

Hybrid Conference Programme

| Start (BST) | Finish (BST) | Presenter details |
|-----------------------------|--------------|--|
| Wednesday 8 May 2024 | | |
| 12:00 | 12:55 | Registration, lunch and networking |
| 12:40 | 12:55 | <i>Briefing for Keynote & Session 1 speakers, microphone runners, chair, moderator & committee - Auditorium</i> |
| 12:55 | 13:10 | Welcome |
| | | <p>Wellcome Connecting Science: Jane Murphy, Wellcome Connecting Science, UK</p> <p>Scientific Programme Committee: Athena Aktipis, Arizona State University, USA Rebecca Fitzgerald, University of Cambridge, UK Moritz Gerstung, Deutsches Krebsforschungszentrum (DKFZ), Germany Carlo Maley, Arizona State University, USA</p> |
| 13:10 | 14:10 | Keynote 1 |
| | | <p>Chair: Moritz Gerstung, Deutsches Krebsforschungszentrum (DKFZ), Germany Moderator: Carlo Maley, Arizona State University, USA</p> <p>Understanding evolutionary trajectories of Barrett's to intercept oesophageal cancer Rebecca Fitzgerald, University of Cambridge, UK</p> |
| 14:10 | 14:15 | Comfort break |
| 14:15 | 15:45 | Session 1: Phenotypic plasticity and Evolution of Therapeutic Resistance |
| | | <p>Chair: Moritz Gerstung, Deutsches Krebsforschungszentrum (DKFZ), Germany Moderator: Carlo Maley, Arizona State University, USA</p> |
| 14:15 | 14:45 | <p>Mechanosensing in metastatic cancer Laura Machesky, Cambridge, UK</p> |
| 14:45 | 15:15 | <p>Cell state switches and local adaptation in cancer: insights from multi-omics, spatial and AI approaches Maria Secrier, University College London, UK</p> |
| 15:15 | 15:30 | <p>Intra-Tumour Evolutionary Dynamics Shaped by Inter-Clonal Synergistic Cooperation Can Enhance Metastasis Caroline Carneiro, University of New Brunswick, Canada</p> |
| 15:30 | 15:45 | <p>Evolvability Underlies Treatment Resistance: The Paradoxical Role of the Mutator Phenotype David Basanta, Moffitt Cancer Center, United States</p> |
| 15:45 | 16:30 | Refreshment break and networking |
| 16:15 | 16:30 | <i>Briefing for Session 2 speakers, microphone runners, chair and moderator - Auditorium</i> |
| 16:30 | 18:00 | Session 2: Spatial Biology and Ecology |
| | | <p>Chair: Rebecca Fitzgerald, University of Cambridge, UK Moderator: Athena Aktipis, Arizona State University, USA</p> |
| 16:30 | 17:00 | <p>MicroLocation, Location, Location; the gastric microbiota invades the lamina propria in Helicobacter pylori-associated gastric carcinogenesis Amanda Rossiter, University of Birmingham, UK</p> |
| 17:00 | 17:15 | <p>Leveraging Spatial Transcriptomics to Map Complex Genotype-Phenotype Relationships in an Autochthonous Mouse Model of Tumour Heterogeneity Artem Lomakin, DKFZ, Germany</p> |
| 17:15 | 17:30 | <p>Immune selective pressure drives loss of clonal neoantigens in primary human tumors Elizabeth Borden, University of Arizona College, USA</p> |
| 17:30 | 17:45 | <p>Rewinding the tape: contingencies and constraints in early kidney cancer evolution Scott Shepherd, The Francis Crick Institute, UK</p> |
| 17:45 | 18:00 | <p>Modelling the effect of spatial heterogeneity in spatial structure and microenvironment on the evolutionary dynamics of precancer Alvina Adimoejia, Stanford University, USA</p> |
| 18:00 | 18:15 | Poster pitch talks for odd number posters |
| 18:15 | 19:15 | Poster session 1 - odd number posters with drinks reception |
| 19:15 | 20:30 | Dinner |
| 19:15 | | Bar open (card payments only) |

Thursday 9 May 2024

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| 09:15 | 09:30 | Briefing for Session 3 speakers, microphone runners, chair & moderator - Auditorium |
| 09:30 | 11:00 | Session 3: Modelling the Evolution of Cancer Chair: Robert Noble, University of London, UK Moderator: Athena Aktipis, Arizona State University, USA |
| 09:30 | 10:00 | Modelling somatic mutation evolution in human tissues using Epithelioids David Fernandez Antoran, Fundación Instituto de Investigación Sanitaria Aragón, Spain |
| 10:00 | 10:15 | Positive and negative subclonal selection in clear cell renal cell carcinoma <i>Diana Alexander, Wellcome Sanger Institute, UK</i> |
| 10:15 | 10:30 | Punctuational evolution is pervasive in metastatic dissemination <i>George Butler, Johns Hopkins University, USA</i> |
| 10:30 | 11:00 | Tracking the evolutionary dynamics of 2000 lymphoid cancers Trevor Graham, Institute of Cancer Research, UK |
| 11:00 | 11:30 | Refreshment break and networking |
| 11:15 | 11:30 | Briefing for Session 4 speakers, microphone runners, chair & moderator - Auditorium |
| 11:30 | 13:00 | Session 4: Multicellularity in Cancer Chair: Aurora Nedelcu, University of New Brunswick, Canada Moderator: Moderator: Athena Aktipis, Arizona State University, USA |
| 11:30 | 12:00 | Competition between unicellular and multicellular life cycles Arne Traulsen, Max-Planck-Institute for Evolutionary Biology, Germany |
| 12:00 | 12:30 | Immune recognition of evolving pathogens Michael Lässig, University of Cologne, Germany |
| 12:30 | 12:45 | Pan-organ analysis of driver gene selection during cancer initiation <i>Faiz Jabbar, The Francis Crick Institute, UK</i> |
| 12:45 | 13:00 | Mechanisms and evolutionary significance of hyperploidy variations in a long-lived parasitic cancer <i>Erika Buoli, CNRS, France</i> |
| 13:00 | 13:45 | Lunch and networking |
| 13:45 | 14:25 | Illustrator session - Alex Cagan, Wellcome Sanger Institute, UK |
| 14:20 | 14:30 | Briefing for KNS microphone runners, chair & moderator - Auditorium |
| 14:30 | 15:30 | Keynote Chair: Moritz Gerstung, Deutsches Krebsforschungszentrum (DKFZ), Germany Moderator: Athena Aktipis, Arizona State University, USA Clonal selection in normal tissues and its relation to cancer risk Núria López-Bigas, Institute for Research in Biomedicine Barcelona, Spain |
| 15:30 | 16:00 | Refreshment break and networking |
| 15:50 | 16:00 | Briefing for Session 5 speakers, microphone runners, chair & moderator - Auditorium |
| 16:00 | 17:30 | Session 5: Beyond the genome Chair: Athena Aktipis, Arizona State University, USA Moderator: Rebecca Fitzgerald, University of Cambridge, UK |
| 16:00 | 16:30 | Enhancer hijacking in AML Christoph Plass, German Cancer Research Centre (DKFZ), Germany |
| 16:30 | 16:45 | Horizontal Transfer of Nuclear DNA in Transmissible Cancer <i>Kevin Gori, University of Cambridge, UK</i> |
| 16:45 | 17:00 | Outcomes of natural and experimental infection of soft-shell clams with a transmissible cancer <i>Michael Metzger, Pacific Northwest Research Institute, USA</i> |
| 17:00 | 17:30 | The evolution of two marine transmissible leukaemias colonizing the coasts of Europe Jose Tubio, Center for Research in Molecular Medicine and Chronic Diseases, Spain |
| 17:30 | 17:45 | Poster pitch talks for even number posters |
| 17:45 | 18:45 | Poster session 2 - even number posters with drinks reception |
| 18:45 | 20:30 | Dinner |
| 18:45 | | Bar open (card payments only) |

Friday 10 May 2024

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| 09:15 | 09:30 | Briefing for Session 6 speakers, microphone runners, chair & moderator - Auditorium |
| 09:30 | 11:00 | Session 6: Aging and Cancer Chair: Carlo Maley, Arizona State University, USA Moderator: Moritz Gerstung, Deutsches Krebsforschungszentrum (DKFZ), Germany |
| 09:30 | 10:00 | Exploring mutational landscapes and selection patterns in normal aging tissues Raheleh Rahbari, Wellcome Sanger Institute, UK |
| 10:00 | 10:15 | Stem and progenitor cell dynamics define oncogenic competence of leukemic drivers Verena Korber, Weatherall Institute of Molecular Medicine, UK |
| 10:15 | 10:30 | Tumor heterogeneity and clonal evolution in Opisthorchis viverrini-associated cholangiocarcinoma Sirinya Sitthirak, Faculty of Medicine, Khon Kaen University, Thailand |
| 10:30 | 11:00 | Evolutionary compromises: Exploring cancer in the animal kingdom Amy Boddy, University of California Santa Barbara, USA |
| 11:00 | 11:45 | Refreshment break and networking |
| 11:30 | 11:45 | Briefing for Keynote Speaker, Scientific Committee Chair and moderator - auditorium |
| 11:45 | 12:45 | Keynote Chair: Rebecca Fitzgerald, University of Cambridge, UK Moderator: Athena Aktipis, Arizona State University, USA Somatic Evolution, Cancer, and Our Inevitable Decline with Age - Inextricably Linked James DeGregori, University of Colorado, USA |
| 12:45 | 13:00 | Closing remarks and prize presentation Scientific Programme Committee: Athena Aktipis, Arizona State University, USA Rebecca Fitzgerald, University of Cambridge, UK Moritz Gerstung, Deutsches Krebsforschungszentrum (DKFZ), Germany Carlo Maley, Arizona State University, USA |
| 13:00 | 13:50 | Lunch and departures |
| 13:50 | | Coach departures for Stansted and Heathrow airports |
| 14:00 | | Coach departures for Cambridge train station and city centre |