux

Prof Paul E. Dux is a psychologist and neuroscientist who received his PhD from Macquarie University and then undertook a postdoctoral fellowship at Vanderbilt University. He has been faculty in the School of Psychology at The University of Queensland since 2009. Dux leads a group that uses cutting edge techniques to study the cognitive and neural underpinnings of human information-processing capacity limitations in health and disease. Specific interests are the mechanisms of attention and executive function and the efficacy of cognitive training and brain stimulation and how they change the brain to improve performance.