The Tumour Ecosystem: Cellular Interactions and Therapeutic Opportunities Programme

Bergamo, Italy
19 - 21 March 2024

Scientific Programme

Tuesday 19th March 2024

Listed times are in Central European Time (CET)

11:30  REGISTRATION & WELCOME LUNCH

13:00  WELCOME TO DAY ONE

SESSION 1 - FROM RESEARCH INSIGHTS TO THERAPEUTIC OPPORTUNITIES
Chair: Neta Erez

13:10  OPENING KEYNOTE LECTURE
Douglas Hanahan
Ludwig Cancer Research, Lausanne, Switzerland
'Immunosuppression in the tumour microenvironment, and beyond'
Q&A: 13:45-13:55

13:55  Yuval Shaked
Technion - Israel Institute of Technology, Technion City, Haifa, Israel
'Immune-Mediated Extracellular Matrix Remodeling Promotes Tumor Resistance and Metastasis Following Anti-Cancer Therapy'
Q&A: 14:15-14:25

14:25  Nicoletta Caronni
San Raffaele Scientific Institute, Milan, Italy
Proffered Paper 1: 'IL-1β+ macrophages fuel pathogenic inflammation in pancreatic cancer'

14:50  EXHIBITOR INTRODUCTIONS

15:20  Alexander vom Stein
University of Cologne, Cologne, Germany
Proffered Paper 1a: 'By perturbing fibroblast polarization, stromal LYN kinase expression in the microenvironment is immunomodulatory and promotes viability of chronic lymphocytic leukemia cells.'
Q&A: 15:30-15:35

15:35  Ana Farias
Imperial College London, UK
Proffered Paper 1b: 'Type I interferons induced upon RSV infection change the lung microenvironment and impair seeding of lung metastatic breast cancer cells'
Q&A: 15:45 - 15:50

15:50  Johanna Joyce
University of Lausanne, Lausanne, Switzerland
'Unravelling the Complexity of Cancer Ecosystems'
Q&A: 16:10-16:20

16:20  MOLECULAR ONCOLOGY CALL FOR CONTENT  
**Siddhi Maniyar**  
Federation of European Biochemical Societies, Cambridge, UK

16:30  POSTER SPOTLIGHTS  
Ngozi Akingbesote, Yale School of Medicine, New Haven, USA; Alessandra Riggio, Huntsman Cancer Institute, Salt Lake City, USA; Simge Yucel, EPFL Life Sciences, Lausanne, Switzerland

16:45  SYMPOSIUM - CANCERTOOLS.ORG  
**Dr Saverio Tardito**  
Cancer Research UK Scotland Institute, and School of Cancer Sciences, University of Glasgow  
‘In vitro veritas: transforming cell culture with more physiological conditions’

17:15  NETWORKING QUIZ  
Our fun, informal quiz offers conference participants the chance to make new connections on the first evening of the meeting.

17:45  WELCOME RECEPTION

18:30  POSTER DISCUSSION SESSION 1

**Wednesday 20th March 2024**

**Listed times are in Central European Time (CET)**

08:45  EARLY POSTER VIEWING (WITH COFFEE)

09:15  INDUSTRY SPOTLIGHT - LUNAPHORE TECHNOLOGIES  
**Alioune Ndoye**  
Lunaphore  
‘Accelerating spatial biology with COMET’

**SESSION 2: THE MACROENVIRONMENT AND METABOLISM**  
Chair: Douglas Hanahan

09:30  Leila Akkari  
Netherlands Cancer Institute, Amsterdam, Netherlands  
‘Dissecting and rewiring myeloid cell heterogeneity in cancer’  
Q&A: 09:50-10:00

10:00  Giulia Biffi  
University of Cambridge, Cambridge, UK  
Proffered Paper 2: ‘SMAD4 loss in malignant cells drives a fibro-inflammatory microenvironment in pancreatic cancer’  
Q&A: 10:10-10:15

10:15  Mariia Yuneva  
The Francis Crick Institute, London, UK  
‘Dissecting metabolic heterogeneity and vulnerabilities of tumours’  
Q&A: 10:35-10:45

10:45  COFFEE BREAK & EXHIBITION

11:15  Julio Aguirre-Ghiso  
Albert Einstein College of Medicine, New York, US
'Age-related clonal hematopoiesis (CH) serves as a host-derived driver of awakening of dormant disseminated breast cancer (BC) cells'

Q&A: 11:35-11:45

11:45 **Monica Cassandras**
Dana-Farber Cancer Institute, Boston, USA
Proffered Paper 3: 'Breast cancer metastasis: uncovering the role of chronic stress in immune evasion'

12:00 **POSTER SPOTLIGHTS**
Kelly McGovern, Dana Faber Cancer Institute, Boston, USA; Tatiana Rizou, Francis Crick Institute, London, UK; Tamar Shami, Tel Aviv University, Tel Aviv, Israel

12:15 **LUNCH**

13:15 **POSTER DISCUSSION SESSION 2**
**SESSION 3: ORGAN-SPECIFIC MICROENVIRONMENTS**
*Chair: Johanna Joyce*

14:45 **Neta Erez**
Tel Aviv University, Tel Aviv, Israel
‘Stromal and Immune Plasticity Shape the Metastatic Microenvironment’

Q&A: 15:05-15:15

15:15 **Yassmin Elbanna**
Memorial Sloan Kettering Cancer Center, New York, USA
Proffered Paper 4: 'A Mechanoimmunological Basis for Metastatic Site Distribution'

15:30 **Ye’ela Scharff**
Tel Aviv University, Tel Aviv, Israel
Proffered Paper 5: ‘Complement signaling is a hallmark of inflammatory fibroblasts in chronic diseases and cancer’

15:45 **Erik Sahai**
The Francis Crick Institute, London, UK
‘Why liver metastases are so hard to treat with immunotherapy’

Q&A: 16:05-16:15

16:15 **COFFEE BREAK & EXHIBITION**

16:45 **Karin de Visser**
Netherlands Cancer Institute, Amsterdam, Netherlands
‘Dissecting how breast tumours hijack myelopoiesis to promote metastasis’

Q&A: 17:05-17:15

17:15 **Jean Albrengues**
Universite Cote d’Azur, Nice, France
‘Neutrophil extracellular traps formed during chemotherapy confer treatment resistance via TGF-β activation’

Q&A: 17:35-17:45

17:45 **MEET THE EXPERT**
Neta Erez, Tel Aviv University, Tel Aviv, Israel; Leila Akkari, Netherlands Cancer Institute, Amsterdam, Netherlands; Ruth Scherz-Shouval, Weizmann Institute, Rehovot, Israel; Jean Albrengues, Universite Cote d’Azur, Nice, France
19:30  CONFERENCE DINNER
The Conference Dinner will be held at the atmospheric Ristorante Taverna Valtellinese. Optional ticketed event.

Thursday 21st March 2024

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08:15  EARLY POSTER VIEWING SESSION (WITH COFFEE)

08:45  INDUSTRY SPOTLIGHT - REACT4LIFE
Silvia Scaglione
React4Life and National Research Council of Italy
‘3D Humanized Tissue Cancer Models and Multi-Organ-on-Chip Platforms to Investigate Immune-Tumor Cellular Interactions and Test New Therapeutics’

SESSION 4: STROMAL AND IMMUNE CELLS SHAPE THE TME
Chair: Erik Sahai

09:00  Ruth Scherz-Shouval
Weizmann Institute, Rehovot, Israel
‘Transcriptional and functional plasticity of cancer-associated fibroblasts in the tumor microenvironment’
Q&A: 09:20-09:30

09:30  Sara Zanivan
CRUK Scotland Institute, Glasgow, UK
‘Harnessing CAF metabolism to create an anti-tumour microenvironment’
Q&A: 09:50-10:00

10:00  Antoinette van Weverwijk
Netherlands Cancer Institute (NKI), Amsterdam, Netherlands

10:15  COFFEE BREAK & EXHIBITION

10:45  Santiago Zelenay
CRUK Manchester Institute, Manchester, UK
‘Protumourigenic inflammation: a targetable immune checkpoint and a biomarker of immunotherapy response’
Q&A: 11:05-11:15

11:15  THE EMBO KEYNOTE LECTURE
Clare Isacke
ICR, London, UK
‘Targeting the tumour microenvironment to limit metastatic relapse’
Q&A: 11:50-12:00

12:00  SUMMARY, AWARDS AND CLOSE

12:10  DEPART