# Respiratory Genomics Conference 2023 Speaker Biographies

**Oliver Burren, Associate Principal Scientist, Centre for Genomics Research, AstraZeneca.**

Oliver is an Associate Principal Scientist within the Centre for Genomics Research (CGR) genome analytics team, where he is responsible for the analysis of AstraZeneca’s IPF genomic portfolio. Prior to joining AZ in 2020, he was Director of Genome Informatics within Prof. Ken Smith’s Laboratory, at the University of Cambridge, performing genomic analysis of primary immunodeficiency as part of the NIHR Rare Disease Bioresource collaborative project. He has a PhD in Medicine (statistical genetics) from the University of Cambridge where he was supervised by Dr Chris Wallace.

**Dr Michael H. Cho, Associate Professor of Medicine, Brigham and Women’s Hospital and Harvard Medical School.**

Dr. Michael H. Cho, MD, MPH, is an Associate Professor of Medicine at Brigham and Women's Hospital and Harvard Medical School in Boston. Dr. Cho completed his pulmonary and critical training at the Harvard Combined Program and received an MPH at the Harvard School of Public Health. Dr. Cho studies the role of genetics and other omics in susceptibility and heterogeneity of chronic lung disease, with a focus on COPD. Among his scientific contributions, he has led or co-led large scale genome-wide association studies (GWAS) and sequencing studies in COPD, interstitial lung abnormalities, and other related phenotypes; the development of polygenic risk scores in COPD; and functional and integrative omics studies of COPD risk loci. He is a past chair of the American Thoracic Society Section of Genetics and Genomics, leads the International COPD Genetics Consortium, and is an elected member of the American Society of Clinical Investigation.

**Professor Ian Hall, Professor of Molecular Medicine, University of Nottingham.**

Professor Ian Hall is Director of the Nottingham Biomedical Research Centre hosted by the NUH Trust and the University of Nottingham. He completed his clinical studies at the University of Oxford before moving to Nottingham for specialist training and an initial research period. Subsequently he was an MRC travelling fellow at the University of Pennsylvania and National Asthma Campaign Senior Research Fellow back in Nottingham. From 2009-2015 he was Dean of the Faculty of Medicine. He holds the Boots Chair in Therapeutics. Professor Ian Hall's main clinical interest is in Respiratory medicine, especially asthma. He runs a research group which works on the genetics and cell biology of airway disease.

**Dr Iain Kilty, Chief Scientific Officer, Sitryx Therapeutics.**

Iain is CSO at Sitryx Therapeutics and a venture partner at SV Health Investors. He has 25 years of global biopharmaceutical industry experience leading programmes from idea through to clinical development across a range of indications and therapeutic modalities. He developed as a drug discoverer through a 22-year tenure at Pfizer, starting as an internal industrial postdoc and taking on roles of increasing responsibility working across the drug discovery paradigm from target identification to leading the early clinical cluster in Rheumatology and Dermatology. Ultimately Iain served as Vice President Preclinical Sciences in the Inflammation and Immunology Research Unit, where he was responsible for a portfolio of both small and large molecule programmes targeted across rheumatology, dermatology and gastroenterology. Iain left Pfizer at the end of 2018 to join Atlas Venture where he was the Chief Scientific Officer of Quench Bio, responsible for the company’s scientific strategy and execution, whilst also working as an Entrepreneur in Residence across the Atlas portfolio. Iain graduated with a BA and MA Cantab in Biochemistry from Jesus College, University of Cambridge, UK, before completing his Ph.D in the Breast Cancer Research Laboratories at the University of Liverpool, UK.

**Professor Turi King, Professor of Public Engagement and Genetics, University of Leicester.**

Turi is a scientist, presenter, speaker and author who is passionate about communicating science to the public.

Turi uses genetics in the fields of forensics, history and archaeology. Alongside this she’s worked in the field of genetic genealogy since 2000. She is perhaps best known her work “cracking one of the biggest forensic DNA cases in history” (Globe and Mail, February 2013) leading the genetic analysis for the identification of  [King Richard III](https://youtu.be/-NDuzZiDWFM). She is an Honorary Fellow of the British Science Association, a Fellow of the Society of Biology, a Fellow of the Society of Antiquaries of London, a Member of the Chartered Society of Forensic Sciences and a Member of the International Society of Forensic Geneticists.

**Dr Stephanie J. London, Senior Investigator and Deputy Chief of the Epidemiology Branch, National Institute of Environmental Health Sciences.**

Dr. Stephanie J. London, MD, DrPH, is a Senior Investigator and Deputy Chief of the Epidemiology Branch at the National Institute of Environmental Health Sciences, part of the National Institutes of Health located in Research Triangle Park, North Carolina. Dr. London takes studies genomic influences on pulmonary function, asthma, and allergic outcomes and their interaction with the environment across the life-course. As the chair of the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) Pulmonary group she has led large scale genetic and epigenomewide methylation studies of pulmonary function and smoking and collaborated with other consortia. In 2013 she started the international Pregnancy and Childhood Epigenetics Consortium (PACE) to bring together pregnancy and child cohorts from around the world to enable well-powered studies of the influence of the prenatal environment on newborn and child epigenome-wide methylation and the influence of methylation on health outcomes. PACE includes over 45 studies and has published over 25 papers. She is the past chair of the American Thoracic Society Assembly on Environmental and Occupational Population Health.

**Professor Martijn Nawijn, Functional Genetics of Chronic Respiratory Disease, University of Groningen.**

I am fascinated with the impact of genetic variation on the function of the structural cells of the airway wall, in particular the airway epithelium, their interactions with the innate and adaptive immune system and the consequences thereof for chronic, respiratory diseases. I perform translational research into the interaction between genetic variation and environmental exposures on the inception, exacerbations, and spontaneous or treatment-induced remission of asthma and COPD. I have been involved with the Human Cell Atlas (HCA) project since the kick-off in October 2016 in London. Within the HCA, I have been working to prioritize the lung as one of the flagship organs for the consortium. Lung is unique in its anatomical structure, allowing efficient use of a common coordinate framework relative to tissue landmarks, and can be sampled in live healthy volunteers, while larger tissue specimens are also available to many research groups through lung resection and organ transplant programs. I am coordinator for the Lung Biological Network within the Human Cell Atlas, a well-organized and highly integrated group of respiratory scientists, as evidenced by the concerted action in response to the COVID-19 pandemic leading to a series of papers from the network and open sharing of data on dedicated platforms.

I coordinate the discovAIR Horizon2020 consortium funded by the European Commission to build the Lung Cell Atlas ([https://discovair.org](https://discovair.org/)), which has 15 partners and will produce an adult lung cell atlas integrating scRNA/ATAC-Seq data with data from 4 different spatial methods. Moreover, my lab participates in the CZI Seed Network for the Lung Cell Atlas v1.0, and we have weekly VTCs with the CZI Seed Network coordinator (dr. Misharin, NorthWestern University) to harmonize the work between the two consortia.

**Dr Emma Rawlins, Senior Group Leader, Gurdon Institute, University of Cambridge.**

Emma Rawlins obtained her PhD in developmental biology from the University of Edinburgh in 2002. For her PhD she worked with Dr Andrew Jarman on cell fate specification in the developing Drosophila PNS. She performed postdoctoral work with Prof Brigid Hogan at Duke University from 2004 – 2009 where she identified stem cell populations in the developing, homeostatic and repairing mouse lungs. In 2009 she started her lab at the Gurdon Institute, University of Cambridge and in 2020 was promoted to Senior Group Leader. Emma is also an Associate Professor in the Department of Physiology, Development and Neuroscience. Her lab works on lung stem and progenitor cell biology, combining innovative human organoid models with mouse genetics.

**Lab website and twitter** <https://www.rawlins.group.gurdon.cam.ac.uk/index.html> @LabRawlins

**Professor Martin Tobin, Professor of Genetic Epidemiology and Public Health, University of Leicester.**

Martin is Professor of Genetic Epidemiology and Public Health at the University of Leicester where he leads the Genetic Epidemiology Group. He leads a programme of research on the genomics of common, complex diseases and traits, including lung health, COPD, and multimorbidity.

He has established, led and co-led research consortia, including UK BiLEVE, the first genetic study in UK Biobank, and collaborative efforts in Genomics England and Health Data Research UK. He continues to lead a successful cohort study, EXCEED, and the international SpiroMeta consortium focused on the genetics of lung function and COPD.

Key interests including early career research training, mentorship, public engagement and supporting genomics-driven precision medicine in non-European ancestries. He is Director of the 4-year PhD Programme in Genomic Epidemiology and Public Health Genomics funded by the Wellcome Trust. Martin has contributed to key funding panels, including for the Wellcome Trust and MRC, and advisory panels, chairing the Governance Committee of the Science Foundation Ireland Centre for Research Training in Genomics Data Science.

He has published over 200 articles (h-index 86) and is a Fellow of the Academy of Medical Sciences.

**Professor Louise Wain, Professor in Respiratory Research, University of Leicester.**

Professor Louise Wain is a non-clinical Professor in Respiratory Research in the Department of Population Health Sciences at the University of Leicester, UK. She has a keen research interest in utilising large-scale genetic epidemiological studies to drive mechanistic understanding of disease to underpin drug target discovery. Louise has led some of the largest genetic association studies of idiopathic pulmonary fibrosis and lung function to date, and enjoys multiple national and international multi-disciplinary collaborations to translate the findings. Louise sits on major UK boards and funding panels and is an Associate Editor for the European Respiratory Journal.