The Speakers

Professor Alan Silman



Professor Alan Silman trained in rheumatology and in epidemiology and had academic post at London University, headed arthritis research at Manchester University before becoming the first Medical Director of the Arthritis Research UK. Since 2015 he has been Professor of Musculoskeletal Health at Oxford University and Senior Research Fellow at Green Templeton College Oxford. He has authored over 700 research papers and a number of textbooks. He is amongst the top 10 published medical scientists in Oxford and top 60 in the UK. He was elected Fellow of the Academy of Medical Sciences and has honorary doctorates from the Universities of Keele and East Anglia. He has been an advisor to the UK government in several areas of medicine and health. Most recently his research has focused on the issues arising from multi-morbidity in both 'high' and in 'low and middle' income countries. Professor Alan Silman is the Course Director of the OXCEP Academic Medicine Courses 2025.

Professor Stephanie Dakin



Professor Stephanie Dakin is Professor of Musculoskeletal Sciences and Senior Research Fellow at Green Templeton College Oxford. Her Lab Group at the Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDORMS), University of Oxford undertakes translational research focusing on identifying the cellular basis of inflammatory fibrosis in soft tissue joint disease, with research programmes on tendinopathy, frozen shoulder and knee arthrofibrosis. Understanding the cellular and molecular basis of these diseases will inform new therapeutic approaches targeting tissue resident stromal cells of the joint, to promote resolution of chronic inflammatory fibrosis. Stephanie served as Director of Postgraduate Taught Studies for the MSc in Musculoskeletal Sciences at the University of Oxford for 8 years. Professor Stephanie Dakin is the Deputy Course Director of the OXCEP Academic Medicine Courses 2025.

Professor Chas Bountra



Professor Chas Bountra is Pro-Vice Chancellor for Innovation at the University of Oxford, Professor of Translational Medicine in the Nuffield Department of Clinical Medicine, Director of the Centre for Medicines Discovery, and Professorial Fellow at Keble College, Oxford. Prior to coming back to Oxford in 2008, Chas was Vice President and Head of Biology at GlaxoSmithKline. Chas is an invited expert on several government and charitable research funding bodies, and an advisor for many academic, biotech and pharma drug discovery programmes. In 2012 he was voted one of the “top innovators in the industry”, in 2014 received the “Rita and John Cornforth Award” from the Royal Society of Chemistry, in 2017 and 2018 was voted “Master of the Bench” from the Medicine Maker Power List, and in 2018 was awarded the“Order of the British Empire” in the New Year’s Honours List. Professor Chas Bountra is the Keynote Speaker in the Closing Ceremony of the OXCEP Academic Medicine Courses 2025.

Professor Laura Coates



Professor Laura Coates is an NIHR Research Professor whose research focuses on optimal therapeutic strategies in psoriatic arthritis (PsA). Her PhD focused on the development of the minimal disease activity criteria for PsA and establishment of the TICOPA trial, the first study to show the benefit of treating to target in PsA. Her research is clinical and focuses on psoriatic arthritis and spondyloarthritides, including prediction, prevention and early diagnosis of PsA, development of digital outcome measures, optimal treatment pathways and strategies in PsA. Professor Laura Coates is on the steering committee of the British PsA Consortium (BritPACT) and the Group for Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA).

Mr James Howarth



Mr James Howarth has been the Librarian at the Hall since 2018. He came to St Edmund Hall from Balliol College where he was Assistant Librarian from 2015. Previously he has worked at the International Institute of Strategic Studies and at Lambeth Palace Library in London, as well as the Taylorian Library in Oxford. He holds MAs in Library and Information Studies from UCL and Medieval Studies from the University of York, as an undergraduate he read English at Exeter College Oxford. As Librarian, Mr Howarth strives to make the Library the intellectual hub of Hall life and a welcoming place to study. He is responsible for maintaining and developing the library's collections and particularly welcomes book requests (on almost any topic) from students. He is also responsible for the Hall's historic and special collections that live in the 17th century Old Library and is keen to promote their use in research, study and outreach.

Professor Dan Woodcock



As Professor of Translational Data Science, Dan has a background in mathematics and machine learning plus over 15 years experience in the biomedical field. The focus of his research is the development and application of machine learning methods to multi-modal data sets to reveal information that conventional techniques cannot. His main work is in cancer, where a particular interest is the discovery of subtypes and prognostic signatures to stratify patients that are susceptible or resistant to particular treatments.

Dan is involved in a number of research projects within Oxford, including leading the multimodal data analysis in the 'COMBATcancer' project (Combined Molecular Analysis of Blood and Tissue in cancer) run through Oxford Cancer and co-leading the Oncology work-stream of the Cartography project. He also has collaborators across the world, particularly those in the Pan Prostate Cancer Group, where he leads the Subtypes and Prognostic Signatures working group. Although his primary focus remains prostate cancer, he is open to investigating any cancer type and has ongoing projects in bladder, kidney, colorectal, endometrial and oesophageal cancers. Professor Dan Woodcock takes charge of the hands-on practical coding sessions (Python) of the OXCEP Academic Medicine Courses 2025.

Dr Griffin Farrow



Dr Griffin Farrow earned a PhD in Computational Physics from Imperial College London, where he created computational models of plasma physics in Python. He then worked as a Health Data Scientist for the UK Government's Medicines and Healthcare Products Regulatory Agency. He is currently a Postdoctoral Research Associate at the University of Oxford where he works on the development of AI methods to identify and characterise subgroups of patients that respond to treatments in clinical trials. Dr Griffin Farrow is an Instructor on the Practical Coding Sessions (Python) of the OXCEP Academic Medicine Courses 2025.

Professor David Clifton



Professor David Clifton is the Royal Academy of Engineering Chair of Clinical Machine Learning at the University of Oxford, and leads the Computational Health Informatics (CHI) Laboratory which focuses on "AI for Healthcare". He is OCC Fellow in AI & ML at Reuben College, a Research Fellow of the Royal Academy of Engineering, and a Fellow of the Alan Turing Institute. Since 2008, he has focused mostly on the development of AI-based methods for healthcare. His research has been commercialised via university spin-out companies OBS Medical, Oxehealth, Biobeats, and Sensyne Health, in addition to collaboration with multinational industrial bodies. In 2022, the Pandemic Sciences Institute opened at Oxford, of which he is an investigator and where CHI Lab provides its AI theme. His research has won over 40 awards; he is a Grand Challenge awardee from the UK Engineering and Physical Sciences Research Council, which is an EPSRC Fellowship that provides long-term strategic support for nine "future leaders in healthcare." He was joint winner of the inaugural "Vice-Chancellor's Innovation Prize", which identifies the best interdisciplinary research across the entirety of the University of Oxford.

Professor Charalambos Antonaides



Professor Charalambos Antonaides is the British Heart Foundation Chair of Cardiovascular Medicine and Director of the Acute Multidisciplinary Imaging And Interventional Centre (AMIIC) in the Radcliffe Department of Medicine at Oxford. He undertakes major research on crosstalk between adipose tissue and the cardiovascular system: From target discovery to advanced imaging and risk prediction, such as the vascular wall and myocardium. His group uses state-of-the-art non-invasive imaging techniques, both advanced ultrasound and CT imaging techniques, to study the structure and function of the cardiovascular system and explore its interactions with the adipose tissue. They are at the forefront of using artificial intelligence to design precision imaging diagnostics and discover novel therapeutic targets.

Professor Dame Carol Robinson



Building on her earliest observations of ligand binding to folded proteins, Professor Dame Carol Robinson became fascinated by the balance of interactions that enable proteins and their complexes to survive in the gas phase. This has guided her research over the years and prompted many of her current questions and future directions. The central tenet of her research is that native mass spectrometry (MS), a technique which enables interactions of proteins to be maintained in the gas phase, can provide unparalleled information on the structure, binding partners and dynamics of proteins, complementing other biophysical approaches yet a powerful tool in its own right. Particularly exciting is the agility with which native MS can be adapted and applied to the research challenges of our time. Professor Robinson's overall goal is to continue to develop and advance her native MS methods for application to a range of fundamental and applied research goals.

Professor Ling-Pei Ho



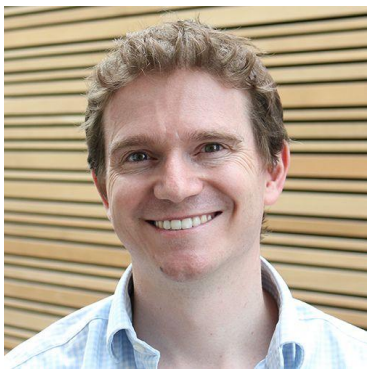
Professor Ling-Pei Ho is Professor of Respiratory Immunology. She is interested in how immunological responses impact on mechanisms of lung injury and repair. Her projects are divided into mechanistic and translational studies. The mechanistic studies question how innate immune cells like iNKT cells, MDSCs and monocyte-macrophage lineage impact on outcome in severe influenza virus infection and progression of lung fibrosis. These studies inform, drive and allow her to test mechanistic hypotheses in/from her human work. In the translational space, her focus is on new or improved therapy for lung fibrosis. Her diseases of interest are idiopathic pulmonary fibrosis (IPF) and fibrotic sarcoidosis, and she targets the interface between cellular immunology, disease mechanisms and early clinical trials.

Professor Qiang Zhang



Professor Qiang Zhang is a deep learning (machine learning) scientist, with cross-domain knowledge of cardiovascular disease, MR physics and scan protocols. His research programme focuses on advancing cardiac imaging and enriching clinical research, with AI: (i) Advancing cardiovascular MRI with Generative AI. A representative work is Virtual Native Enhancement imaging, where he developed AI techniques that could serve as "virtual contrast" in enhancing MR images, without the need for contrast injections. This may lead to more informative, needle-free, faster and safer heart MR scans. (ii) Developing automated image processing pipeline for cardiac imaging big data, and AI-enhanced cardiac biomarkers to drive new discoveries in clinical research.

Professor David Eyre



Professor David Eyre is Professor of Infectious Diseases at the University of Oxford's Big Data Institute. His research aims to understand who gets different infections and why, and how best to prevent, treat and monitor these infections. He also works on developing artificial intelligence tools to help diagnose and treat hospital patients, and to help hospitals run better. He uses a range of approaches spanning epidemiology, statistics, causal inference, and machine learning. He works with detailed deidentified healthcare record data at both regional and national scales. He also has extensive programming and database expertise. His other research interests include the use of whole-genome sequencing as a tool for understanding the epidemiology and transmission of bacteria, viruses and fungi, and mathematical modelling of infectious disease transmission. Professor David Eyre is also interested in using sequencing technologies as a novel tool for culture-independent microbiology diagnostics. These technologies offer the prospect of same-day diagnosis of infection, rather than having to wait several days for bacteria to grow in the lab as is common now.

Professor Paresh Vyas



Professor Paresh Vyas is a clinical academic haematologist. He is Professor of Haematology at the University of Oxford and Deputy Director of the MRC Molecular Haematology Unit (MHU), Weatherall Institute of Molecular Medicine (WIMM) at the University of Oxford. He is clinical lead for AML (Acute Myeloid Leukaemia) and high risk MDS (Myelodysplasia) for the Oxford region and helps lead Phase I-III clinical trials in AML and MDS for the UK AML Trial Group. He formed the EVOLVE consortium, composed of HOVON, AMLSG and the UK AML Trial Group that now jointly plan pivotal Phase III AML/high risk MDS trials. He trained in Cambridge, Oxford and London. He did his PhD with Doug Higgs on globin gene regulation and his post-doctoral research with Dr Stuart Orkin at Children's Hospital Boston. His research focuses on the molecular and cellular biology of normal and leukaemic haemopoiesis, AML therapy, clonal haemopoiesis and allo-immune responses to leukaemia.

Professor Rachael Bashford-Rogers



Professor Rachael Bashford-Rogers uncovers how the immune system changes across diseases. She has developed widely adopted experimental and computational tools, including B/T cell receptor sequencing, single-cell multi-omics, functional assays and imaging processes, to reveal how immune cells develop, function, and respond to therapy in health and disease. She is also co-founder of two companies: 'Alchemab Therapeutics', which is developing drugs targeting a wide range of diseases in an unmatched and novel manner; and 'Theraimmune', which is dedicated to developing the first-generation of post-menopausal therapeutics through decoding how individual cells age and interact after menopause to uncover the mechanisms driving disease.

Professor Peter Rothwell



Professor Peter Rothwell is a clinical neurologist with particular interests in stroke, hypertension, the risks and benefits of aspirin, and how best to apply the results of clinical trials and other research to clinical decisions with individual patients in routine clinical practice. He leads the longitudinal Oxford Vascular Study, the findings of which have changed how people are assessed and treated after a transient ischaemic attack (TIA) or stroke, both in the UK and around the world. TIAs are now seen as medical emergencies requiring urgent treatment. Taking aspirin straight after a TIA, Professor Rothwell's team showed, can reduce the chance of a major stroke over the next few days by 80%. Professor Rothwell holds various advisory roles relating to stroke, including the National Stroke Strategy, the Stroke Association, the National Institute for Health and Care Excellence, and he serves on several conference scientific committees. He is the author of over 300 published scientific papers and several books.

Professor Kassim Javaid



Professor Kassim Javaid is Professor of Osteoporosis and Adult Rare Bone Diseases, and his research areas are in epidemiology and adult metabolic bone disease focusing vitamin D, osteoporosis, secondary fracture prevention and rare bone diseases. He is also an adult rheumatologist at the Oxford University Hospitals NHS Trust, with specialties in clinical and research of common and rare metabolic bone diseases. He is the clinical lead for Oxford Fracture Prevention Service and the national Fracture Liaison Service Audit for England and Wales run through the Royal College of Physicians. Internationally, he co-chairs the International Osteoporosis Foundation Capture the Fracture Programme that has audited over 400 services globally. He is also clinical lead for the Oxford Rare bone disease service for adults and the national 100,000 Genomes Clinical Interpretation partnership for musculoskeletal conditions.

Professor Rui Ponte Costa



Professor Rui Ponte Costa leads the Neural & Machine Learning group that leverages AI principles to develop a new generation of computational models of learning in the brain. We are at an exciting turning point in neuroscience. New technologies now allow us to measure and control neural activity and behaviour with unprecedented detail. At the same time, new theoretical frameworks are starting to reveal how rich behaviours arise from synaptic, circuit and systems computations. The group is contributing directly to the latter by aiming to understand how we learn. To this end, the group is developing a new generation of computational models of learning driven by recent machine learning developments. The group focuses on understanding how a given behavioural outcome ultimately leads to credit being assigned to trillions of synapses across multiple brain areas – *credit assignment problem*. To this end and in order to have a unified understanding of how we learn to produce adaptable behaviours, it is important to jointly study the contribution of three different systems: (i) *cortical circuits*, (ii) *neuromodulation* and (iii) *subcortical regions*. The group co-organises the Oxford NeuroTheory Forum.

Professor Zhengming Chen



Professor Zhengming Chen is Richard Peto Professor of Epidemiology at Oxford Population Health and a Senior Research Fellow of Green Templeton College Oxford. His main research focus concerns causes, prevention and treatment of major chronic disease. Over the last few decades, he has initiated and led several large international randomised trials (e.g. CAST, COMMIT/CCS-2) involving in total more than 100,000 patients, leading to major changes of international guidelines and clinical practice. He has published >700 papers (h-index >125), with expertise in epidemiology, genomics, target discovery, clinical trials, and precision health. In Oxford he leads a large and expanding multi-disciplinary research team involving >50 staff and DPhil students, with research themes covering lifestyle factors, environmental health, chronic infection, genetic epidemiology, risk prediction, and application of big data in development of precision medicine and population health. He also sits on a number of international and UK research committees (e.g. Hong Kong Research Council, UK MRC, and the Wellcome Trust). Professor Zhengming Chen is an elected Fellow of Academia Europaea.

Professor Christopher Toepfer



Professor Christopher Toepfer's main research interest is the study of the role of thick filament variants in hypertrophic cardiomyopathy (HCM). He had established the laboratory of 'Cardiac Physiology and Disease Modelling' at the University of Oxford, supported by a Sir Henry Dale Fellowship from Wellcome and additional funding from the British Heart Foundation (BHF). His research group is investigating the mechanisms that drive inheried cardiomyopathies, including both HCM and dilated cardiomyopathies (DCM), by using human induced pluripotent stem cells (hiPSCs) to produce human heart cells in the dish (hiPSC-CMs). Utilising genetic engineering (CRISPR/Cas-9), his research team introduce patient specific mutations into human heart cells to study disease mechanisms, with the aim of developing new genetic cures for inherited heart muscle diseases.

Professor Sarah Pendlebury



Professor Sarah Pendlebury graduated in 1992 from Oxford and worked subsequently in London and France. She is Professor of Medicine and Old Age Neuroscience at the University of Oxford and Consultant Physician and Clinical Lead for Dementia at the Oxford University Hospitals NHS Foundation Trust. Professor Pendlebury's research centres around the impact of acute illness on the ageing brain and encompasses delirium and dementia, cerebrovascular disease and frailty.

She has established ongoing big data cohorts and smaller prospective studies to explore the impact of acute illness and delirium on future dementia risk as part of the ORCHARD research portfolio. This includes leveraging real-world EPR data, following her Trust-wide implementation of routine cognitive and delirium screening, for epidemiologic studies into the prevalence and outcomes of delirium and dementia, the development of risk prediction algorithms, exploratory blood biomarkers and automated CT-brain imaging analysis.

Professor Julian Knight



Professor Julian Knight is Professor of Genomic Medicine at the University of Oxford, Honorary Consultant Physician at the Oxford University Hospitals NHS Foundation Trust, and Research Director at the NHS Central and South Genomic Medicine Service Alliance. He is clinically active in internal medicine and a Fellow of the Academy of Medical Sciences. His work is focused on advancing genomic medicine into the clinic, with an active research programme in this area and providing leadership in education and training. He is a Principal Investigator at the Centre for Human Genetics, leading work investigating the genomics of immunity and how this can determine our individual response to infections such as sepsis.

Professor Jeremy Cobbold



Professor Jeremy Cobbold graduated in Medicine from the University of Cambridge and University College London. He also obtained a PhD from Imperial College London. He is Consultant Hepatologist and Clinical Lead for Hepatology at Oxford University Hospitals NHS Foundation Trust. He set up the multi-disciplinary metabolic hepatology clinic in Oxford for patients with steatotic liver diseases and continues to run the clinic weekly. Professor Cobbold's research into steatotic liver disease spans 20 years, with extensive publications on non-invasive assessment and therapeutic strategies. He serves as Chair of the MASLD Special Interest Group for the British Association for the Study of the Liver. Professor Jeremy Cobbold also runs the joint Oxford / Royal Free liver transplant service, in collaboration with the Royal Free transplant team.

Professor Sir Adrian Hill



Professor Sir Adrian Hill is the Lakshmi Mittal Professor of Vaccinology and Director of the Jenner Institute at Oxford University. In 2005 he founded the Jenner Institute at Oxford, which is now one of the largest academic vaccine centres globally with clinical-stage vaccine programmes against fifteen diseases. His current lead malaria vaccine, R21 in matrix-M adjuvant, has shown high efficacy in clinical trials in the UK and Africa (Lancet. 2021;397:1809-1818) and could be the first widely used vaccine to impact on the great disease burden of malaria in Africa. In 2020, the Jenner Institute initiated a major effort towards rapid development of a COVID-19 vaccine which in collaboration with AstraZeneca is now in world-wide pandemic deployment. He has published over 600 research papers with 60,000 citations and co-founded several spin-off companies. He is a Fellow of the UK Academy of Medical Sciences, the Royal College of Physicians, and the Royal Society.

Professor Waleed Fateen



Professor Waleed Fateen is a Consultant Hepatologist and Pancreato-biliary physician. His area of interest is early cancer detection as well the management of liver, bile duct and pancreatic cancer. He obtained a PhD in liver cancer from the University of Leeds. Professor Fateen is an advanced endoscopist with interest in liver, bile duct and pancreatic endoscopy using ERCP and EUS. His current research focuses on developing cost-effective molecular tests for the early detection and monitoring of primary liver and biliary tract cancers, specifically hepatocellular carcinoma and cholangiocarcinoma using cell-free DNA (cfDNA) analysis from blood and bile samples. By leveraging genomic discoveries made through comprehensive sequencing studies over the past two decades, his team are creating tests that can be easily adopted by diagnostic laboratories, significantly improving early detection and potentially transforming clinical outcomes for patients facing these aggressive cancers.

Professor Trish Greenhalgh



Professor Trish Greenhalgh is Professor of Primary Care Health Sciences and Fellow of Green Templeton College at the University of Oxford. She has a doctorate in diabetes care and an MBA in Higher Education Management. She leads a programme of research at the interface between the social sciences and medicine, working across primary and secondary care. Her main interests are the health needs and illness narratives of minority and disadvantaged groups; the introduction of technology-based innovations in healthcare; and the complex links between research, policy and practice. Professor Trish Greenhalgh is the author of over 500 peer-reviewed publications and 16 textbooks. She was awarded the OBE for Services to Medicine by Her Majesty the Queen in 2001 and made a Fellow of the UK Academy of Medical Sciences in 2014. In 2021 she was elected to the Fellowship of United States National Academy of Medicine for "major contributions to the study of innovation and knowledge translation and work to raise the profile of qualitative social sciences". She became a Fellow of the Faculty of Leadership and Management in Medicine in 2024. Professor Trish Greenhalgh was the Course Director of the OXCEP Academic Medicine Course 2019.