

# Cancer Metabolism Programme

Bilbao, Spain

11 - 13 October 2022



## Scientific Programme

### Tuesday 11th October 2022

12:00 REGISTRATION & WELCOME LUNCH

13:00 CONFERENCE WELCOME

#### SESSION 1: METABOLIC WIRING IN CANCERS

**Chair: Arkaitz Carracedo**

13:10 KEYNOTE LECTURE

**Ralph DeBerardinis**

Children's Medical Center Research Institute, USA

"Tumor Metabolism and Cancer Progression in Humans"

Q&A: 13:40 - 13:55

13:55 **Sarah-Maria Fendt**

VIB Leuven, Belgium

"The role of metabolism in metastasis formation"

Q&A: 14:15 - 14:25

14:25 **Eva Crosas-Molist**

Barts Cancer Institute, UK

Proffered Paper 1: "AMPK is a mechano-metabolic sensor linking cell adhesion and mitochondrial dynamics to Myosin II dependent cell migration"

Q&A: 14:35 - 14:40

14:40 EXHIBITOR INTRODUCTIONS

60-second intro pitches by each company

14:50 COFFEE BREAK & TRADE

**Chair: Sarah-Maria Fendt**

15:20 **Matthew Vander Heiden**

Koch Institute, MIT, USA

"Metabolic limitations in Cancer"

Q&A: 15:40 - 15:50

15:50 **Oliver Maddocks**

University of Glasgow, UK

"Cancer specific amino acid metabolism"

Q&A: 16:10 - 16:20

16:20 **Arkaitz Carracedo**

CIC bioGUNE, Spain

"Metabolic drivers of prostate cancer progression beyond the tumor cell"

Q&A: 16:40 - 16:50

16:50 POSTER SPOTLIGHTS

Top abstracts presented as 3 minute flash talks by Natividad Alquezar-Artieda CLIP, Czech Republic, Patricia Altea-Manzano KU Leuven, Belgium, and Imanol Arozarena NAVARRABIOMED-FMS, Spain

17:00 **WELCOME RECEPTION & TRADE EXHIBITION**  
including drinks and a light buffet

18:00 **POSTER DISCUSSION SESSION 1**

## Wednesday 12th October 2022

08:30 **POSTER VIEWING**

08:45 **INDUSTRY SPOTLIGHT 1 - AGILENT TECHNOLOGIES**

**Alfredo Caro-Maldonado**

"How to develop and predict the efficiency of T cell therapies by immunometabolism"

**SESSION 2: METABOLIC PROGRAMS ALONG CELL STATES**

**Chair: Christian Frezza**

09:00 **EMBO KEYNOTE LECTURE**

**Massimiliano Mazzone**

University of Leuven, Belgium

"Harnessing tumor metabolism to overcome immunosuppression"

Q&A: 09:20 - 09:30

09:30 **Lisa Vettore**

University of Birmingham, UK

Proffered Paper 2: "Proline biosynthesis through PYCRL regenerates NAD<sup>+</sup> to promote cancer stem-like cells proliferation and survival under hypoxic conditions"

Q&A: 09:40 - 09:45

09:45 **Salvador Aznar Benitah**

Institute for Research in Biomedicine, Spain

"Epigenetic influence of our (fatty) diet on metastatic-initiating cells"

Q&A: 10:05 - 10:15

10:15 **Theodore Alexandrov**

European Molecular Biology Laboratory, Germany

"Spatial metabolomics in tissues and single cells"

Q&A: 10:35 - 10:45

10:45 **COFFEE BREAK & TRADE**

11:15 **KEYNOTE LECTURE**

**Joshua Rabinowitz**

Lewis-Sigler Institute for Integrative Genomics, USA

"The energy budget of tumors in vivo"

Q&A: 11:45 - 12:00

12:00 **Tobias Ackermann**

CRUK: Beatson Institute

Proffered Paper 3: "Secreted mono-unsaturated fatty acids are paracrine anti-ferroptotic factors in triple-negative breast cancer cells"

- Q&A: 12:10-12:15
- 12:15 **POSTER SPOTLIGHTS**  
Top scoring abstracts presented as 3 minute talks from Sarah Cherkaoui (UCH Zurich, Switzerland), Ginevra Doglioni (VIB-KU Leuven, Belgium) & Lorea Valcarcel Jimenez (Hutchison/MRC RC & CECAD, UK).
- 12:25 **BUFFET LUNCH & TRADE**
- 13:20 **POSTER DISCUSSION SESSION 2**  
**SESSION 3: METABOLISM BEYOND THE TUMOR CELL**  
**Chair: Sarah-Maria Fendt**
- 14:50 **KEYNOTE LECTURE**  
**Celeste Simon**  
Abramson Family Cancer Research Institute, USA  
"Exploring Tumor Neighbourhoods"  
Q&A: 15:20 - 15:35
- 15:35 **Katrien De Bock**  
ETH Zurich, Switzerland  
"Endothelial cells and metabolism in the muscle microenvironment"  
Q&A: 15:55 - 16:05
- 16:05 **Debbie Moss**  
Queen's University Belfast, UK  
Proffered Paper 4: "Oxidative Mitochondrial Metabolism: A Key Driver of Therapy Resistance in Colorectal Cancer"  
Q&A: 16:15 - 16:20
- 16:20 **Fabricio Loayza-Puch**  
DKFZ, Germany  
Proffered Paper 5: "Exploiting mitochondrial translation to uncover compartment-specific metabolic vulnerabilities"  
Q&A: 16:30 - 16:35
- 16:35 **COFFEE BREAK & TRADE**
- 17:05 **Sara Zanivan**  
Beatson Institute, UK  
"CAF metabolism coordinates extracellular matrix production"  
Q&A: 17:25 - 17:35
- 17:35 **Ilaria Elia**  
University of Leuven, Belgium  
"The metabolic cross-talk between T cells and tumor cells in the tumor microenvironment"  
Q&A: 17:55 - 18:05
- 18:05 **MEET THE EDITORS**  
Join us in this informal session to meet Alfredo Gimenez-Cassina (Nature Metabolism), Maria Garcia-Fernandez (Nature Communications) and Barbara Marte (Nature) and ask questions in a relaxed and informal setting. Scheduled to end at 18:45.
- 19:30 **CONFERENCE DINNER**  
Optional ticketed dinner

## Thursday 13th October 2022

08:30 POSTER VIEWING

08:45 INDUSTRY SPOTLIGHT 2 - PARSE BIOSCIENCES

**Mostafa ElMaghraby**

"Resolving More Biology Using the Evercode Platform for Single Cell RNA Sequencing"

09:00 MEET THE MEMBERS OF THE SCIENTIFIC PROGRAMME COMMITTEE

This is an opportunity for all participants to get to know, and ask questions to, Arkaitz, Christian, Sarah-Maria and Sara in an informal setting.

SESSION 4: CANCER METABOLISM AND THE REGULATION OF THE EPIGENOME

**Chair: Sara Zanivan**

09:45 **Sonia Rocha**

Institute of Integrative Biology/Biochemistry, UK  
"Chromatin as a metabolic sensor in the cell"

Q&A: 10:05 - 10:15

10:15 **Andreas Trumpp**

DKFZ, Germany  
"Metabolism in normal and malignant stem cells"

Q&A: 10:35 - 10:45

10:45 COFFEE BREAK & TRADE

11:15 **Alia Ghrayeb**

Technion-Israel Institute of Technology, Israel  
"Glycine ameliorates paracetamol-induced liver injury in non-alcoholic fatty liver disease by supporting glutathione biosynthesis"

Q&A: 11:25-11:30

11:30 **Andrea Morandi**

Università di Firenze, Italy  
"Lipid droplets-peroxisome metabolic axis is a vulnerability of ER+ breast cancer resistant to estrogen deprivation"

Q&A: 11:50 - 12:00

12:00 **Katiuscia Bianchi**

Barts Cancer Institute, UK  
"Role of cellular metabolism in obesity-driven breast cancer"

Q&A: 12:20 - 12:30

12:30 CONFERENCE SUMMARY

12:40 DEPART