

# **Speed Dating Table Hosts**

# Applied Artificial Intelligence Institute (A<sup>2</sup>I<sup>2</sup>)

Thom Quinn is a bioinformatician currently working with the Applied Artificial Intelligence Institute (A2I2) at Deakin University in the space of interpretable machine learning, and is an active developer of new software for the analysis of gene expression data and microbiome count data. Having first trained as a biologist, he strives to develop methods, workflows, and frameworks that are accessible to practitioners. He spends most of his research time applying data science to medical genomics, and is motivated by the possibility that we may someday harness genomic data to improve medical prognostics, diagnostics, and therapeutics.

#### **Deakin Biostatistics Unit**

A/Professor Steve Bowe is an Associate Professor of Biostatistics and biostatistics consultant with the Biostatistics Unit at Deakin University. He has conducted meta analysis workshops for Deakin researchers and for emerging nutrition researchers and PhD students, and has been a research collaborator with WHO Study on global AGEing and adult health (SAGE) in Geneva and a research collaborator with the Australian Longitudinal Study on Women's Health, as well as collaborating with Barwon Health's Dept of Infectious Diseases. Steve has over 15 years' experience in longitudinal research designs and analytic strategies, such as: Generalised estimating equations, linear mixed effects modelling, multilevel models, network meta analysis, meta analysis, complex survey data, survival analysis and Bayesian statistical inference. He has extensive experience with statistical software such as: Stata, R, Minitab, SAS, SPSS and Mplus.

### Centre for Sport Research

**Dr Aaron Fox** is a researcher within the Centre for Sport Research at Deakin University. His research involves examining the biomechanics and control of human movement, and how these can be optimised to minimise injury risk and maximise performance. Aaron completed his PhD at Deakin University in 2016, focusing on anterior cruciate ligament injury risk and prevention in female athletes. Since then, his research applying advanced biomechanical methods to sporting and clinical problems has spanned across multiple domains – such as patellofemoral pain, tibial stress fractures, anterior cruciate ligament rupture, and shoulder instability.

## **Centre for Sport Research**

**Dr Dominique Condo** is a senior lecturer in sports nutrition and accredited sports dietitian. She holds a joint position between Deakin University and Geelong Cat Football club. Dr Condo's current research areas include the relationship between diet and sleep in athletes and

assessment of energy availability in team sport athletes. Her research involves the collaboration with industry leaders including the AFL, Geelong Cats football club, Netball Australia and Barwon Sports Academy.

### **CHIME**

Renae Carolin is the Interim Director for CHIME, the newly formed 'Change to Improve Mental Health' Translational Research Partnership between Deakin University and Barwon Health's Mental Health, Drugs and Alcohol Services (MHDAS).

CHIME is keen to support translational mental health research across a range of research domains including:

- Mental health systems, service delivery and clinical models of care
- Consumer and carer engagement
- Novel therapies, therapeutics and digital technologies
- Design of mental health facilities for mental health and well-being
- Leadership and workforce development

### **GCEID**

Professor Soren Alexandersen is a Veterinary Pathologist, Virologist and Epidemiologist specialising in molecular pathogenesis, epidemiology and control of virus infections since 1982. In October 2015, he joined Deakin University and Barwon Health as a Professor and Director of the Geelong Centre for Emerging Infectious Diseases (GCEID), a One Health collaborative Centre of Deakin University, Barwon Health/University Hospital Geelong and the CSIRO Australian Animal Health Laboratory. He has worked and given invited lectures in most parts of the world and has published more than 150 international scientific papers.

## **GCEID**

Dr Anthony Chamings is a veterinarian and associate research fellow at the Geelong Centre for Emerging infectious diseases. His research interests span infectious diseases affecting both humans and/or animals. He has worked on viral and bacterial diseases and has expertise in investigating the molecular epidemiology of disease and the use of next generation sequencing to detect variant pathogens and to study virulence factors. His current/recent projects include SARS-CoV-2, human parechovirus, rhinovirus, antimicrobial resistance and detection and characterization of a wide range of infectious agents in commercial and wild animals.

#### **GCEID**

**Luba Sominsky**, Senior Scientist, Barwon Health, GCEID is a neuroimmunology researcher (PhD 2014), with broad interests within the fields of early life programming, metabolic, reproductive and mental health. Her work has focused on the impacts of environmental challenges, including psychological stress, diet and infections on neurodevelopment, adult stress responsivity and female reproduction. Luba's background and expertise are in the use of animal models of disease, including behavioural assessments and the use of molecular techniques for mechanistic investigations. She is very interested to implement this knowledge in a translational project that would allow the investigation of an issue of critical importance in human health utilising a cross-species approach.

### **Health Economics**

A/Professor Martin Hensher is an emerging leader at the intersection of health economics and sustainable health and healthcare. With 30 years' experience of translating health economics into policy in government health departments in the UK, South Africa and Australia, he joined Deakin University in 2019. He is one of only a handful of health economists globally to have published on the economics of environmentally sustainable health and healthcare. He has published on the application of ecological economics to health and healthcare in BMJ, Health Affairs, Resources, Conservation & Recycling, and Global Sustainability. He has a long-standing publication track record on alternatives to hospital care, public health strategy and evaluation, and the economics and financing of health care systems in low and high-income countries, with commissioned publications from the World Health Organization, the World Bank and the US National Institutes of Health.

### **IMPACT**

Professor Michael Berk is an NHMRC Senior Principal Research Fellow at Deakin University, where he heads the IMPACT institute. He is listed by Thompson Reuters as amongst the world's most influential scientific minds (2015-2020) and was awarded the Brain & Behaviour (NARSAD) Colvin Award for Mood Disorders in 2015, the Victoria Prize for life sciences in 2019 and the International Society for Bipolar Disorders Bob Post award for mentorship in 2020. He is past president of the International Society for Bipolar Disorders and the Australasian Society for Bipolar and Depressive Disorders. His major interests are in the discovery and implementation of novel therapies.

### **IMPACT**

**Professor Ken Walder, Chair in Metabolic Diseases, Deakin University,** leads a team with expertise in cell biology, molecular biology, drug repurposing, and biomarker discovery across three major current programs:

- 1) BD Stem Cell project. We collect blood samples from patients with bipolar disorder and healthy, matched controls. We reprogram PBMCs into induced pluripotent stem cells, and then differentiate these into cortical networks (neuron/astrocyte cocultures). We then look for differences between the patients and controls for factors such as mitochondrial function, oxidative stress and inflammation, and we also investigate using hypothesis-free approaches such as transcriptomics, metabolomics and genome-wide methylation profiling. We will also use the cortical networks to screen drug libraries to repurpose drugs to treat bipolar disorder.
- 2) Myalgic encephalomyelitis/chronic fatigue syndrome project. Similar to above, but with ME/CFS patients
- Biomarker program. Working with a range of clinical researchers across Australia, we measure a range of circulating factors in plasma/serum samples and analyse whether these can predict treatment response in clinical trials. Typical methods used include ELISA and Luminex (multiplexed magnetic bead technology).

## Institute for Physical Activity and Nutrition (IPAN)

**Professor Kylie Hesketh** co-leads the Healthy Active Living Domain within the Institute for Physical Activity and Nutrition at Deakin University. Her research centres on physical activity, sedentary behaviour and obesity prevention in children and families with a particular focus on

the early childhood period. Her studies span epidemiology and behavioural intervention including mHealth, with a focus on translation and 'real world' applicability.

# **Institute for Physical Activity and Nutrition (IPAN)**

Associate Professor Nicole Kiss is an advanced APD with more than 20 years' experience in cancer nutrition including clinical, research and health service management positions. Nicole is a Victorian Cancer Agency Clinical Research Fellow and co-lead of the Exercise and Nutrition for Cancer research group in the Institute for Physical Activity and Nutrition at Deakin University. Nicole's research interests include interventions to optimise nutritional and functional outcomes during and after cancer therapy with a particular focus on body composition, cancer-related malnutrition and sarcopenia. Nicole has been a member of steering committees for the development of multiple evidence-based guidelines on nutrition and cancer and led the development of the position statement on cancer-related malnutrition and sarcopenia for the Clinical Oncology Society of Australia.

More to come...