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+ 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