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-1+ macrophages fuel pathogenic inflammation in pancreatic cancer'

14:40 EXHIBITOR INTRODUCTIONS

14:50 COFFEE BREAK & EXHIBITION

15:20 **Alexander vom Stein**

University of Cologne, Cologne, Germany

Proffered Paper 1a: 'By perturbating 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
Proffered Paper 6: 'Distinct p53 hotspot mutations differentially regulate immune composition and immunotherapy response in breast cancer'

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