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Centre

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beating cancer



Cancer Research UK Manchester Centre Celebration

Monday 7th October 2024
Oglesby Cancer Research Building Lecture Theatre

Agenda

Cancer Research UK Manchester Centre Celebration Oglesby Cancer Research Building – Lecture Theatre, M20 4GJ

10:00 – 10:05	Professor Robert Bristow , Director, Cancer Research UK Manchester Centre	Welcome Address Cancer Precision for All: Harnessing inclusive translational science and driving clinical excellence to create a future free from the burden of cancer
10:05 – 10:25	Dr Nathalie Dhomen , Commercialisation Lead	Commercialisation within the Centre Commercialisation within the Centre: Building a Culture of Innovation and Entrepreneurship
10:25 – 10:45	Dr Matthew Krebs , Clinical Senior Lecturer in Experimental Cancer Medicine Dr Aine O'Reilly , ECMT Clinical Fellow Dr Alicia Marie Conway , NIHR Academic Clinical Lecturer in Medical Oncology	Experimental Cancer Medicine Theme Introduction of ECM: Delivering tomorrow's treatment today Determining Extended Therapeutic indications for Existing drugs in Rare Molecularly-defined Indications using a National Evaluation platform trial Liquid Biopsies in Carcinoma Unknown Primary (CUP)
10:45 – 11:05	Dr Jamie Weaver , NIHR Clinical Lecturer Dr Diego Sanchez Martinez , Clinical Research Training Fellow	Integrative Pathology Theme Rapid Research Autopsy at the Christie Integrative Pathology theme: Case Study: Penile Cancer

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		Radiotherapy BioAdaption Theme
11.05 - 11.25	Professor Marcel van Herk , Chair in Radiotherapy Physics	Introduction of Radiotherapy BioAdaption
	Mr Michael Dubec , Principal Clinical Scientist	Magnetic Resonance Imaging Biomarker Development
	Dr Rob Chuter , Principal Clinical Scientist and Honorary Lecturer	Investigating the use of liver function MR images for bioadaption in radiotherapy (INTERIOR)
	Dr Sapna Lunj , Postdoctoral Researcher	Bioadaption in Radiotherapy: The role of Biological Biomarkers
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		PhD student flash talks
11:25 - 11:50	Dr Laura Woodhouse	Distinct Mutational Signatures Across KRAS Variants in Lung Adenocarcinoma: Insights into Aetiology and Genomic Heterogeneity
	Charlotte Mellor	BioID Analysis Identifies Novel Interactions Associated with Apoptotic Priming
	Accadius Lunayo	Integrating Multi-Omics Signatures and Histopathology for Early Detection of the Oesophageal Squamous Cell Carcinoma (OSCC)
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		Patient Public Involvement and Engagement Session
11:50 - 12:10	Dr Rebecca Holley , Senior Research Project Manager	Essential need for PPIE in the RAPID-RT Programme
	Amy Smith , Clinical Nurse Specialist	Putting Research, Patient and Carer Feedback into Clinical Practice
	Leanna Goodwin , Project Manager	Patients' Understanding of Genomics

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Lunch

Including a poster session in Paterson Building Foyer:

12:10 – 13:10

Lucy Barton – Prostate Cancer Heterogeneity and Aggression: Chromosomal Gains and Hypoxic Microenvironments

Fabianna Tennant – Using a 3D cell culture model to investigate how increased matrix stiffness disrupts mitochondrial function in mammary epithelial acini

Harry Barnes – Development of an ex vivo model to determine early transcriptional changes in breast cancer

Cancer Early Detection Theme

13:10 – 13:30

Professor Robert Bristow

Introduction of Cancer Early Detection

Dr Sean Knight, Clinical Research Fellow

Early Detection in Lung Cancer

Digital Cancer Centre Theme

Dr Lauren Scanlon, Lead Data Scientist

The New Real World Data Toolbox (RWD Toolbox+)

13:30 – 13:50

Dr Gareth Price, Senior Lecturer in Cancer Digital Sciences

Using the learning health system to drive improved cancer care with real-world-data

Dr Danilo Carvalho, Research Associate

Generative AI for Supporting Experimental Cancer Medicine

Agenda

13:50 - 14:40

Professor Joachim Lütken Weischenfeldt

Clinical Professor, BRIC University of Copenhagen and Rigshospitalet

Keynote Talk:

Cancer Genomics: etiologies, mutational processes and clinical trajectories

National Biomarker Centre

Professor Caroline Dive, Director, CRUK National Biomarker Centre, Deputy Director, CRUK Manchester Centre
Interim Director, CRUK Manchester Institute

Introduction of National Biomarker Centre talks

14:40 - 15:00

Sophie Richardson, PhD Researcher

Multimodal liquid biopsies to detect and monitor Ewing Sarcoma

Dr Christopher Fife, Translational Scientist

Investigating SCLC specific T Cell Responses: using ex vivo autologous tumour-immune co-cultures

Dr Paul O'Regan, Principal Clinical Informatician

Digital Cancer Research: Cancer trial matching

15:00

Close

With optional tours of the Paterson Building

Biographies



Professor Joachim Lütken Weischenfeldt

Clinical Professor, BRIC University of Copenhagen and Rigshospitalet

Joachim Weischenfeldt is a Clinical Professor at the BRIC University of Copenhagen and Rigshospitalet. Joachim has a PhD from University of Copenhagen, post doc at EMBL in Heidelberg. He has led the computational cancer genomics research group at BRIC/Finsen Laboratory since 2015 where his research group focuses on mutational processes and clonal evolution in cancer with a particular focus on genomic structural variations. Lead roles in several national and international cancer genomics consortia including DCCC, BTC, ICGC, PCAWG, PPCG.

Joachim's laboratory is interested in the mutational mechanisms and clonal evolution of cancer, in particular mechanisms of complex structural variants and the impact on 3D chromatin organization. We are collaborating closely with clinicians, to identify the earliest mutational processes in a tumor.

Biographies



Professor Robert Bristow

Director, Manchester Cancer Research Centre
Director, Cancer Research UK Manchester Centre
Senior Group Leader, Translational Oncogenomics, CRUK Manchester Institute
Chief Academic Officer & Honorary Consultant, The Christie NHS Foundation Trust
Cancer Domain Lead and University Professor of Cancer Studies, The University of Manchester

Robert Bristow completed his PhD in Medical Biophysics and Residency in Radiation Oncology at the University of Toronto with post-graduate fellowships at Erasmus University Rotterdam, MD Anderson Cancer Centre and Massachusetts General Hospital. He held positions as Professor and Clinician Scientist in Genito-Urinary cancers at the Princess Margaret Cancer Centre in Toronto during 1999–2017.

Seminal contributions include his pioneering work on the prostate cancer genome and tumour microenvironment hypoxic tumour cell characterisation by understanding role of hypoxia in driving genetic instability and the changes in sporadic and hereditary (e.g. BRCA2) prostate cancer genomes during cancer aggression. Co-leading the Canadian ICGC prostate cancer team, he found that a significant proportion of prostate cancers harbour copy number alterations and large-scale genomic rearrangements, that when combined with sub-regions of hypoxia, are co-drivers that lead to adverse prognosis.

Bristow joined the University of Manchester as Director of the Manchester Cancer Research Centre (MCRC) in August 2017 with a remit to developing a new cancer strategy for Manchester with a cancer team science approach. He serves on a number of international Scientific Advisory Boards and had more than 300 published papers. He is twice a Canadian Foundation for Innovation (CFI) awardee. He was made a Canadian Cancer Society Research Scientist in 2004, an ESTRO Honorary Fellow in 2011 and a Fellow of the Academy of Sciences (UK) in 2019. In 2021, he was awarded the Weiss medal (Association for Radiation Research) for distinguished contributions to radiation science

Biographies



Professor Caroline Dive

Director, Cancer Research UK National Biomarker Centre

Deputy Director, Cancer Research UK Manchester Centre

Interim Director, Cancer Research UK Manchester Institute

Upon completing her PhD studies in Cambridge, Professor Caroline Dive moved to Aston University's School of Pharmaceutical Sciences in Birmingham where she established her own group studying mechanisms of drug induced tumour cell death, before moving to The University of Manchester to continue this research. Caroline was awarded a Lister Institute of Preventative Medicine Research Fellowship before joining the Cancer Research UK Manchester Institute (CRUK MI) in 2003. Currently, she is Interim Director of the Institute and Director of its Cancer Biomarker Centre, with research spanning tumour biology, biomarker discovery and preclinical pharmacology alongside regulated laboratories for biomarker assay validation and qualification within clinical trials to Good Clinical Practice standards supporting clinical decision-making.

Caroline was awarded the Pasteur-Weizmann/Servier International Prize in 2012 for her Biomarker Research, the AstraZeneca Prize for Women in Pharmacology in 2016 and was presented with the 2019 Heine H. Hansen Lectureship Award by the International Association for the Study of Lung Cancer (IASLC). In 2017, Caroline was awarded Commander of the Order of the British Empire (CBE) for her services to cancer research. Most recently, she became an elected member of EMBO (2020), received the inaugural Johann Anton Merck Award in recognition for exceptional contributions to the field of preclinical oncology (2020) and was the recipient of the Mary J. Matthews Pathology/Translational Distinguished Service Award by IASLC (2021). Caroline is the current President of the European Association for Cancer Research (2020 – 2022).