



Meet the Participants

Red Team

Dr Xin You Tai: University of Oxford

Wellcome Trust Academic Fellow (DPhil student Biomedical and Clinical Sciences)

My research focus is examining cognitive, and particularly hippocampal, dysfunction across different neurological conditions and ageing. I am interested in the electrical disruption as a mechanism of memory problems and network changes in temporal lobe epilepsy and cerebrovascular disease and how this relates to ageing and other neurodegenerative conditions. I am also looking to better understand how memory works in healthy individuals including how we shift information from short term to long term memory.

Gabriel Mateus Bernardo Harrington: Keele University

PhD Student

I completed my BSc in Biological Sciences in 2016 at Lancaster University. Following this I spent 6 months doing a project testing next-generation cochlea implants at the Bionics Institute in Melbourne, Australia. I started my PhD at Keele University in October 2018 and am due to finish in 2021. My project title is "Exploring the serum proteome of spinal cord injured patients: Identifying prognostic biomarkers and new treatment targets".

My research interests surround: Prognostic modelling, biomarkers, proteomics, reproducible research. You'd never know from the above but I'm a bit of nerd and enjoy coding, experimenting with Linux and computer science in general.

Dr Cameron Shand: UCL (University College London)

Research Fellow in Disease Progression Modelling and Machine Learning for Clinical Trials

Cameron is currently a research fellow in the Progression Of Neurodegenerative Disease (POND) group at UCL, looking at how machine learning can be used to better characterise disease trajectories for patients with Alzheimer's disease. These models can then allow us to improve clinical trial screening to find the right patient at the right time. Prior to this, he completed his PhD on the interface between clustering and evolutionary algorithms at the University of Manchester.

Dr Claire Durrant: University of Edinburgh

Race Against Dementia/Dyson Fellow and UKDRI Emerging Leader

Dr Claire Durrant relocated from Cambridge to Edinburgh to become the Race Against Dementia Dyson Fellow. Dr Durrant's project, funded by the James Dyson Foundation, investigates the role of tau, a key protein implicated in both frontotemporal dementia and Alzheimer's disease. Over the five-year project, Dr Durrant is investigating the role of tau in keeping synapses – the connections between brain cells - healthy and how these change in Alzheimer's disease. The tau protein is an important target for future dementia treatments and understanding more about its role in Alzheimer's disease will be key for the success of this approach.



Meet the Participants

Jimmy Headdon: McLaren

Senior Manager, Software Development

Jimmy Headdon is the Senior Manager for Performance Software at the McLaren Racing Formula 1 team, having spent 10 years within the McLaren Group delivering tools to gain competitive advantage through race strategy, driver performance and vehicle performance. He also worked as a technical lead for motorsport telemetry systems at McLaren Applied Technologies, and as a consultant in media & broadcast for global telecoms, and for UK insurers in vehicle & fleet telematics.

Jimmy is an active STEM ambassador and mentor, having founded a multi award-winning computer games company at age 17, and enjoys delivering diverse, impactful solutions in high-pressure environments.

Paul Tombs: Cranfield Alum

Cranfield BGP alumnus Paul Tombs has serially co-founded 3 businesses. Selling each business in turn to develop and grow a more ambitious business using the experience and knowledge gained from each. From the original business “designing and selling DIY products to high street retailers” he spotted a gap in the market and sold the business in 1995 leading to his second business developing electronic systems and services for tracking and analysing consumer behavior, which he sold in 2007. Paul’s latest product “Car Facts Disc” is for car and vehicle enthusiasts allowing owners to share details about their vehicle, revealing its modifications or restoration work, adventures on the racetrack or road, along with images & videos – it resembles the look of the UK’s old paper tax disc displayed on the windscreen. The innovative method allows any passer-by, event visitor, or fellow enthusiast to use their smartphone camera to scan the QR code to view the motor’s personalised trivia. He’s a serious classic car nut and a member of the Royal Automobile Club. He’s can usually be seen braving the weather in November with his wife on the London to Brighton veteran car run in a 1904 Cadillac. www.factsdisc.com