



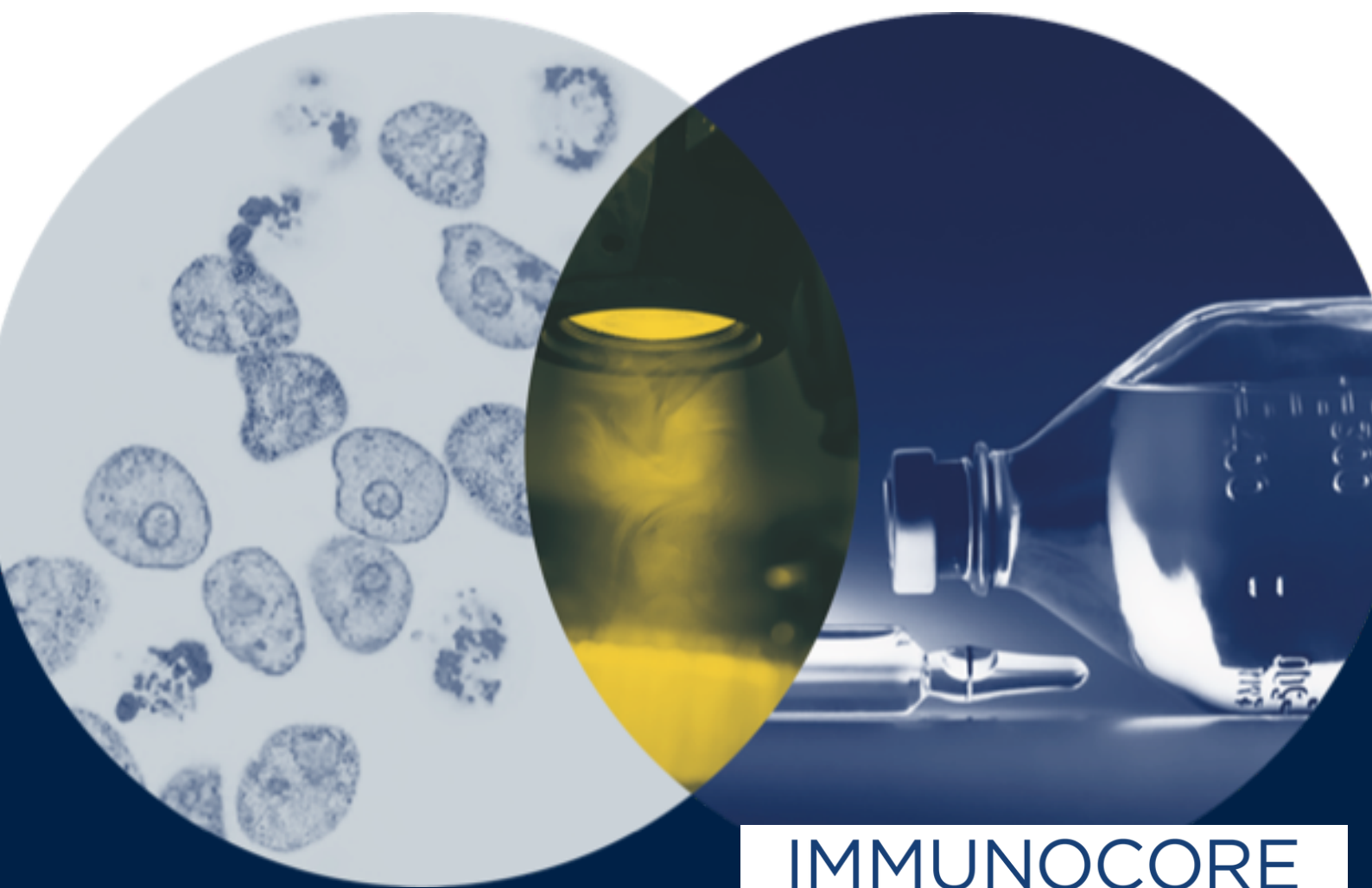
Oxford
Centre



Oxford Cancer Immuno-Oncology Network (OCION) 2025 Annual Symposium

Friday 13th June 2025

Lecture Theatre 2, Mathematical Institute, University of Oxford



IMMUNOCORE



Oxford
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Technologies

10x
GENOMICS

Immunotherapy
ADVANCES

Oxford Cancer Immuno-Oncology Network (OCION) 2025 Annual Symposium

Friday 13th June 2025

Mathematical Institute, University of Oxford, OX2 6GG
Lecture Theatre 2

08:45 **Arrival and registration**

09:15-09:25 Welcome

Tim Elliott

Next Generation Therapies *(chair: Eileen Parkes)*

09:25-09:45 Vaccine platforms for cancer vaccines – much of a muchness or fundamentally different?

Ellie Barnes

09:45-10:05 Anti-tumour impacts of antiviral responses

Paul Klenerman

10:05-10:25 The impact of the bone marrow microenvironment upon CAR-T function

Ronjon Chakraverty

10:25-10:30 Development of an EPCR-reactive $\gamma\delta$ TCR as bispecific T-cell engager

Mariolina Salio

10:30 -11:00 **Coffee**

Inflammation and Immunometabolism *(chair: Audrey Gérard)*

11:00-11:20 A longitudinal single-cell atlas of anti-TNF therapy in IBD

Calli Dendrou

11:20-11:40 Eosinophil deactivation by the breast tumour microenvironment can be reversed by interferons

Kim Midwood

11:40-12:00 Developing ex vivo models for investigating natural and therapeutic regulation of human adaptive immunity

Pablo Céspedes Donoso

12:00-12:05 “Interferon exhaustion” - exploring the effect of sustained Type I interferon signalling on treatment outcomes of checkpoint immunotherapy

Maksim Chan

12:05-12:10 Spatial mechano-transcriptomics: mapping at single-cell resolution mechanical forces and gene expression in tissues

Adrien Hallou

12:10-12:15

Tim Elliott

12:15-13:45 **Lunch (posters 12:45-13:30)**

13:45-14:15 PPI quiz and panel discussion

Catriona Gilmour-Hamilton

Tumour Microenvironment *(chair: David Withers)*

14:15-14:35 Lymph node yield as an immunological marker of primary colorectal cancer biology

James Bundred

14:35-14:55 Scratching below the surface of skin cancer in high-risk groups using spatial profiling

Matthew Bottomley

14:55-15:15 Hypoxia-mediated repression of MHC-I and antigen presentation

Ester Hammond

15:15-15:35 Finding needles in the hay: Multi-omics approaches to identify tumour antigens

Eleni Adamopoulou

15:35-15:40 MAIT cell phenotype and diversity predicts risk of checkpoint inhibitor dermatitis in melanoma

Gusztav Mlotay

15:40-16:10 **Coffee**

16:10-16:50 **Keynote:** Rewiring immune responses for advancing cancer immunotherapy

Alfred Zippelius

Awards and closing remarks

Drinks reception

16:50-17:00

Tim Elliott

17:00-18:00

Welcome from the OCION Founding Director Tim Elliott



It is my pleasure to welcome you to the 3rd 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 Alfred Zippelius from the University of Basel, who has performed seminal work in immunotherapy refractoriness and treatment combinations.

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.

A large, thick yellow arch graphic that spans across the lower half of the slide, partially obscuring the background image of Oxford's skyline.

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



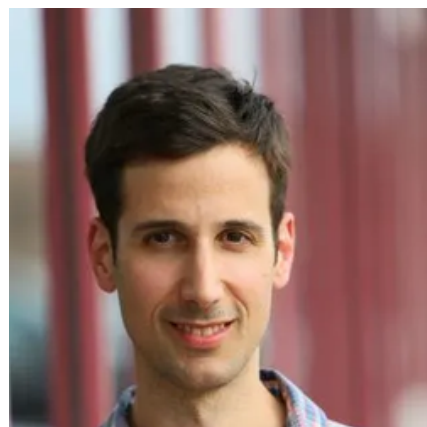
**Tim
Elliott**



**Kim
Midwood**



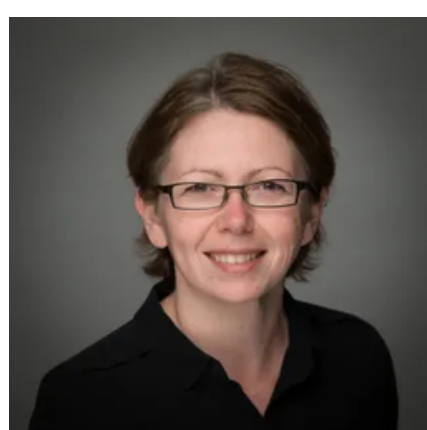
**Tao
Dong**



**Omer
Dushek**



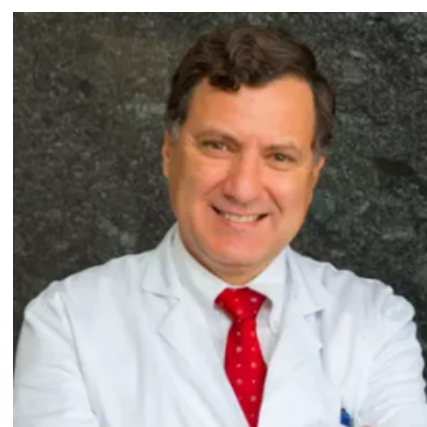
**Paul
Klenerman**



**Audrey
Gérard**



**Calliope
Dendrou**



**Ignacio
Melero**

2025 OCION Pump Prime Funding Scheme



Launched in 2023, we have now funded seven pump prime projects, two in partnership with the NIHR Oxford BRC. 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 multi-disciplinary. 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.

2024 winners

[Audrey Gérard and Claudia Monaco, The Kennedy Institute of Rheumatology](#)

Exploring the relationship between the immune landscape of cancer and atherosclerotic plaques to identify targetable pathways to control tumour growth and limit atherosclerosis incidence

[Adán Pinto-Fernández, The Chinese Academy of Medical Sciences Oxford Institute](#)

Targeting ISGylation to Boost Cancer Antigenicity: A Novel Approach for Cancer Immunotherapy

[Anna Schuh and Kate Ridout, Department of Oncology \(funded by NIHR Oxford BRC\)](#)

Exploring Neo-Epitope Landscapes in Chronic Lymphocytic Leukaemia for Vaccine Development

[Tamsin Cargill, NDM Experimental Medicine Division \(funded by NIHR Oxford BRC\)](#)

Deciphering Tumour-associated Antigen T-cell Reactivities in Hepatocellular carcinoma to identify candidate immunogens for anti-cancer vaccine development

OCION scientific funding review board



**Tim
Elliott
(chair)**



**Mike
Dustin**



**Alison
Simmons**



**Rachael
Bashford-
Rogers**



**Ben
Faifax**



**Felipe
Galvez-
Cancino**



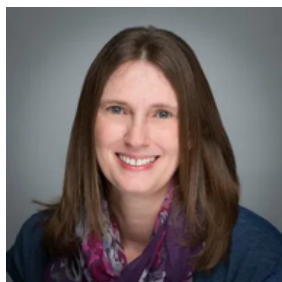
**Paul
Klenerman**



**Tao
Dong**



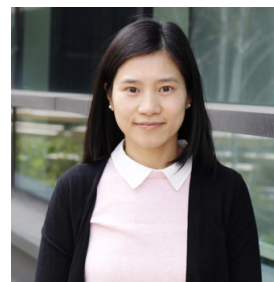
**Ellie
Barnes**



**Kim
Midwood**



**Ricardo
Fernandes**



**Carol
Leung**



**Tamsin
Cargill**

Speaker Biographies

Keynote Speaker



Professor Alfred Zippelius

**Professor of Cancer
Immunology**

University of Basel



Alfred Zippelius is Co-Chair of the Department of Medical Oncology at the University Hospital Basel and Professor of Oncology at the University of Basel. He leads clinical and translational research in cancer immunotherapy, with a focus on developing novel immunotherapies. His research aims to understand how those therapies modulate tumor-specific immunity and investigate potential mechanisms, to overcome therapeutic resistance. His group, working with patient-derived and murine models, prioritizes rational combinations, reinvigoration of intra-tumoral immune cells, reinforcing of anti-tumor immunity by immunomodulation and mechanisms of anti-tumor immunity in patients.

Speaker Biographies

Next Generation Therapies Session



Professor Eleanor Barnes

Eleanor Barnes is Professor of Hepatology and Experimental Medicine at Oxford University and the John Radcliffe hospital leading a research group in applied immunology relevant to liver disease. She co-leads the Oxford NIHR BRC Vaccine theme, and has a long standing history in developing vaccines for persistent viral infections taking these from design to human testing. She leads a national program in liver cancer early detection and is a co-director of the Go-PRECISE GSK-Oxford cancer vaccine collaboration, developing vaccines for cancer prevention. She performs comparative analysis of ChAd and mRNA vaccine platform technologies in pre-clinical studies and in humans.



Professor Paul Klenerman

Paul Klenerman trained in medicine at Cambridge and Oxford and specialised in infectious diseases. He has been funded mainly by the Wellcome, initially working on HIV with Andrew McMichael and Rodney Phillips, then with Rolf Zinkernagel and Hans Hengartner in Zurich on LCMV and returning to Oxford to set up studies on T cells in chronic infections such as HCV and CMV. His group have worked on vaccines, especially adenoviral vector vaccines and the types of memory induced, including memory inflation. He currently carries out studies looking at CD8+ T cells and unconventional T cells such as MAIT cells in infectious diseases and cancer.



Professor Ronjon Chakraverty

Professor Ronjon Chakraverty obtained his medical degree from the University of Birmingham before training in internal medicine and haematology in Cambridge and Oxford. In 2000, he was awarded a Leukaemia Research Fund Bennett Senior Fellowship in Experimental Haematology, allowing him to join Professor Megan Sykes' laboratory at the Transplant Biology Research Center, Harvard Medical School. He set up his own group at UCL in 2005 where his research used pre-clinical models and patient samples to explore mechanisms that dictate the success or failure of anti-cancer T cell therapies. In 2020, he was recruited as Professor of Haematology at the University of Oxford, where he leads efforts to create infrastructure required for delivery of first-in-human trials in advanced cell and gene therapy. He is currently Director of the NIHR Blood and Transplant Research Unit in Precision Cellular Therapeutics, Co-Lead for the NIHR Oxford Biomedical Research Cell and Gene Therapy Theme and Co-Director of the MRC Centre of Research Excellence in Therapeutic Genomics.



Speaker Biographies

Next Generation Therapies

Session



Dr Mariolina Salio

Mariolina Salio obtained her degree in Medicine from the University of Torino, Italy and worked at Mount Sinai Hospital, Harvard Medical School and the Basel Institute for Immunology. After 22 years at the MRC Human Immunology Unit in Oxford she joined Immunocore in January 2022, to lead research on unconventional T cell targets, including CD1, MR1 and gamma-delta ligands. Ultimately, her interest lies in designing strategies to harness both conventional and innate-like T cells to improve adaptive immunity in cancer. As a Director of Research and Fellow in Immunology, Mariolina is also keen to bridge Academia and Industry through cutting edge collaborations and to train the next generation of multi-disciplinary immunologists.



Speaker Biographies

Inflammation and Immunometabolism

Session



Associate Professor Calli Dendrou

Calliope Dendrou is an Associate Professor in Clinical Pathology and Inflammation at the Kennedy Institute of Rheumatology (KIR). She previously held a Wellcome & Royal Society Sir Henry Dale Fellowship to start her group in 2017 at the Wellcome Centre for Human Genetics in Oxford, where she was also the Equality, Diversity and Inclusion Champion, before moving to the KIR in 2023. Calli completed her BSc in Biology at Imperial College London in 2005, and her PhD at the University of Cambridge in the Diabetes and Inflammation Laboratory in 2010, before moving to Oxford to undergo postdoctoral training at the Weatherall Institute of Molecular Medicine.

Calli's current research uses high-resolution genomic profiling technologies to investigate shared molecular circuits and cellular mechanisms across tissues and across immune-mediated diseases. Her research aims to identify 'hubs' that may be targeted therapeutically via drug repositioning approaches, with an especial emphasis on cytokine signalling pathways.



Professor Kim Midwood

Kim Midwood is Professor of Matrix Biology at Oxford University, and Principal Investigator at the Kennedy Institute of Rheumatology, studying how the cellular microenvironment drives, and shapes, immune responses. Kim graduated with a B.Sc. (HONS) in Biochemistry from Edinburgh University in 1995, and completed her Ph.D. in the Department of Pathology at Edinburgh University in 1999. Following postdoctoral training at Princeton University in the US from 1999, she established the Matrix Immunology group in the Kennedy Institute of Rheumatology at Imperial College London in 2004 to examine how immunomodulatory matrix molecules contribute to healthy immune responses, and their role in pathological inflammation, moving to Oxford University in 2011. Her lab aims to develop new drugs targeting the matrix to re-educate the tumor immune axis for hard to treat cancer; she has filed 18 patents in this area to date and spun out 2 companies: Nascent and Orthobond Ltd.



Speaker Biographies

Inflammation and Immunometabolism

Session



Dr Pablo Céspedes Donoso

Dr Céspedes studied Veterinary Medicine and obtained his PhD in Molecular Genetics and Microbiology in Chile, investigating host-virus interactions modulating T-cell priming. Currently, he is a Career Development Fellow at the CAMS Oxford Institute and the Nuffield Department of Medicine at the University of Oxford. His group develops next-generation ex vivo models for lymphocyte communication in health and disease. His team focuses on rapidly initiating lymphocyte self-organisation into ex vivo follicles capable of forming germinal centres. Unlike previous models, Dr Céspedes' methods reactivate lymphocyte behaviours antigen-agnostically, without viruses, to identify cell subsets relevant to autoimmunity, chronic inflammation, and cancer. His ultimate goal is to develop human-centric 3Rs models facilitating mechanistic studies and preclinical assessments of vaccines and therapeutics across diverse fields, from infections to cancer.



Dr Maksim Chan

Maksim is a first-year DPhil student at Prof. Ben Fairfax's lab. He is a clinician who graduated with honours from The Chinese University of Hong Kong (CUHK), receiving the Kan Tong Po Gold Medal in Medical Studies among other accolades, and a Minor in Computer Science. Maksim's research focuses on the application of bioinformatics to cancer immunology, specifically investigating how genetic and transcriptomic data can serve as predictive biomarkers for immunotherapy outcomes and associated toxicities. Prior to his DPhil studies, he interned at the MRC WIMM Centre for Computational Biology where he acquired research experience in genome-wide association studies.



Dr Adrien Hallou

Dr Adrien Hallou is a Group Leader in Tissue Biology (Innovation Investigator Track) and the Principal Investigator of the Laboratory of Cell and Tissue Dynamics at the Kennedy Institute of the University of Oxford. Funded by the Kennedy Trust for Rheumatology Research and the Royal Society, his interdisciplinary research group investigates the role of mechanical and biochemical signalling in cell fate decisions and tissue dynamics during development, homeostasis and disease using innovative approaches combining mechanobiology, spatial genomics, advanced imaging, machine learning and mathematical modelling.



Speaker Biographies

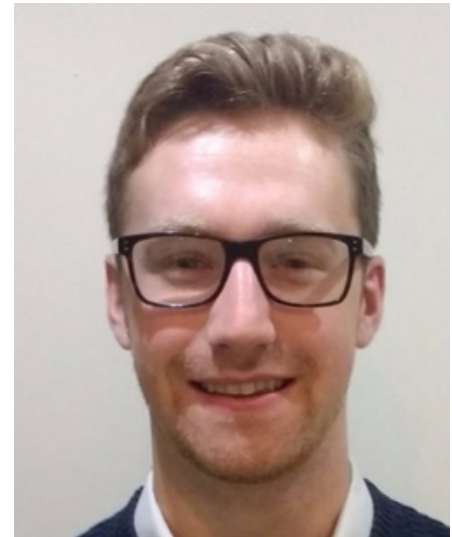
Immunotherapy-Refractory Cancers

Session



Mr James Bundred

James Bundred is a colorectal surgery trainee and DPhil student in Cancer Sciences, based in Professor Simon Buczacki's lab. His research focuses on how the order of driver gene mutations shapes colorectal cancer evolution using gene-edited organoid models and multi-omics approaches. At OCION, he will present on behalf of Professor Buczacki, discussing two strands of work: the prognostic impact of lymph node yield in colon cancer using national surgical registry data, and experimental studies examining how specific mutations and Hedgehog pathway expression influence tumour-immune interactions. With a background in academic surgery and translational cancer research, James is particularly interested in how mechanistic insights can inform immune-targeted strategies and improve patient outcomes in colorectal cancer.



Dr Matthew Bottomley

Dr Bottomley is clinician-scientist at the Chinese Academy of Medical Sciences Oxford Institute (COI) and a practicing consultant nephrologist at the Oxford Kidney and Transplant Unit, Churchill Hospital. His research focus is on the development of malignancy in immunosuppressed populations, particularly in organ transplant recipients. He and his group work to identify novel clinical and immunological parameters to aid risk stratification and prompt intervention in this high-risk cohort. They utilise multimodal approaches including (spatial) proteotranscriptomic profiling and functional validation. He has published several papers regarding the use of circulating immunological parameters to identify kidney transplant recipients at highest risk of subsequent malignancy development and is the principal investigator for two multicentre studies evaluating the optimal management of skin cancer after transplant. He is the academic lead of the COI Spatial Profiling Hub. He is a board member for the British Society of Skin Care in Immunocompromised Individuals (BSSCII).



Professor Ester Hammond

Ester completed her PhD at the School for Cancer Sciences, University of Birmingham then accepted a post as a postdoctoral fellow within the Molecular Oncology Group at the University of Cambridge School of Clinical Medicine before moving to the USA to join the Department of Radiation Oncology at Stanford University, first as a postdoctoral fellow then a research associate. She joined the Department of Oncology in 2007.



Speaker Biographies

Immunotherapy-Refractory Cancers

Session



Dr Eleni Adamopoulou

Eleni studied Biomedical Sciences and earned a Master's in Immunology from LSHTM, London. She completed my PhD at the University of Tübingen, Germany, under the supervision of Profs. Hans-Georg Rammensee and Max Topp, studying antigen presentation and T cell responses in infection and autoimmunity. During her postdoctoral training in Tuebingen and Oxford, she made key contributions to defining the HLA ligand repertoire of human thymic antigen-presenting cells, with emphasis on mechanisms driving deletion of autoreactive T cells. Currently, she leads a multidisciplinary team investigating the dynamics of antigen processing and presentation in the tumour microenvironment. The group integrate multiomics data with mass spectrometry-based immunopeptidomics to uncover the heterogeneous tumour antigenic landscape, aiming to identify and prioritise immunogenic peptide targets for immunotherapies.



Mr Gusztav Milotay

Gusztav is a second year DPhil student in the Fairfax Lab at the Weatherall Institute, investigating features of the T cell repertoire that predict improved clinical outcomes to Immune Checkpoint Blockade (ICB). My background is in Biochemistry, with a primary focus on T cell receptor (TCR) antigen recognition—an area of interest I first developed in the biotech industry while developing TCR sequencing pipelines. My recent research has focussed more broadly on the role of chronic viral infection in sculpting the anti-cancer T-cell response and in altering risk of developing immune-related adverse events on ICB.



Poster titles and presenters



Poster #1

[Jia-Ling Ruan](#); Department of Oncology

FLASH Radiotherapy Modulates the Tumour Microenvironment and Enhances Anti-Tumour Immunity in Muscle-Invasive Bladder Cancer

Poster #2

[Hedib Alrawili](#)¹, Alice Beard¹, Beatrice Salerno¹, Haofeng Chen¹, Simeon Draganov¹, Simon Davis³, Zhu Liang³, Tim Elliott², Eleni Adamopoulou², Tao Dong¹, and Adán Pinto-Fernández¹

¹Chinese Academy of Medical Sciences Oxford Institute, Nuffield Department of Medicine

²Oxford Cancer Centre for Immuno-Oncology and CAMS-Oxford Institute, Nuffield Department of Medicine

³TDI Mass Spectrometry Laboratory, Target Discovery Institute, Nuffield Department of Medicine

Exploring the Role of USP18 and ISG15 in Cancer Antigen Processing and Presentation

Poster #3

[Sally Pelling-Deeves](#); Medical Sciences Division

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

Poster #4

Ben de Wet¹, Karolina Goscinska¹, Christopher Rowley¹, Nathaniel Liddy¹, Francesco Castagna¹, Dylan Jones¹, Rakesh Kulkarni¹, Guillaume Rieunier¹, Ritu Raj¹, Daniel Fonseca¹, Kafayat Ololade¹, Andrea Bisso², [Mariolina Salio](#)¹ and Christopher Holland¹

¹Immunocore LTD, Abingdon, Oxford, UK

²Gadeta BV, Utrecht, The Netherlands

Development of an EPCR-reactive $\gamma\delta$ TCR as bispecific T-cell engager

Poster #5

[Hala Estephan](#)¹, [Arun Tailor](#)², [Robert Parker](#)², [McKenzie Kreamer](#) ³, [Ioanna Papandreou](#)³, [Leticia Campo](#)¹, [Alistair Easton](#)¹, [Eui Jung Moon](#)¹, [Nicholas C. Denko](#)³, [Nicola Ternette](#)², [Ester M. Hammond](#)¹, [Amato J. Giaccia](#)¹

¹ Department of Oncology

² Centre for Immuno-Oncology, Nuffield Department of Medicine

³ Department of Radiation Oncology, OSU Wexner Medical Center, USA.

Hypoxia promotes tumour immune evasion by suppressing MHC I expression and antigen presentation

Poster #6

[Gusztav Mlotay](#); Department of Oncology

MAIT cell phenotype and diversity predicts risk of checkpoint inhibitor dermatitis in melanoma

Poster #7

[Paul Tarlatt](#); Centre for Immuno-Oncology, NDM

Dendritic Cells in the Spotlight – Investigating Dendritic Cell Trapping Within the Tumour Microenvironment using Photoconvertible Mice

Poster #8

[Lea RZ Cohen](#)^[1], [Guangyi Niu](#)^[1], [James Gilchrist](#)^[1], [Shawn Sun](#)^[1], [Dylan Muldoon](#)^[1], [Martin Little](#)^[1], [Sophie Mackay](#)^[1], [Gusztav Mlotay](#)^[1], [Chelsea Taylor](#)^[1], [Robert Watson](#)^[1], [Benjamin Fairfax](#)^[1]

^[1]University of Oxford

The genetics determinants of variance in CD8+ T cells' response to ICB treatment in melanoma patients

Poster #9

[Maksim Chan](#); Department of Oncology

“Interferon exhaustion” – exploring the effect of sustained Type I interferon signalling on treatment outcomes of checkpoint immunotherapy

Poster #10

[Vinnycius Pereira Almeida](#)¹, Sara Abdel Malak¹, Amanda Wicki¹, James McAuliffe¹, Laurine Noblecourt¹, Emily Steffke¹, Silvia Panetti¹, Ricardo A. Fernandes², Benoit Van den Eynde¹, Carol Leung¹

¹ -LICR, University of Oxford

² - CAMS and NDM, University of Oxford

Viral vector vaccination improves adoptive T-cell therapy against solid tumours

Poster #11

[Matthew Jackson](#), Tianming Zhao, Gusztav Mlotay, Isabela Pedroza-Pacheco, Jan Rehwinkel, David Withers, Benjamin Fairfax, OxCITE, John Christianson, Eileen Parkes
Centre for Immuno-Oncology, NDM

TMEM33 loss associates with improved CD8+ T cell functionality and tumour control

Immunotherapy Advances features ongoing Special Collections on high-interest topics in immunotherapy. These collections welcome original research, reviews and TrialsWatch articles and are open for submissions.

Indexed in Web of Science, PubMed Central, and Scopus. The journal has an impact factor of 4.1

IMMUNOTHERAPIES FOR INBORN ERRORS OF IMMUNITY

Led by Menno van Zelm, Rita Carsetti, & Hirokazu Kanegane,

This collection will explore the identification of immune pathways and novel therapeutics which may provide targeted treatment options for genetic immune defects.

B CELL AND IMMUNE REGULATION

Led by Professor Yiwei Chu and Professor Ronghua Liu

This collection highlights advances in B cell research and immune regulation using animal models and clinical samples. We welcome high-quality research and reviews on B cell phenotypes, functions, regulatory mechanisms, and clinical studies targeting B cells in disease. Submit your work to contribute to this growing field!

CANCER VACCINES GLOBAL ADVANCES

Led by Dr Lennard Lee, Dr Carol Leung & Professor Tim Elliott

This collection brings together cutting-edge research on cancer vaccines, from personalized neoantigen approaches to off-the-shelf solutions and clinical trial updates. We invite researchers to submit original studies, reviews, and expert insights to advance the field and highlight the latest innovations.

IMAGING IN IMMUNOTHERAPY

Led by Doreen Lau

This collection will focus on molecular imaging techniques and biomarkers for use in immunotherapy, from pre-treatment screening to target validation of novel immunotherapeutics.

Find out more at bit.ly/ITACallForPapers

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Oxford Nanopore has developed a new generation of DNA/RNA sequencing technology. It is the only platform offering real-time analysis, scalable from pocket to population level, capable of analysing native DNA or RNA, and sequencing any fragment length from short to ultra-long reads.

It is used across a wide range of biological and applied research areas, including human genomics, cancer, microbiology, plant science, environmental research, healthcare, agriculture, food, surveillance, and education.

As shown by the research community, Oxford Nanopore sequencing can access regions of the genome that are unreachable with legacy short-read technologies, enabling more comprehensive genome analysis and advancing our understanding of health and disease.



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IMMUNOCORE

is a commercial-stage T cell receptor biotechnology company which launched the world's first TCR therapy in 2022, on a mission to radically improve outcomes for patients living with cancer, infectious diseases, and autoimmune conditions by pioneering and delivering transformative medicines



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 on our website](#).

Funding
support

Translational
histopathology
lab

Clinical
positioning
network

Patient
sample
access

Clinical
trial
support

PPI

Molecular
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PPI
centre

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support

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platform

Get in touch

We are always happy to hear
from our members!
Get in touch...

E: cancer@medsci.ox.ac.uk

T: +44 (0)1865 617043

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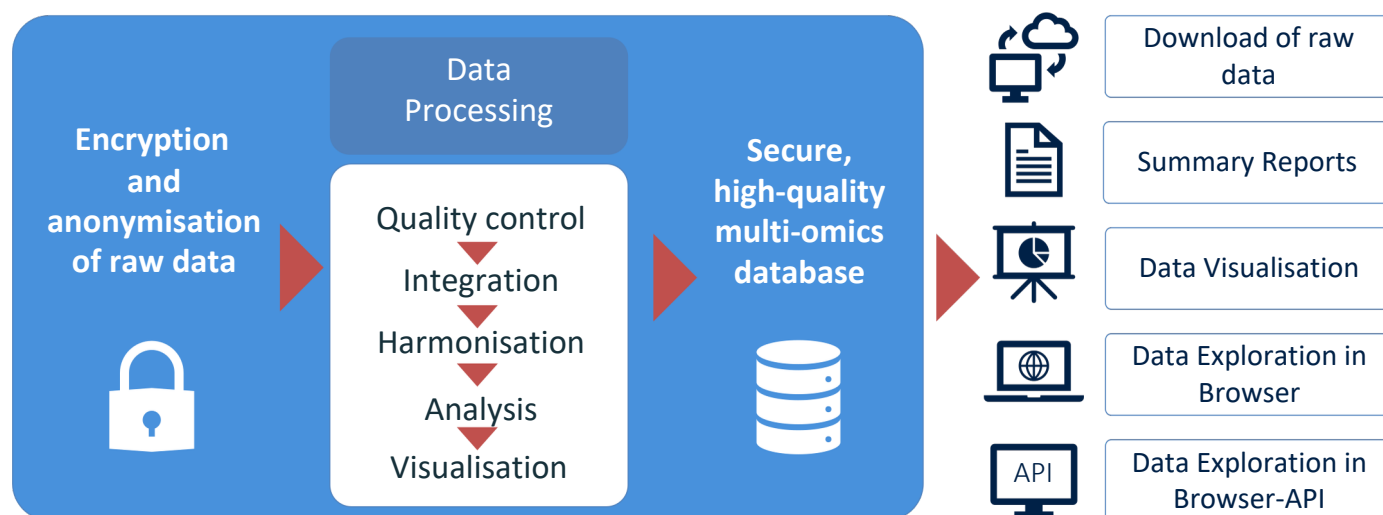
W: cancer.ox.ac.uk

Translational Data Platform

“We enable Oxford researchers to fully capitalise on clinical, imaging and molecular data generated during clinical studies.”

The platform can accommodate single cell and bulk RNASeq expression data, WGS mutations, SNPs, copy number variation, methylation, proteomics, IHC, H&E images, spatial transcriptomics, MRI and other scans, and clinical data.

Data are combined into a single, secure, user-friendly, data platform: **cBioportal**



To request access to our data or if you would like help with managing yours please email sara.danielli@medsci.ox.ac.uk

TRIALS ON THE PLATFORM

S:CORT
2000 colorectal
cancer patients

METFORMIN
41 breast
cancer patients

WINGMEN
pancreatic
cancer
TBA

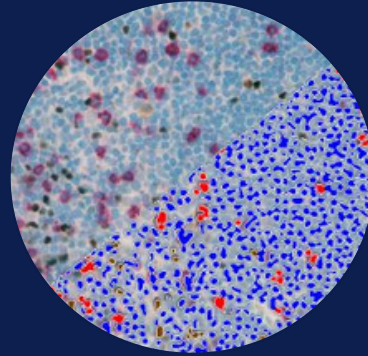
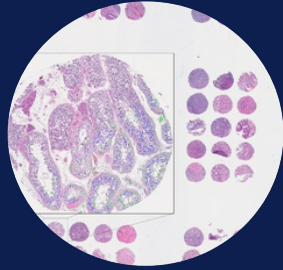
FRONTIER
40 breast
cancer
patients

SCOPE
250 oesophageal
cancer patients



Translational Histopathology Laboratory

thlenquiries@oncology.ox.ac.uk



Services

Tissue processing, embedding and sectioning

Tinctorial histochemical staining (H&E).

Multiplex immunofluorescence with panel optimisation and imaging

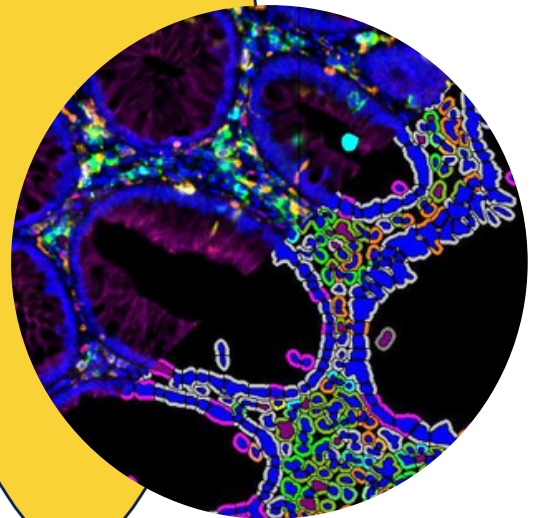
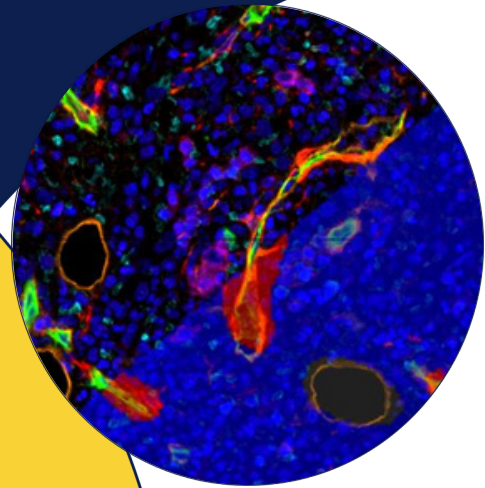
Bespoke Tissue Micro Array (TMA) creation

Oesophageal Cancer TMA available

Indica's HALO image analysis software

Pathologist-led, computer-aided, analysis

Digital slide scanning





Halo® – Image Analysis Platform

HALO® can separate **up to five stains simultaneously** within any cellular compartment.

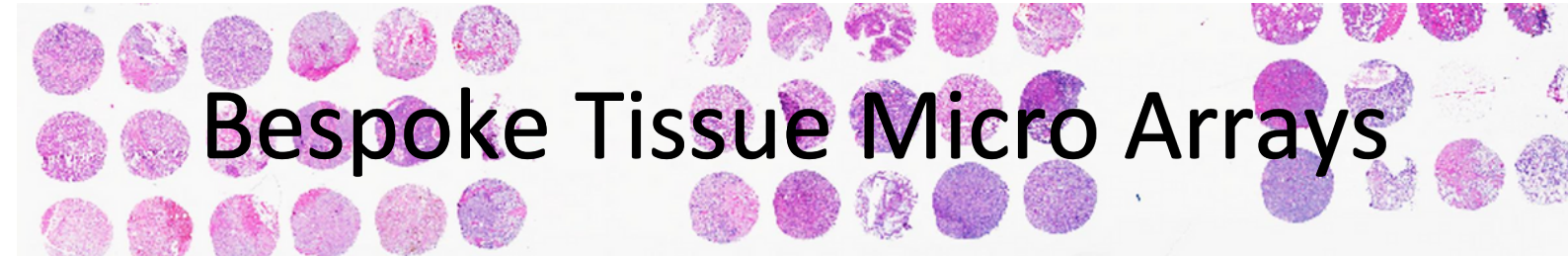
HALO is capable of **automated tissue classification** thanks to machine learning.

The software can perform **infiltration analysis, nearest neighbour/proximity analysis and density hotspot** analysis.

HALO allows automated batch analysis of whole slides and TMAs.

We offer software training, pathology and pathology-assisted analysis or unassisted use of HALO.

To Join our **Pathology Clinics** please email thlenquiries@oncology.ox.ac.uk.



Bespoke Tissue Micro Arrays

Tissue Micro Arrays (TMAs) are multi-tumour tissue blocks that allow standardised staining of up to **120 samples**

Using TMAs reduces IHC cost and staining variations

The THL has access to diagnostic archive samples and **pathology expertise** to choose the most interesting regions to study

We offer:

- **pan-tumour and healthy tissue** TMAs for antibody optimisation
- **Oesophageal cancer** TMA

And **bespoke TMA** creation with pathology aid

We offer bespoke TMA creation for any type of cancer as well as access to existing ones. For enquires please email thlenquiries@oncology.ox.ac.uk.

Patient and Public Involvement

Successful cancer research can only happen in partnership with those affected by cancer: people who live with cancer; people who have recovered from it; friends and family members; and those who are at risk of getting cancer in future. At Oxford Cancer, we strive to ensure that our work learns from and responds to the experience of people like these.

What is PPI?

Patient and Public Involvement (PPI) refers to the many ways in which people with lived experience can work in partnership with cancer researchers as colleagues, advisors and collaborators. It is about ensuring that the culture of cancer research seeks out, cultivates and welcomes multiple voices to challenge and co-design.

Examples of PPI in action:

What matters most to the people who might benefit from your work?

Do you know if your research is important to patients? Do you know what questions patients want answers to? We work with groups of patients to identify priorities and shape our Centres of Excellence in response.

Building capacity in cancer researchers of the future.

We ensure that students on our DPhil programme have the opportunity to meet and learn from our PPI contributors from the outset of their studies.

Ensuring diversity in PPI contributors.

We are working with community groups locally and nationally to build greater diversity in our panel of consultees. This ensures that our work includes perspectives from the many different communities we serve.

Building relationships between the lab and “real world” experience.

Our ‘buddy’ programme allows people with cancer to see the science in action, and allows people working in labs to fully understand why their work really matters.

To find out more-visit our stand at the symposium, or contact us at:
oxfordcancerppi@medsci.ox.ac.uk.

PPI AND LABORATORY RESEARCH: ADDING VALUE

MOTIVATION AND ENCOURAGEMENT

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.

PPI AND LABORATORY RESEARCH: EXAMPLE ACTIVITIES

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.



The Oxford Centre for Early Cancer Detection and Prevention

The Oxford Centre for Early Cancer Detection

(OxCODE) launched under the leadership of Professor Xin Lu in June 2019 to build on the existing momentum and galvanise early cancer detection research in Oxford. We have recently expanded OxCODE's remit to also include biologically informed cancer prevention research, changing the name to the Oxford Centre for Cancer Early Detection and Prevention (OxCODE).

The formation of OxCODE consolidated our significant expertise to realise the full potential of cross-disciplinary discourse and collaboration for advancing early cancer research for patient benefit. The Centre comprises >350 members from >20 Departments, Units and Institutes from the University of Oxford and the Oxford University Hospitals NHS Foundation Trust (OUHFT). OxCODE aims to stimulate more cancer prevention and early detection activity in Oxford. We are expanding our multidisciplinary research community by hosting a series of events (next annual symposium in December 2025) and increasing the scale and scope of this research at Oxford by providing infrastructure funding for new projects, grant writing support and travel awards.

All University of Oxford or OUHFT researchers with an interest in cancer prevention and early detection are welcome to join. If you wish to be added to the mailing list to hear about future events and funding opportunities, or have an idea for a new research project, please email the OxCODE Scientific Coordinator (francoise.howe@ludwig.ox.ac.uk).

DPhil in Cancer Science



CANCER
RESEARCH
UK

Oxford
Centre



Launched in 2020, the DPhil in Cancer Science Programme provides research-based doctoral training for cancer researchers from clinical, biological, engineering, mathematics, and statistics backgrounds.

STUDENTS

The CRUK Oxford Centre funds around 12 full-time studentships each year, and currently has 46 on-course students spread across 18 Departments. We are looking forward to welcoming an additional 18 students in October 2025. Our current cohorts consist of:



28% Clinical trainees



26% Medical Undergraduates



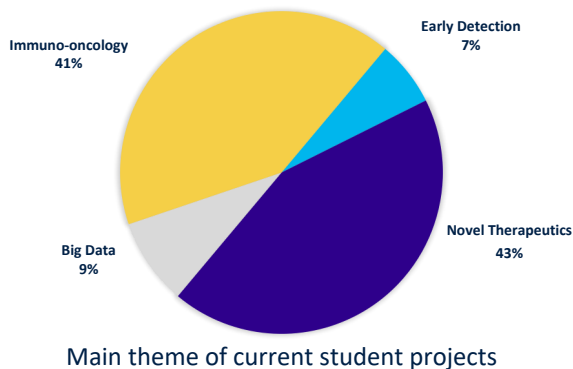
31% Fundamental scientists (biological/chemical science)



15% Fundamental scientists (engineering/mathematics/stats)

The programme attracts students on an international scale, with over 24 different nationalities currently enrolled.

Our students receive a world-leading research training experience that incorporates advanced level seminars; mentorship; and a subject-specific training programme tailored to individual research needs.



PROJECT THEMES

The programme is distinctive in offering integrated training across the following themes: Immuno-

Oncology; Cancer Big Data; Novel Therapeutics;

Early Cancer Detection.

It builds on Oxford's outstanding research record in these areas, spanning both the University and Hospital Trust.

NEW FROM 2025

Fundamental science students successfully enrolled onto our programme from October 2025 will take on two 6-month rotations within their first year, before deciding on a final 3-year project for the remainder of their DPhil. If you are interested in submitting a DPhil project for 2026, we will be opening to submissions in late-March 2025, date to be announced in the Oxford Cancer Newsletter.

To find out more about the DPhil in Cancer Science programme, view our current student profiles, or join the mailing list, scan the QR code.





UNIVERSITY OF
OXFORD

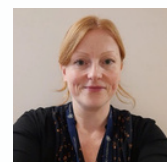
OXFORD IMMUNOLOGY NETWORK

An inclusive network led by Paul Klenerman for anyone at Oxford interested in immunology...

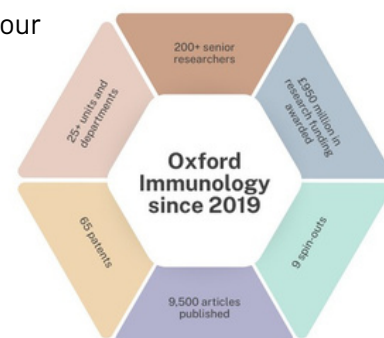
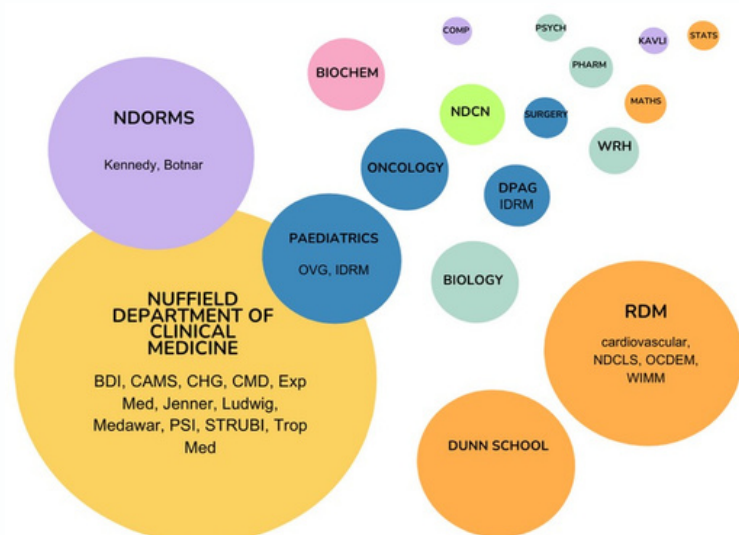
We have 600 members across Oxford, including 200 PIs from 25+ units and departments.

We exist to:

- promote collaboration across our research community
- share funding opportunities and support multi-team grant applications
- develop external partnerships and collaborations
- support effective sharing of resources, equipment and expertise
- facilitate training and networking
- communicate achievements and capabilities to external audiences - through our podcast, social media and website.



Research Facilitator
Sally Pelling-Deeves



Get involved!

Contact immunology@medsci.ox.ac.uk to:

- Join the network mailing list
- Suggest seminar topics and other event ideas
- Be interviewed on our podcast
- Find a collaborator or piece of equipment for your project
- Tell us your news so we can highlight it on our website and social media
- Sign up to our equipment working group
- Get connected with opportunities for teaching and public engagement

www.immunology.ox.ac.uk

www.linkedin.com/company/oxford-immunology-network

