Adam Jaffe

Adam undertook his MD thesis on Gene Therapy in Children with CF at Imperial College and Royal Brompton Hospital. He was subsequently appointed as a Consultant in Respiratory Research at Great Ormond Street Hospital for Children, London and headed up Respiratory Medicine Research at the Institute of Child Health London before moving to Sydney 14 years ago.

His research career centres on translational research specifically aimed at improving child health outcomes. His research interests lie in the areas of cystic fibrosis, childhood pneumonia, emphysema, asthma and rare "orphan" lung diseases.

Adam has published in excess of 170 peer reviewed publications and has been associated with more than $12 million in grant awards including two current NHMRC grants as Chief Investigator.

Peter Wark

Peter Wark is a senior staff specialist in Respiratory and Sleep Medicine at John Hunter Hospital, Newcastle and a conjoint Professor with the University of Newcastle. He is a senior investigator with the Priority Research Centre for Healthy Lungs at the Hunter Medical Research Institute. He is also a chief investigator in the NHMRC Centre of Excellence in Severe Asthma.

His research interests are airway inflammation in the context of chronic airways disease, innate immunity and the role of infection in chronic airways disease. His group has developed expertise in identifying respiratory viruses in airway secretions and developing an in-vitro cell culture model of the airway epithelium that we use to model the effect of infection and inflammation. His research focuses upon factors that increase susceptibility to virus infection in asthma, COPD, Cystic Fibrosis and bronchiectasis. Characterising airway inflammation and innate immune responses in chronic airways disease and applying this to clinical care, as well as the development of precise individualised management strategies.

He is the centre director for the John Hunter Adult Cystic Fibrosis clinic that manages over 130 adult patients with CF in the context of a multidisciplinary team. He works in the severe asthma clinic as well as in general respiratory clinics at John Hunter Hospital and takes part in Aboriginal outreach clinics at Narrabri and Moree working with the Kamillori people. He is chairperson for the Hunter New England Local Hospital network respiratory stream, responsible for the provision of respiratory services throughout the Hunter New England area, with a catchment population of 840,000. He is a board member of Cystic Fibrosis Australia.

Peter qualified as a Bachelor of Medicine at the University of Newcastle, Australia in 1991. He qualified as a specialist in General and Respiratory and Sleep Medicine and was made a Fellow of the Royal Australasian College of Physicians in 1999. He was awarded a PhD under the supervision of Professors Peter Gibson and Michael Hensley at the University of Newcastle, Australia in 2001. He was made a Fellow of the Thoracic Society of Australia and New Zealand in 2017.

From 2001-2005 he was a post-doctoral research fellow under an NHMRC Neil Hamilton Fairley Travelling Fellowship at the University of Southampton and University College London, under the supervision of Professors Stephen Holgate, Donna Davies and Sebastian Johnston. He was a member of the TSANZ executive board and chairman of the clinical care and resources subcommittee from 2011 to 2015. He was a board member of the National Asthma Council of Australia from 2011 to 2014.
He is currently on the board of directors for Cystic Fibrosis Australia and the National Asthma Council.

Peter is married to Katrina, and parents to Kirsty, Marden, Jasmine, Sarah, David, Charlotte and Eliza and grandfather to Elijah and Cohen.

Shafagh Waters

Shafagh has recently established (and run) the Research Lab at molecular integrative Cystic Fibrosis (miCF) at UNSW Sydney. The lab is the molecular mode of the miCF Research Centre, which was established as a collaborative effort between researchers and clinicians.

Her research aims to understand the epigenetic basis of complex evolutionary innovations. Shafagh is especially interested in understanding the complex epigenetic basis underlying epithelial developmental. In the past 18 months she has established a pipeline for collection and bio-banking of bodily fluids, as well as culture of primary nasal/bronchial and rectal organoids. She is currently using these in vitro models to rest small molecules to target a non-coding RNA with CFTR modulating properties.

In 2019 and 2020 Shafagh was awarded the David Millar Giles Innovation Grant on “An Australian Alliance of personalised lab grown mini-organs to save the rarest of them all”. This application represents an alliance of 11 CF clinics across Australia to create a nationwide stem stell based cell biobank for use in predictive drug discovery and efficacy platform (CF Avatar) created by miCF research centre (UNSW) from patients with rare CFTR mutations. The grant provided financial support towards our research to expand our precision medicine predictive platform and create an Australian wide network to cover majority of CF patients with rare CFTR mutations.

Gerard Kaiko

In 2019 Gerard was awarded $80,000 for the 2019 Innovation Grant from the Australian Cystic Fibrosis Research Trust (ACFRT) to consider “Optimising patient-derived steam cell technology in cystic fibrosis to predict CFTR modulator response”.

The Grant allowed Gerard to investigate how stem cell technology can grow airway and intestinal cells into organoids from tiny biopsies taken from patients with cystic fibrosis (CF). Then use laboratory assay employing these personalised therapies in the clinic. The ultimate aim is to get the right patient onto the right drug and optimising the efficacy of these therapies for the CF patient population and increase access to CFTR modulators.

Initial findings suggested this new technology offers many benefits over existing methods, and their ongoing studies over the next 12 months will establish the accuracy of their laboratory tests for predicting patient response to CFTR modulator treatment in the clinic. The study has wide ranging potential to influence clinical practice and implementation of modulator therapy in CF over the next decade.

Gerard currently works in stem cell technology at the University of Newcastle and Hunter Medical Research Institute together with the Hunter New England Health Network. The ACFRT Grant allowed Gerard to fund this study in order to recruit more patients and provide them the opportunity to be tested to predict their response to multiple CFTR modulators. This continues to international understanding of whether in vitro essays can predict clinical response to modulators in order to get the right drug to the right patient and eventually increase access to life extending modulator therapy.

15/1/2020