



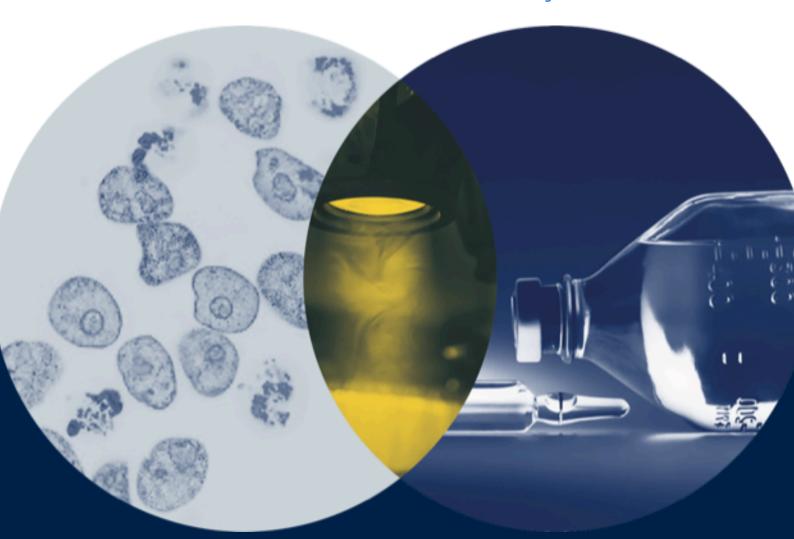




# Oxford Cancer Immuno-Oncology Network (OCION) 2024 Annual Symposium

Friday 7th June 2024

Lecture Theatre 2, Mathematical Institute, University of Oxford







Thermo Fisher SCIENTIFIC

# Agenda



08:30	Arrival and registration	T FW-4
09:00-09:15	Welcome	Tim Elliott
Immunotherapy and Resistance (chair: Carol Leung)		
09:15-09:35	Stimulation of an abscopal effect by ultrasound and	
	microbubbles	Eleanor Stride
09:35-09:55	Predicting response to immunotherapy in oesophageal	
00:55 40:45	cancer	Richard Owen
09:55-10:15	cGAS driven remodelling of the tumour microenvironment in chromosomally unstable cancers	Eileen Parkes
10:15-10:20	Initial results from the AVENuE window study	Graham Collins
10:20-10:25	Circulating cell-free DNA for early response monitoring in	Granam Commo
	oesophageal cancer with immuno-chemotherapy	Phil Xie
10:25 -11:00	Coffee	
11:00-11:30	What matters most to people with colorectal cancer?	Philip Edge, Simon Buczacki,
11.00-11.50	What matters most to people with colorectal cancer?	Catriona Gilmour Hamilton
		Caurena Cimical Flammon
Tumour Microenvironment (chair: Kim Midwood)		
11.30-11.50	Inflammation driven Cancer: Host-microbe interactions	Fiona Powrie
11:50-12:10	Tissue-resident NK cells support survival in pancreatic	F : 011 !!!
12:10 12:20	cancer through promotion of cDC1-CD8T activity	Eric O'Neill Simon Davis
12:10-12:30 12:30-12:35	Precision proteomics in human disease Enhancing the immune response to ovarian cancer	Luyao Wang
12:35-12:40	Characterising Tissue Resident Memory CD8+CD103+	Luyao Wang
12.00 12.10	T-cells in malignant pleura effusion	Delaney Dominey-Foy
12:40-14:00	Lunch (posters 13:00-13:45)	
Specificity and Function (chair: Malcolm Sim)		
14:00-14:20	Exploring TCR and co-receptor signalling in T cells	
	using engineered ligands	Ricardo Fernandes
14:20-14:40	Isolation and Characterization of Cancer-specific T	Tao Dong and
	Cells from Tissue and Blood	Megat Bin Abd Hamid
14:40-15:00	Manipulating TCR cross-reactivity for improved	Omer Duebek
15:00-15:20	immune therapies without modifying the TCR Applying OPIG's computational tools and databases to	Omer Dushek
10.00-10.20	characterise cancer-associated adaptive immune receptors	Matthew Raybould
15:20-15:25	Characterizing the tumour-specific T cell repertoire in	,
	Hormone receptor-positive Breast Cancer	Mariana Pereira Pinho
15:25-15:30	Mapping specificity and cross-reactivity of wild type and	
	engineered T cell receptors	Kristen Koopmans
15:30-16:00	Coffee	
16:00-16:45	Keynote: Immunology of non-inflamed cancer	Lieping Chen (Yale)
	Kindly supported by the Ludwig Institute for Cancer Research	
16:45-17:00	Awards and closing remarks	Tim Elliott
17:00-18:15	Drinks reception	
18:00-20:00	Speakers dinner	
	-p	

# Welcome from the OCION Founding Director Tim Elliott





It is my pleasure to welcome you to the 2nd Annual OCION Symposium. We established OCION was in June 2023 to bring together scientists from different disciplines, cutting-edge technologies and patient samples to progress our immuno-oncology understanding to the next level. By applying Oxford's leading expertise in fundamental immunology, we hope to enable more patients, with a wide range of cancer types, to benefit safely from tailored immunotherapy use.

I am delighted to present a diverse and exciting programme, and especially exciting to welcome our keynote speaker Professor Lieping Chen, who's work in the discovery of the PD-1/PD-L1 pathway in cancer immunotherapy was cited as the top breakthrough of the year by Science Magazine 2013.

Alongside our annual event, our offering includes a seminar series with networking drinks, pump prime funding, monthly newsletter, immuno-oncology directory and support with grant writing, sample/data access and helping to foster industry relationships.





# OCION, Oxford Cancer and the CRUK Oxford Centre



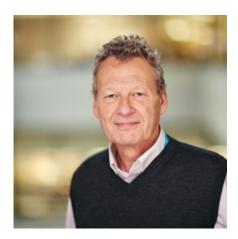
OCION is part of Oxford Cancer, a city-wide partnership between the University and the NHS Hospitals Trust, funded in part by CRUK. We create and support opportunities for people who are experts in different areas - such as biology, data, computer science and chemistry - to work together. Working together helps us optimise time, money and skills so that research can be applied to improve the lives of cancer patients faster.

This initiative would not be possible without the support of many of you who are here today, be it through seminar talks, through PPIE, our funding review committee or the OCION steering committee. Thank you for your hard work and dedication to make OCION a reality.

The CRUK Oxford Centre harnesses Oxford's world-leading cancer research with the core aim of facilitating collaboration to ensure rapid translation from scientific discovery to treatments for patients. The Centre is run as part of the Oxford Cancer network, with a focus on funding Cancer Research UK strategic priorities.

# OCION steering committee





Tim Elliott



Kim Midwood



Tao Dong



Omer Dushek



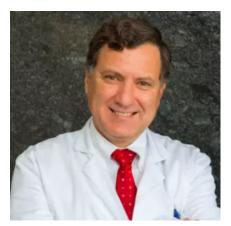
Paul Klenerman



**Audrey Gérard** 



Rachael
Bashford
-Rogers



Ignacio Melero

# 2024 OCION Pump Prime Funding Scheme



Following a very competitive set of applications in 2023 when we funded 3/21 projects, we are launching the call for applications to the 2024 round. Awards of up to £20,000 each are available for a maximum of 12 months starting on 1st December 2024. Please download the guidance and application form from the website.

The mission of the Oxford Cancer Immuno-Oncology Network (OCION) Funding Scheme is to provide short-term awards that pump-prime innovative, high-risk and proof-of-concept Oxford-based immuno-oncology research. Often the projects we support are at too early of a stage to be competitive for project/programme grant applications but have the potential to be with additional preliminary data. If you are unsure whether your proposal would be in scope, please contact elizabeth.mann@medsci.ox.ac.uk for an informal discussion.

Priority will be given to projects that nurture new collaborations and are multidisciplinary. Moreover, to be successful applications should:

- 1) demonstrate genuine integration of immunology and cancer research;
- 2) demonstrate clear line of sight to translation;
- 3) be informed by patient and public involvement;
- 4) increase Oxford's immuno-oncology capacity;
- 5) be used to leverage follow-on external funding.

# **Previous winners**

# Kim Midwood, The Kennedy Institute of Rheumatology

How does macrophage marker F4/80 control T cell tolerance during tumour progression? Finding new ways of taming inflammation to improve treatment options for people with cancer

David Church and Luciana Gneo, Henry Wellcome Building of Genomic Medicine

Vaccination for cancer prevention in Lynch Syndrome

Alistair Easton, Department of Oncology

Phenotyping Intra-epithelial Lymphocytes in Pre-Invasive Lesions



# OCION scientific funding review board





Tim Elliott (chair)



Mike Dustin



Alison Simmons



Rachael Bashford-Rogers



Ben Faifax



Len Seymour



Paul Klenerman



Tao Dong



Ignacio Melero



Kim Midwood



Ricardo Fernandes



Carol Leung

# Speaker Biographies Keynote Speaker



# **Professor Lieping Chen**

# Professor in Cancer Research and Professor of Immunobiology, of Dermatology and of Medicine

### Yale School of Medicine



Lieping Chen was born in Fuzhou, China and earned his medical degree from Fujian Medical College, Fuzhou, China in 1982. After clinical and research training in Fujian Union Hospital and Beijing Union Medical College, he received a PhD degree in Pathology from Drexel University in Philadelphia, Pennsylvania in 1989; and did a postdoctoral fellowship in the University of Washington in Seattle. He joined the Bristol-Myers Squibb/Oncogen in Seattle as a research scientist in Immunology and Oncology group from 1989-1997 where he has originated a new paradigm to target T cell costimulatory and coinhibitory pathways for cancer immunotherapy. He moved to Mayo Clinic to become Professor in immunology department where he discovered B7-H1 (aka PD-L1) molecule, identified T cell inhibitory function of B7-H1 and its receptor PD-1, demonstrated the role of this pathway in the evasion of tumour immunity, and showed antibody blockade of this pathway could restore dysfunctional immunity in tumour site as therapeutic approach. Collectively, these findings are cornerstones of FDA-approved anti-PD-1/PD-L1 antibody drugs for cancer treatment. In 2004, he joined the faculty of the Johns Hopkins University School of Medicine where he helped initiate the first clinical trial of anti-PD-1 antibody MDX-1106 (now known as Nivolumab or Opdivo@) for treating advanced human cancer and developed PD-L1 staining as a predictive biomarker. He moved to Yale and resumed current position in 2011. In addition to the PD-1/PD-L1 pathway, his laboratory also discovered over 20 cell surface receptors and ligands and/or their immunological functions as well as their applications in human disease treatment (e.g., 4-1BB, B7-H3, B7-H4, Siglec-15, FGL1/Laq3, CD93/IGFBP7).

Dr. Chen has published over 390 research articles in peer-reviewed journals and is the principal inventor on 40+ US patents. His work in the discovery of the PD-1/PD-L1 pathway in cancer immunotherapy was cited as the #1 breakthrough of the year by Science Magazine 2013. His honours and awards include the William B. Coley Award, AAI-Steinman Award, Giants of Cancer Care Award and Warren Alpert Foundation Prize. He is a member of US National Academy of Sciences and a fellow of American Association for Cancer Research.

# Speaker Biographies Immunotherapy & Resistance Session



### **Professor Eleanor Stride**

Eleanor Stride is a Professor of Bioengineering at Oxford University specialising in stimuli responsive drug delivery. She has over 200 publications papers, 12 patents and is a director of 2 spin out companies set up to translate her research into clinical practice. She is a fellow of the Royal Academy of Engineering, the ERA foundation and Acoustical Society of America. She received the ASA Bruce Lindsay award, the IET AF Harvey prize, was nominated as one of the 100 most influential women in Engineering in 2019 and was made an Officer of the Order of the British Empire in 2021.



### **Dr Richard Owen**

Richard Owen is a consultant oesophageal cancer surgeon in Oxford, holding a joint appointment at the Ludwig Institute as a senior researcher, and is a principal investigator on several clinical projects relating to oesophageal cancer care. He completed a DPhil at the University of Oxford investigating how oesophageal premalignancy develops, using single cell RNA-sequencing in human upper gastrointestinal tissues for the first time. This deep phenotyping approach has given new insights into the importance of the myeloid compartment in anti PD-L1 response, and how blood-based methylation signatures can provide on-therapy response monitoring.



# **Associate Professor Eileen Parkes**

Eileen Parkes is an Associate Professor, Wellcome Trust Fellow and Medical Oncologist at the Centre for ImmunoOncology, Department of Oncology. She completed her oncology fellowship training and PhD at Queen's University, Belfast, where she identified constitutive activation of cGAS-STING signalling in BRCA-mutant cancers. As Oxford ECMC lead and medical oncologist, Eileen is PI of multiple early phase trials studying novel immunotherapies. As a group leader in tumour immunology, she leads a team of researchers studying the tumour microenvironment in chromosomally unstable cancers such as oesophageal adenocarcinoma, which are cancers of high unmet need, her goal is to develop new therapeutic strategies.



# Speaker Biographies Immunotherapy & Resistance Session



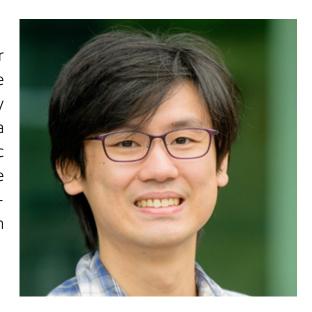
### **Associate Professor Graham Collins**

Graham Collins is Associate Professor of Haematology at Oxford University and Lead of the Haematology and Lymphoma service at Oxford University Hospitals NHS Foundation Trust. He is deputy chair of the National UK Lymphoma clinical study group, past chair of the Hodgkin and T-cell lymphoma study groups and Clinical Expert on the National CAR-T Clinical Panel for lymphoma. His academic interests are in Hodgkin and high-grade non-Hodgkin lymphoma and he is chief investigator on a number of investigator initiated and commercial clinical trials. He has worked with the National Institute for Health and Care Excellence on guidelines for non-Hodgkin lymphoma and has also co-authored British Society of Haematology guidelines on Hodgkin lymphoma and T-cell lymphoma. Professor Collins is founder and co-course director of the national Lymphoma Management Course.



### **Dr Phil Xie**

Dr. Phil Xie is a postdoctoral researcher at the Ludwig Institute for Cancer Research, Oxford. He studied medicine at The Chinese University of Hong Kong and earned his DPhil from the University of Oxford. His research centres on oesophageal cancer, with a special interest in the widespread cancer-associated epigenetic changes, in particular DNA methylation. Dr. Xie is exploring the potential clinical applications of these changes in circulating cell-free DNA, aiming to improve treatment strategies in patients with oesophageal cancer.

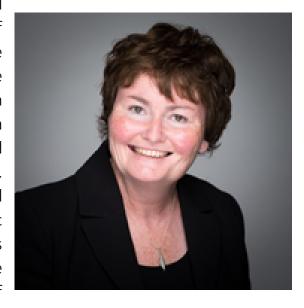


# Speaker Biographies Tumour Microenvironment Session



### **Professor Dame Fiona Powrie**

Professor Dame Fiona Powrie is Director of the Kennedy Institute of Rheumatology, University of Oxford, a Fellow of the Royal Society and the Academy of Medical Sciences and Deputy Chair of Wellcome Trust's Board of Governors. After her PhD in Oxford she moved to the DNAX Research Institute in Palo Alto, before returning to Oxford in 1996 as a Wellcome Trust Senior Research Fellow. Prior to her appointment to the Kennedy Institute, Fiona was the Sidney Truelove Professor of Gastroenterology and Head of the Translational Gastroenterology Unit, Oxford (2009-2014). Her research examines the relationship between the intestinal microbiome and the host immune system and how this mutualistic relationship breaks down in inflammatory bowel disease, arthritis and cancer. Fiona was elected an international member of the National Academy of Sciences in 2020 and Dame Commander of the Most Excellent Order of the British Empire (DBE), for services to Medical Science, in 2022.



### **Professor Eric O'Neill**

Eric O'Neill is professor of Cell and Molecular Biology at the Department of Oncology, University of Oxford and leads a research group on cell signalling of tumourigenesis and cancer, with a focus on epithelial tumours in particular, pancreatic cancer. More recently this has expanded into the tumour immune microenvironment employing single cell sequencing, spatial transcriptomics and patient tissue avatars to highlight immune neighbourhoods and intra-immune cell-cell communications that support tumour cell growth and survival.



### **Dr Simon Davis**

Simon is a postdoctoral researcher in the Clinical Proteomics Group of Prof. Roman Fischer at the Centre for Medicines Discovery & Target Discovery Institute. His research focusses on the spatial organisation of the proteome within healthy and diseased tissues. This involves using a newly developed workflow for laser capture microdissection and mass spectrometry-based proteomics to profile proteome changes across tissue structures, disease state and cell composition.



# Speaker Biographies Tumour Microenvironment Session



# **Dr Luyao Wang**

Dr. Luyao Wang is a postdoctoral researcher focused on cancer immunotherapy, particularly ovarian cancer. She earned her Ph.D. at Sichuan University, specialising in drug delivery systems and cancer therapy. Dr. Wang also completed a one-year visiting study with Professor Walter Bodmer at the University of Oxford, researching bispecific antibodies for colorectal cancer immunotherapy. Currently, she is working in Professor Ahmed Ahmed's group, developing adoptive T-cell therapy for ovarian cancer. Her research aims to understand T-cell immune responses to combat ovarian cancer initiation and progression, and to establish a translation-ready therapeutic and prevention platform.



# **Delaney Dominey-Foy**

Delaney is a 4th Year Clinical Medicine DPhil student supervised by Professor Tao Dong and Dr Yanchun Peng at the Chinese Academy of Medical Sciences Oxford institute (COI). He has a deep-seated interest in immunology, cellular therapy and adaptive immune responses to cancer. His DPhil research focuses on T-cell infiltrate in malignant pleural effusion, and repurposing Tissue Resident Memory CD8+T-cells for antitumour immunity. Prior to attending the University of Oxford, he read BSc (Hons) Molecular Genetics at King's College London. At KCL he had the privilege to research allogeneic "off-the-shelf" CAR-T cells for multiple myeloma, supervised by Dr Reuben Benjamin.

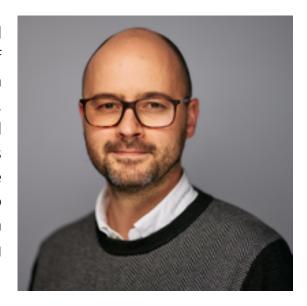


# Speaker Biographies Specificity and Function Session



### **Dr Ricardo Fernandes**

Dr. Ricardo Fernandes is a Group Leader at the CAMS Oxford Institute and Nuffield Department of Medicine at the University of Oxford. He obtained his PhD from Oxford, where he worked with Simon Davis on understanding the mechanism of TCR triggering. Later, he pursued his postdoctoral studies at Stanford and developed novel bispecific proteins that utilize endogenous membrane phosphatases to shut down signaling by surface receptors. The Fernandes' Lab employs protein engineering to identify new therapeutic approaches for modulating T cell function in autoimmune and cancer settings, while also deciphering functional and structural correlates of immune receptor signaling.



# **Professor Tao Dong**

Tao Dong is Ita Askonas Professor of Translational Immunology at Oxford University, has held the post of professor of Immunology in MRC Human Immunology since 2014 and is a Senior Fellow at University College Oxford. She is the founding director of CAMS Oxford Institute based at Oxford University since 2019. Tao moved to Oxford University in 1993 where she received a DPhil degree in Immunology in 1998. In 2010 she became the Head of the human anti-viral and anti-cancer cytotoxic T cell laboratory and subsequently Program Leader in the MRC Human Immunology Unit at Oxford University. She also served as a panel member in various international funding organisations, and SAB member for several pharmaceutical companies.



# Dr Megat Hafizzuddin Bin Abd Hamid

Megat is currently a postdoctoral researcher within Professor Tao Dong's group at CAMS Oxford Institute, Nuffield Department of Medicine, University of Oxford. He previously undertook a DPhil at the Weatherall Institute of Molecular Medicine, University of Oxford, and prior to that, completed his Bachelor of Biotechnology (Hons) at the Australian National University. His current research assesses the characteristics and mechanisms of immune regulators on tissue-resident cytotoxic T cells within lung cancer, for potential usages in immunotherapies. His other current research interest is in understanding the effects of tissue microenvironment on disease tolerance and responses



# Speaker Biographies Specificity and Function Session



### **Professor Omer Dushek**

Omer Dushek is Professor of Molecular Immunology and Wellcome Trust Senior Research Fellow at the Sir William Dunn School of Pathology, University of Oxford. After initial training in physics (BSc) and applied mathematics (PhD) in Canada, he moved to the UK for his post-doctoral work where carried out experimental work on T cells. His lab is focused on understanding and exploiting the process of T cell antigen recognition by the T cell antigen receptor and synthetic antigen receptors. Together with Anton van der Merwe, he has recently spun-out a company (MatchBio Ltd) to improve immune therapies.



# **Dr Matthew Raybould**

Matthew Raybould has an MChem in Chemistry and a DPhil in Immunoinformatics from the University of Oxford. His DPhil focused on the development of 3D structure-aware computational tools that aid antibody drug discovery and was conducted in the Oxford Protein Informatics Group (OPIG) under the supervision of Professor Charlotte Deane. Matthew continues to work in OPIG as a postdoctoral researcher, performing and supervising computational analyses of adaptive immune receptor repertoires and methodology/database development for in silico-assisted immunotherapy and vaccine design.



# Speaker Biographies Specificity and Function Session



### Dr Mariana Pereira Pinho

Dr. Mariana Pereira Pinho is currently a postdoctoral scientist in Tao Dong's lab at the Translational Immune Discovery Unit (TIDU) of the MRC Weatherall Institute of Molecular Medicine, University of Oxford. Mariana graduated in Molecular Sciences, an interdisciplinary course designed for scientists, in 2012. She obtained both her Master's and PhD degrees in Cancer Immunology in Brazil, with collaborative research periods in Germany and Switzerland, respectively. Dr. Pinho's current research focuses on investigating the tumor-specific T cell response in breast cancer patients and studying how it is influenced by immunotherapy.



# **Kristen Koopmans**

Kristen is in her second year of the DPhil in Cancer Sciences programme, working in Ricardo Fernandes' lab at the CAMS Oxford Institute. Prior to starting her DPhil, she completed her MBChB pre-clinical years at the University of Manchester, and her BSc in Biomedical Sciences at UCL. Her research focuses on mapping specificity and cross reactivity of T cell receptors (TCRs) to improve our understanding of interactions between the TCR and peptide MHC (pMHC). This is done via a combination of high-throughput screenings, computational approaches, and functional assays.



# Poster abstracts



Poster #1

Aisling Barrett, Graham Collins; Department of Oncology

PD1 inhibitor induced chemo-sensitisation as a method to reduce chemotherapy burden in older patients with Hodgkin Lymphoma: the RATiFY study

Poster #2

Alice Barocco\*, Matthew Brown\*, <u>Jia-Ling Ruan</u>, Shihong Wu, Carl Lee, Doreen Lau, Iain Tullis, Kristoffer Petersson; Department of Oncology

Deciphering the immune effect of FLASH radiotherapy on muscle-invasive bladder cancer

Poster #3

Bruno Beernaert; Centre for Immuno-Oncology

cGAS-STING drives myeloid inflammation in chromosomally unstable oesophageal cancer

Poster #4

<u>Delaney Charles Conleth Dominey-Foy</u>, X. Yao, W. Wang, N. I Kanellakis, A. Bates, Y. Zhao, B. Wang, S. Farrar G. Liu, M. Bin Abd Hamid, M. Pidoux, N. Manohara, B. Iqbal, N. M Rahman, Y. Peng, and T. Dong; Ludwig Institute for Cancer Research

Characterising Tissue Resident Memory CD8+CD103+ T-cells in malignant pleura effusion

Poster #5

Hannah Scott; Nuffield Department of Medicine

Targeted Mass Spectrometry Reveals Interferon-Dependent Eicosanoid and Fatty Acid Alterations in Chronic Myeloid Leukaemia

Poster #6

Jamie Kwon; Centre for Immuno-Oncology

Characterisation of the tumour immune microenvironment in homologous recombination-deficient prostate cancer

# Poster abstracts



Poster #7

<u>Julia EV McCarthy</u>, Dan Hudson, Raul Cioaca, Peijun Zhang, Jamie Rossjohn, Timothy J Elliott, Ricardo A Fernandes; Centre for Immuno-Oncology

Structural Correlates of T Cell Receptor Specificity and Cross-reactivity

Poster #8

<u>Kristen E Koopmans</u>, Adam Bates, Dan O Hudson, Julia McCarthy, Yunkai Yang, Tao Dong, Ricardo A Fernandes; Centre for Immuno-Oncology

Mapping specificity and cross-reactivity of wild type and engineered T cell receptors

Poster #9

Lea RZ Cohen; Department of Oncology

CR participation in relapse-free survival after ICB treatment

Poster #10

Luciana Gneo; Centre for Human Genetics

Functional and therapeutic analysis of DNA mismatch repair deficiency in intestinal cancer

Poster #11

<u>Margarida Rei</u>, Rui Ma, Ana Tomás, Hasan Al-Sattar, João Canto-Gomes, Claudia Nóbrega, Margarida Correia Neves, Punnet Plaha, Vincenzo Cerundolo, Xin Lu; Ludwig Institute for Cancer Research

Interrogating the TCR specificity of glioblastoma-infiltrating T cells

Poster #12

Mariana Pereira Pinho; Weatherall Institute of Molecular Medicine

Hormone Receptor positive breast cancer patients have a diverse tumor-specific CD8 T cell repertoire that can infiltrate the tumor

# Poster abstracts



Poster #13

Phil Xie; Ludwig Institute for Cancer Research

Circulating cell-free DNA for early response monitoring in oesophageal cancer with immuno-chemotherapy

Poster #14

<u>Sally Pelling-Deeves</u>; Medical Sciences Division

Oxford Immunology Network: Supporting immunology research, resources and training at the University of Oxford

Poster #15

<u>Simeon D. Draganov</u>, Benedikt M. Kessler, Adan Pinto-Fernandez

Uncovering the USP18 Interactome and Elucidating Its Role in Cancer Immunology

Poster #16

Sofia Bustamante Eguiguren, Sir William Dunn School of Pathology

PD-1 and BTLA indiscriminately inhibit the T cell receptor and co-stimulation receptor signalling in a high-density dependent manner

Poster #17

Zinaida Dedeic, Department of Oncology

LungVax: A Precision Prevention approach to vaccinate against lung cancer in an atrisk population



# 10)<br/>GENOMICS

10x Genomics was founded on the vision that this century will bring advances in biomedicine and transform the way we understand and treat disease. We deliver powerful, reliable tools that fuel scientific discoveries and drive exponential progress to master biology to advance human health. Our end-to-end single cell and spatial solutions include instruments, consumables, and intuitive software, letting you unravel highly intricate biological systems, while bringing into focus the details that matter most.

https://www.10xgenomics.com/



# Thermo Fisher SCIENTIFIC

Thermo Fisher Scientific is a global leader in scientific solutions, serving customers in research, healthcare, and industrial sectors.

Our goal is to enable customers to make the world healthier, cleaner, and safer through innovative technologies and services.

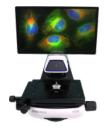
We offer a comprehensive range of products catering to immuno-oncology research, including laboratory instruments, recombinant growth factors and other reagents, and consumables.

Our cutting-edge technologies empower scientists and researchers to accelerate discoveries, enhance efficiency, and streamline workflows.

We provide exceptional customer support and technical expertise, assisting customers from instrument selection to troubleshooting and training.

Thermo Fisher is committed to sustainability and corporate social responsibility, reducing our environmental impact and supporting education and community development initiatives.

We strive to build long-lasting partnerships with our customers based on trust, collaboration, and mutual growth. Thermo Fisher is dedicated to advancing scientific knowledge and enabling breakthrough discoveries worldwide.









For more information, please contact your account manager Lauri Saastamoinen at lauri.saastamoinen@thermofisher.com or 07909 350446

# **Sponsors**



# LUDWIG CANCER RESEARCH

Ludwig Cancer Research is an international community of distinguished scientists dedicated to preventing and controlling cancer. American businessman Daniel K. Ludwig began to support cancer research with the establishment of the Ludwig Institute for Cancer Research in 1971.

### Oxford

Daniel K. Ludwig was born in 1897, in Michigan, USA. By the 1960s he was among the richest men in the world, with a self-made empire of some 200 companies. By the time of his death, he had pioneered the modern supertanker, participated in major oil and gas projects throughout the world, become a major investor and operator in the production of coal and other minerals, acquired and developed luxury hotels and other real estates, and developed a forest-products and agricultural enterprise that encompassed three million acres in the Amazon basin.

In 1971, he launched the Ludwig Institute for Cancer Research (he had to be persuaded strongly to allow his name to be used), endowing it with nearly all of his international holdings. That endowment is managed by the Ludwig Institute for Cancer Research Fund.

Today, the scientific efforts endowed through his resources have grown to encompass the Ludwig Institute and the Ludwig Centres at several institutions in the U.S. and across Europe, all dedicated to advancing the prevention and treatment of cancer.

Ludwig provides Ludwig scientists around the world with the resources and flexibility to realise the life-changing potential of their work, to see their discoveries improve human health and save lives. This philosophy, supported by robust translational programmes, significantly increases the likelihood that that the groundbreaking discoveries made by Ludwig researchers lead to products that are attractive for commercial development.

Since its inception, Ludwig has invested nearly \$3 billion in cancer research.

The Oxford Branch of Ludwig Cancer Research, embedded within the University of Oxford, was created in 2007 and has transitioned into a dynamic world class research institute with over 130 researchers, all with the overarching question: how do genetic alterations interact with epigenetic and epitranscriptomic regulators to impact cancer initiation and progression? Answering this question will allow us to achieve our aim to advance early cancer detection and prevent progression.

Since its foundation, the Branch has focused on how the combination of genetic alterations and the microenvironment drive tumourigenesis. More specifically, we aim to identify the key molecular switches that remodel the epigenetic and epitranscriptomic landscape in response to microenvironmental cues (including infection and inflammation) to impose distinct phenotypic states that underpin cancer initiation, progression and therapy resistance.

By working collaboratively and synergistically among ourselves, with our colleagues in the University of Oxford, the global Ludwig Cancer Research and international research communities, Ludwig Oxford PIs have developed a world leading capacity in epigenetic and epitranscriptomic regulation, in analytical technologies that permit single cell resolution, in models that permit longitudinal observation of disease progression, and in clinical links to cohorts of very high-risk patients who enable informative longitudinal surveillance.



# DO YOU HAVE AN IDEA THAT COULD HELP WITH THE DIAGNOSIS, MONITORING AND TREATMENT OF CANCER?

FURTHER FASTER TOGETHER

OR HAVE YOU DEVELOPED A CANCER RELATED ANTIBODY, CELL LINE OR MOUSE MODEL TO FURTHER CANCER RESEARCH?

### **EXPLORE OPPORTUNITIES TO:**

- TRANSLATE YOUR RESEARCH WITH CANCER RESEARCH HORIZONS
- DEPOSIT YOUR RESEARCH TOOLS WITH CancerTools.org

# CONTACT OUR OXFORD REPRESENTATIVES.



Gillian.Shuttleworth@cancer.org.uk



Ruth.Barrett@cancer.org.uk



Scan to learn about how we can help you to translate your research and increase your impact (incl. funding opportunities and entrepreneurial programmes).



# MOTIVATION AND ENCOURAGMENT

Many people engaged in lab-based research will not meet or work with those affected by cancer. PPI can encourage researchers to meet patients and hear their experiences. This can remind you of the importance of your work and bolster confidence.





### REFINING RESEARCH IDEAS

Listening to the experiences of people with cancer - and finding out what matters to them - might influence the emphasis or direction of your future research, and challenge you in ways you hadn't imagined.

# DEVELOPING RESEARCHER COMMUNICATIONS SKILLS

At some point you have to learn how to communicate the importance of your work to people who are not in your specialist community. PPI can help with verbal and written communications and with confidence in speaking to the public.





# BUILD RELATIONSHIPS WITH FUNDERS

PPI contributors can help you apply for grants and build relationships with funding bodies. Your PPI community will lend support and justification for continued investment in you and your work.

TO FIND OUT MORE EMAIL OXFORDCANCERPPI@MEDSCI.OX.AC.UK



# MEETINGS WITH PATIENTS

Meetings can be for a number of purposes - you might have specific questions to ask, you might want to learn about living with a particular cancer, or you might just want to practice speaking to the public. You might want a committee to meet regularly to hear your progress. Small numbers can yield surprisingly rich results.





### **SHARING DOCUMENTS**

PPI representatives can help you improve your skills at writing for the public, and can help make sure public-facing documents will be understood. They can also help with presentation skills if you want to get some practice.

# LABORATORY VISITS AND TOURS

Build relationships with your PPI contributors by inviting them behind the scenes to see your work in action. This can be interesting and exciting for your guests and might have wider benefits for your laboratory colleagues.





### REACH OUT TO NATIONAL PATIENT CHARITIES

Have you explained your work and its potential significance to a national audience of patients? Large patient organisations can be crucial collaborators and their members are usually interested in cutting-edge science.

TO FIND OUT MORE EMAIL OXFORDCANCERPPI@MEDSCI.OX.AC.UK

# Support and Services



Oxford Cancer is here to support your research by coordinating expertise, lowering barriers and helping you to access key research facilities. We have access to a range of services that can help your research to reach its translational potential. These are available to any University of Oxford or Oxford University Hospitals staff member belonging our Oxford Cancer community. More details on the tools, teams and resources available can be found via the QR code below.

Funding support

Translational histopathology lab

Clinical positioning network

Molecular diagnostics centre

Patient sample access

Clinical trial support

PPI

Comms & event support

