The Speakers

Principal Prof. Kathy Willis



Professor Katherine (Kathy) J. Willis, CBE, was appointed as Principal of St Edmund Hall in October 2018. Kathy is also Professor of Biodiversity in the Department of Zoology, University of Oxford.

Prior to this, Kathy was Director of Science at the Royal Botanic Gardens, Kew, where she spearheaded the launch of Kew's Science Strategy 2015-2020. She also previously held the Tasso Leventis Chair of Biodiversity at Oxford and was founding Director of the Oxford Martin School Biodiversity Institute.

Kathy's research interests focus on the relationship between long-term ecosystem dynamics and environmental change. She has published extensively being the author of over 100 scientific publications. In 2015, Kathy was awarded the Michael Faraday Prize for her excellent work in science communication and in 2016 she was appointed to the Natural Capital Committee, which will take forward the implementation of the Government's new 25-year Environment Plan.

Prof. Robert Wilkins



Professor Robert Wilkins holds the American Fellowship in Physiology at St Edmund Hall: he oversees the admission, teaching and pastoral support of Biomedical Sciences and Medicine students and provides tutorials covering cellular and systems physiology. Prof. Wilkins was Coordinator for Admissions in Medicine at Oxford from 2007 until 2011. He is now the Director of the University's Biomedical Sciences course that admitted its first students in October 2012. Prof. Wilkins is also the co-editor of the Oxford Handbook of Medical Sciences and Basic Science for Core Medical Training and the MRCP (both OUP). In Trinity Term 2020, he was appointed as the University's Director of Pre-clinical Studies.

His research has characterised the involvement of membrane transport pathways in osteoarthritis and epithelial cancers. Prof. Wilkins has been the OXCEP Academic Medicine Programme Supervisor since 2018.

Prof. Chris Conlon



Professor Chris Conlon is a Consultant Physician in Infectious Diseases in Oxford and Professor of Infectious Diseases at Oxford University. He trained in Oxford, London and Birmingham and spent 3 years working in Africa. His main interests are HIV, TB, Travel Medicine and COVID. He is a past Chair of the Joint Specialty Committee on Infection and Tropical Medicine at the RCP and past Secretary of the British Infection Society. He served on the Expert Advisory Group on AIDS and is currently on the UK Advisory Panel for Healthcare Workers Infected with Bloodborne Viruses and the Travel Subcommittee of the Joint Committee on Vaccines and Immunisations. He is Chair of the Centre for Tropical Medicine and Global Health in the Nuffield Department of Medicine and is a Fellow of Oriel College. He has been an external examiner at several medical schools and is one of the three senior editors for the 6th edition of the Oxford Textbook of Medicine, published in 2020. Prof. Conlon has been the Course Director of the OXCEP Academic Medicine Course since 2022.

Dr Jack Tan



Dr Jack Tan is a Fellow by Special Election at St Edmund Hall. After completing his DPhil in Medical Sciences (Gene Therapy) at the University of Oxford he joined Alain Townsend's lab at the MRC Weatherall Institute of Molecular Medicine, on developing next generation nanoparticle vaccines mainly against infectious diseases. Currently, he is a senior scientist focusing on developing novel vaccines and therapeutic monoclonal antibodies for emerging infectious diseases and understanding the immunology against infectious diseases. He is also a Project Manager of the Caltech-Oxford-Ingenza-UK CPI consortium, funded by the Coalition of Epidemic Preparedness Innovations (CEPI) to develop a novel pan SARS-like betacoronavirus vaccine that is designed to induce cross-reactive antibodies against all SARS-CoV-2 variants and other animal SARS-like betacoronavirus that have the potential to cause a pandemic in the future. Dr Tan is the Deputy Course Director of the OXCEP Academic Medicine Course 2023.

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.

Prof. Heidi Jansen-Berg



Professor Heidi Johansen-Berg is a Wellcome Principal Research Fellow and Fellow of the Academy of Medical Sciences. Heidi is Director of the Wellcome Centre for Integrative Neuroimaging (WIN), based at the University of Oxford. WIN is a multi-disciplinary research facility that aims to exploit the ability of non-invasive neuroimaging to bridge the gap between laboratory neuroscience and human health, by performing multi-scale studies spanning from animal models through to human populations. Heidi's own research group investigates plasticity and recovery in the sensorimotor system, with particular focus on white matter plasticity and activity-dependent myelination. Her research focuses on how the brain changes with learning, experience, and damage. As well as shedding light on how the healthy brain responds to change, her work also has implications for understanding and treating disease. For example, her group are testing new methods for rehabilitation after stroke and assessing whether taking up physical exercise could slow the effects of age on the brain or promote healthy brain development during adolescence. The group's research uses a variety of neuroimaging and stimulation tools in healthy human volunteers across the lifespan, individuals with brain damage, and rodents.

Prof. Ben Fairfax



I am an Academic Medical Oncologist based in Oxford specialising in the treatment of skin cancer. As a junior doctor I became interested in the causes of heterogeneity response to infection and undertook a Wellcome MB PhD postdoctoral fellowship in Julian Knight's group in Oxford where I developed research interests in cell-type specific and context-specific expression quantitative trait loci (eQTL) in the immune system. I was awarded a Wellcome Intermediate Clinical Fellowship to establish a research group at the MRC WIMM in 2017. The focus of our work is the identification of peripheral markers of response to checkpoint immunotherapy. We are particular interested in the interaction of treatment with germline genetic variation to shape the anti-tumour immune response and predispose to autoimmune side effects. Other key projects within the group include the agnostic identification of T cell receptor sequences associated with complete response to treatment and the interplay with patient HLA type. We hope that our work will help in the development of novel adjuncts to cancer immunotherapy as well as further our understanding of the mechanistic basis of autoimmunity.

Prof. 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.

Prof. Chris Butler



Professor Chris Butler FMedSci, is a Professor of Primary Care at the University of Oxford's Nuffield Department of Primary Care Health Sciences, Professorial fellow at Trinity College, and the Clinical Director of the University of Oxford Primary Care Clinical Trials Unit.

His main research interests are in common infections, and health care communication and behaviour change. He was the Wales Royal College of General Practitioners patient-nominated GP of the Year in 2019, and won the Royal College of General Practitioner's Research Paper of the Year Award in 2020. He is a NIHR Senior Investigator, and co-leads the PRINCIPLE and PANORAMIC Trials of community treatments for COVID-19 which had randomised >30,000 people with COVID-19 in the community and has had 9 agents under study. Chris has published over 400 scientific papers.

Prof. John Davis



Professor John Davis is CSO for the Centre for Medicines Discovery, at the University of Oxford, and Director of Business Development for the Alzheimer's Research UK Drug Discovery Alliance. John is a biochemist with a PhD from the University of Cambridge, postdoctoral training carried out at the Ludwig Institute (Middlesex Branch) and an EMBO fellowship at The Salk Institute. In 1993 he joined SmithKline Beecham as part of the establishment of a neurology research unit within the company and, following the merger to form GlaxoSmithKline, led non-clinical pharmacology research departments for pain and neurodegenerative diseases. In 2010 John co-founded Convergence Pharmaceuticals, subsequently acquired by Biogen, and has since co-founded a further three start-up companies. In 2015 he joined the University of Oxford to set up and lead the ARUK Oxford Drug Discovery Institute. The institute has developed a portfolio of early drug discovery programmes for Alzheimer's and Parkinson's disease, with an emphasis on genetically validated targets, and has formed several industrial alliances to help prosecute these targets. John has 25+ years of drug discovery expertise from target to phase IIa and has helped steer a dozen drug candidates into development and to four positive Phase II PoCs.

Prof. Fergus Gleeson



Professor Fergus Gleeson is a Consultant Radiologist and Professor of Radiology in Oxford. He trained in Cambridge, Papworth and London, and was a Fellow in Radiology at UCLA in America. He was appointed to Oxford in 1992, is Head of Academic Radiology in Oxford, and is the Director of the Oxford Radiology Research Unit at Oxford University Hospitals NHS Foundation Trust. He is currently President of the European Society of Thoracic Imaging, and has published over 200 peer review papers and book chapters, has a h-index of 62, and currently has more than £30 million in grant income. He is the PI for IDEAL and DART, two multicentre studies investigating the use of Artificial Intelligence in pulmonary nodules and lung cancer, and the PI for EXPLAIN, a multicentre study investigating Long COVID using hyperpolarised Xenon MRI. His specialist interests are in Artificial Intelligence, Thoracic Imaging, PET-CT and Hyperpolarized xenon MRI. He is also the Chief Medical Officer of the National Consortium of Intelligent Medical Imaging (NCIMI): which aims to bring together the NHS, and University and industry partners to promote the development and implementation of artificial intelligence in medicine.

Prof. Leanne Hodson



Professor Leanne Hodson received her PhD from the University of Otago, New Zealand. She was awarded the Girdlers-Health Research Council of New Zealand Career Development Award to come and work with Professors Frayn and Karpe, University of Oxford. Over the course of her time in Oxford Leanne has been awarded British Heart Foundation (BHF) Intermediate and Senior Research Fellowship, she has recently renewed the latter. Leanne was awarded the Cuthbertson Medal from the Nutrition Society in 2017 and the Starling Medal from the Society of Endocrinology in 2018. She is Professor of Metabolic Physiology.

Prof. Simon Leedham



Professor Simon Leedham is a Professor of Molecular and Population Genetics and a Wellcome Senior Research Fellow in Clinical Medicine at the University of Oxford. His research is into the morphogenic signalling pathways that control the intestinal stem cell in homeostasis, regeneration and cancer, and he has published more than 80 peer reviewed papers in journals that include *Nature Medicine, Nature Genetics*, *Gastroenterology* and *Gut.* Simon's research has been recognised by the United European Gastroenterology Rising Star award in 2010, the British Society of Gastroenterology Francis Avery Jones research prize in 2015 and the CRUK future leaders prize in 2017.

Prof. Julian Knight



Professor Julian Knight is Professor of Genomic Medicine at the University of Oxford, Director of the Doctoral Training Programme in Genomic Medicine and Statistics, and a Fellow and Tutor in Medicine at Merton College. Since 2005 he has worked at the Wellcome Centre for Human Genetics as a Principal Investigator and as an Honorary Consultant Physician at the Oxford University Hospitals NHS Trust in internal medicine. He is also Research Director of the Central and South Genomic Medicine Services Alliance. His research investigates the genomics of immunity and how this can determine our individual response to infections such as sepsis and development of autoimmunity.

Prof. David Eyre



Professor David Eyre is an infectious diseases and microbiology clinician at Oxford University Hospitals and an Associate Professor at the University of Oxford's Big Data Institute. His research focuses on better understanding the epidemiology and transmission of infectious diseases through a combination of pathogen sequencing and use of large-scale healthcare data. He also has an interest in improving the diagnosis and management of infection using routinely collected healthcare data. His previous work has focused on a range of pathogens including *C. difficile*, *Candida auris* and *N. gonorrhoeae*. During the COVID pandemic he has used national survey and contact tracing data as well as healthcare worker data to study transmission, real-world vaccine effectiveness and antibody responses to infection and vaccination. He has also generated evidence underlying the widespread use of SARS-CoV-2 antigen lateral flow tests in the UK.

Prof. Ian Pavord



Professor Ian D Pavord, MA DM FRCP FERS FMedSci is Professor of Respiratory Medicine at the University of Oxford and Honorary Consultant Physician at the Oxford University Hospitals. He is a member of congregation at the University of Oxford and a Professorial Fellow of St Edmund Hall. He was a Consultant Physician from 1995 and Honorary Professor of Medicine from 2005 to 2013 at the Institute for Lung Health, Glenfield Hospital, University Hospitals of Leicester NHS Trust. He was elected an NIHR Senior Investigator in 2011&14, an inaugural Fellow of the European Respiratory Society in 2014 and a Fellow of the Academy of Medical Science in 2015.

He has a research interest in the clinical aspects of inflammatory airway diseases and has pioneered the use of non-invasive measures of airway inflammation in the assessment of these conditions. He has identified a number of clinically important phenotypes of inflammatory airway disease, has discovered clinically important biomarkers, and has played a lead role in the clinical development of three of the most promising new treatments for severe airway disease.

Professor Pavord was co-editor of Thorax from 2010-2015, Chief Medical Officer of Asthma UK from 2008-14, Associate Editor of the American Journal of Respiratory and Critical Care Medicine from 2005-10 and has been Associate Editor of the European Respiratory Journal since 2016. He is the author of over 520 publications and has an H-index of 119 making

him the 2nd highest cited researcher in asthma worldwide. He received the 2016 European Respiratory Society (ERS) Gold Medal for his research and gave the Cournand Lecture at the 2004 ERS meeting. He chaired the 2017 Lancet Commission on Asthma.

Prof. Anneke Lucassen



Professor Anneke Lucassen is Professor of Genomic Medicine in the Wellcome Trust Centre for Human Genetics and director of the Centre for Personalised Medicine based at St. Anne's College, Oxford.

She trained as a physician and is an honorary consultant at Oxford's regional genetic service. Her research combines clinical, molecular and ethico-legal expertise to provide an interdisciplinary approach to the rapid developments in genomics and to effect improved delivery of genomic services to individuals and families.

She leads the Clinical Ethics Law and Society groups at Oxford (www.soton.ac.uk/cels); has a range of relevant national roles (eg Chair of Joint Committee on Genomics in Medicine, member National Screening Committee) and co-leads the UK's Genethics forum (http://www.genethicsuk.org/)

Prof. Sir Rory Collins



Professor Sir Rory Collins is an epidemiologist who studies how to prevent and treat cardiovascular disease. He is BHF Professor of Medicine & Epidemiology, and Head of the Nuffield Department of Population Health at the University of Oxford. Prof. Collins became Principal Investigator of UK Biobank in 2005. Involving 500,000 participants, it is the largest deeply-characterized prospective study of disease globally, available for any type of health research. Over 30,000 researchers worldwide use it currently, generating 1700 papers in 2021 alone. He was knighted for services to Science in 2011, elected to the Royal Society in 2015, and awarded the UK Medical Research Council's 2020 Millennium Medal for his national and international research contributions. Prof. Sir Rory Collins has been the Chief Executive Officer of UK Biobank since 2005.

Prof. Paul Leeson



Professor Paul Leeson is Professor of Cardiovascular Medicine at the University of Oxford, and Head of the Oxford Cardiovascular Clinical Research Facility. He is also a Consultant Cardiologist at the John Radcliffe Hospital, where he provides expertise in Cardiovascular Imaging, as well as General Cardiology and Cardiovascular Prevention through the Oxford Specialist Hypertension Clinic.

He heads the Preventive Cardiology Research Group, based in the Oxford Cardiovascular Clinical Research Facility, which aims to improve how we identify and prevent heart disease in young people.

His research group has pioneered the application of computational modelling and artificial intelligence to imaging in clinical cardiology research and works on some of the largest imaging studies in the world. Novel insights generated by the group have ranged from how pregnancy complications alter the hearts of both mothers and their children, to how the structure of blood vessels differ in the brains of young people with high blood pressure. Innovations arising from the research led to the spin out of Ultromics from the group in 2017. The company has now brought some of the first AI-driven diagnostic aids in cardiology through regulatory clearance into clinical use in hospitals across the US and UK.

Prof. Sarah Walker



Professor Sarah Walker, FMedSci, OBE is Professor of Medical Statistics and Epidemiology at the Nuffield Department of Medicine at the University of Oxford and at the Medical Research Council Clinical Trials Unit at University College London (MRC CTU at UCL).

At Oxford, she has been at the forefront of translating advances in genetic sequencing into microbiology services, and linking this sequence data to electronic health records for large-scale epidemiology, with a particular focus on 'big data' from routinely collected electronic health records, as part of the “Modernising Medical Microbiology” consortium. She is Director for the National Institutes of Health Research (NIHR) Health Protection Research Unit on Antimicrobial Resistance and Healthcare Associated Infections at Oxford, and Lead of the NIHR Biomedical Research Centre Modernising Medical Microbiology and Big Infection Diagnostics Theme

Most recently, she is the Chief Investigator and Academic Lead for the UK’s COVID-19 Infection Survey, a partnership between the University of Oxford and the Office for National Statistics, investigating prevalence and incidence of current and past infection

with SARS-CoV-2. The survey is the largest study of COVID-19 infection and immunity across all four nations of the UK, swabbing ~150-180,000 participants every fortnight and taking blood from ~100-150,000 participants every month.

Prof. Robert MacLaren



Professor Robert MacLaren is Professor of Ophthalmology at the University of Oxford, Consultant Ophthalmologist at the Oxford Eye Hospital, Honorary Professor of Ophthalmology at the UCL Institute of Ophthalmology, Honorary Consultant Vitreoretinal Surgeon at Moorfields Eye Hospital and an NIHR Senior Investigator. He is also a Fellow of the Royal College of Ophthalmologists, Fellow and former King James IV Professor of Surgery at the Royal College of Surgeons of Edinburgh, Fellow of the American College of Surgeons, Fellow of the Academy of Medical Sciences, Bodley Fellow of Merton College Oxford and Civilian Consultant Advisor to the Royal Navy. He has been a recipient of the ARVO Camras Award for Translational Research, the RP Fighting Blindness Scientist of the Year Award, the American Academy of Ophthalmology Achievement Award, the Royal College of Ophthalmologists Keeler Medal and the Macular Society Clinical Service of the Year award.

Together with the University of Oxford in 2014, he co-founded Nightstar Therapeutics in order to expand retinal gene therapy towards worldwide approval for patients with retinal diseases. After listing on NASDAQ in 2017, Nightstar Therapeutics was acquired by Biogen in 2019, making it one of the most successful British biotechnology company buyouts of all time. In 2023, he co-founded Beacon Therapeutics together with Syncona Partners, achieving the largest equity at launch for any Oxford spinout company to date. Over the last decade, he has helped raise over a billion dollars of funding for retinal gene therapy.

Prof. Nicole Zitzmann



Professor Nicole Zitzmann, FSB, FRSTMH is the Head of the Antiviral Research Unit and Director of the Oxford Glycobiology Institute, Department of Biochemistry, the University of Oxford, where she is Associated Head of Department for the Infectious Disease Processes Theme. She is an International Advisor at the Center for Dengue Research at the University of Sri Jayawardenapura in Sri Lanka, and a Supernumerary Fellow of Merton College Oxford where she was a Biochemistry Fellow and Lecturer

in Medicine from 2012 – 2017. Nicole held a Dorothy Hodgkin Research Fellowship of the Royal Society from 1999-2003 and since then has built a multi-disciplinary team to develop novel antiviral therapies, including approaches from Glycobiology, Biophysics and Proteomics. She has over 130 peer-reviewed publications, 24 patents, and trained 27 D.Phil. students to date.

Prof. Tim Elliott



Professor Tim Elliott, FMedSci left the University of Oxford with a first in Biochemistry in 1983 and completed his PhD in cancer immunotherapy at the University of Southampton in 1986. He did his postdoctoral training at the Massachusetts Institute of Technology before returning to the University of Oxford to join the Institute for Molecular Medicine in 1990. In 2000, he became Professor of Experimental Oncology and Director of the Centre for Cancer Immunology at the University of Southampton. In 2020 he was appointed to the Kidani Chair of Immuno-Oncology at the University of Oxford.

Tim is a world leader in the field of antigen presentation and T cell biology and has incorporated discoveries in the areas of antigen processing, T cell regulation and immunodominance into the development of new cancer immunotherapies. He is the Founding Editor-in-Chief of the journal Immunotherapy Advances published by the British Society for Immunology.

Prof. Alex Green



Professor Alexander L Green, FRCS(SN), MD, MB BS, BSc(hons), PhD is a Professor of Neurosurgery at the University of Oxford, Nuffield Department of Surgical Sciences. He is an academic Functional Neurosurgeon specialising in Deep Brain Stimulation and Spinal Cord Stimulation but his practice also encompasses some general neurosurgery including trauma. His research is focused on Neuromodulation for Autonomic Function and Sleep disorders and includes device development, basic

physiological science and Neuroscience. He has authored over 200 peer-reviewed publications.

He has been awarded a number of international prizes for his work, including the Congress of Neurological Surgeons (CNS) 'Stereotactic and Functional Neurosurgery Resident Award' in 2005, 'Gordon Holmes Prize' awarded by the Royal Society of Medicine in 2007, and the International Neuromodulation Society (INS) 'New Investigator Award' in 2010. He has written two books and over 15 book chapters. He sits on a number of research trial committees including a data monitoring committee, steering committee and clinical advisory board. He frequently teaches on International Courses on spinal cord and dorsal root ganglion stimulation. He is currently running three major clinical trials including EPIONE (DBS for Chronic Post-stroke Pain) and BRAINSTATE (DBS for Minimally Conscious State).

Prof. Najib Rahman



Professor Najib M Rahman, BM BCh, MA (oxon) MSc, DPhil, FERS is Professor of Respiratory Medicine, Director of Oxford Respiratory Trials Unit at the University of Oxford, Consultant Pleural Physician at Oxford Centre for Respiratory Medicine, Churchill Hospital Oxford, Deputy National CRN Lead for Respiratory Disease at NIHR CRN, and NIHR Senior Investigator.

Prof. Rahman Directs the Oxford Respiratory Trials Unit and works clinically as a pleural specialist. He is currently running randomised and observational studies in pleural infection, pneumothorax and malignant pleural effusion. He is specialised in Thoracoscopy, Thoracic Ultrasound and Clinical Trials methodology, and has published over 300 papers with citations of >6000. He is co-chair of the BTS Pleural Guidelines 2022, Chair of the BTS Pleural Intervention Committee 2022, and Chair of multiple ERS guidelines on pleural disease.

Prof. Udo Oppermann



Professor Udo Oppermann has been a Principal Investigator of the Structural Genomics Consortium (SGC) in Oxford since its inception in 2003. He became Professor of Molecular Biology at NDORMS in 2008, and he is now Director of the Laboratory Sciences Division at the Institute of Musculoskeletal Sciences, Botnar Research Centre, the University of Oxford. The research in the Oppermann group focuses on drug and target discovery by using systems biology and single-cell approaches in a variety of human diseases including metabolic, inflammatory and malignant diseases. Application of novel single-cell technologies and chemical biology in primary and secondary bone cancers such as multiple myeloma with a focus on epigenetic mechanisms is a key research area of the group.

Prof. William James



Professor William James is Professor of Virology at the Sir William Dunn School of Pathology. His research focuses on macrophage modulation during viral infection and neuroinflammation. Tissue macrophages, including the microglia in the brain, act as critical sentinels to defend us against infection. Consequently, pathogens such as HIV have developed ways of circumventing the defensive functions of macrophages in order to establish chronic infection. Moreover, their persistence in macrophages appears to generate chronic inflammatory reactions, that may lead to the dysfunction of neighbouring cells, such as neurons, and result in neurocognitive disorders. In order to dissect the molecular pathways involved in these processes, Prof. James has developed human iPS cell-derived tissue models for macrophages, microglia and neurons, and use high-efficiency Cas9-based gene editing methods to investigate the contribution of individual components. He also works extensively with neuroscience collaborators on the neuroinflammatory aspects of Parkinson's disease and Alzheimer's disease.

The Oxford Stem Cell Facility, based in his lab, is headed by Dr Sally Cowley. Her team generate, edit, curate and differentiate dozens of iPS lines as part of multi-centre collaborations to investigate the pathogenesis of neurodegenerative and related disorders. They develop sophisticated differentiation and tissue culture models of cell types of interest in these fields and use them with translational scientists to identify new therapeutics.