

Cancer and Metabolism 2018

June 25-27, 2018
Cambridge, UK

Conference Program

Monday, June 25

- 14:00 – 15:00 Registration
- 15:00 – 15:10 Welcome: Eyal, Karen and Christian
- 15:10 – 15:40 Matthew Vander Heiden (MIT University, US)
Metabolic factors affecting tumor growth
- 15:40 – 16:10 Aimee Edinger (UC Irvine, US)
Nutrient scavenging and transport in cancer
- 16:10 – 16:20 Abcam
- 16:20 – 18:30 Poster session I and drinks reception

Tuesday, June 26

- 09:00 – 09:30 Martin Eilers (Würzburg University, Germany)
Regulation of protein synthesis prevents MYC-dependent apoptosis in APC-deficient colorectal cancer
- 09:30 – 10:00 Tomer Shlomi (Technion Israel Institute of Technology, Israel)
Cancer cellular metabolism at a spatio-temporal resolution
- 10:00 – 10:15 Christiane Opitz (German Cancer Research Center, DKFZ, Germany)
Upregulation of tryptophanyl-tRNA synthetase adapts human cancer cells to nutritional stress caused by tryptophan degradation
- 10:15 – 10:30 Christopher J. Halbrook (University of Michigan, US)
Targeting metabolic crosstalk to improve therapy in pancreatic cancer
- Break
- 11:00 – 11:30 Karen Vousden (The Francis Crick Institute, UK)
p53 pathways and cancer cell metabolism
- 11:30 – 12:00 Sarah-Maria Fendt (VIB, Belgium)
Cancer metabolism - a driver of metastasis formation
- 12:00 – 12:15 Etienne Meylan (Ecole Polytechnique Fédérale de Lausanne, Switzerland)
Role of glucose transporter Glut1 in tumor cells and neutrophils in non-small cell lung cancer
- 12:15 – 12:30 Hamed Alborzinia (German Cancer Research Center, Germany)
MYCN mediates cysteine addiction and sensitizes to ferroptosis
- Lunch and poster viewing

- 14:00 – 14:30 Ayelet Erez (Weizmann Institute, Israel)
The role of amino acid metabolism in carcinogenesis
- 14:30 – 15:00 Alexei Vazquez (Beatson Institute, UK)
Increased formate overflow is a hallmark of oxidative cancer
- 15:00 – 15:15 Francesca R. Auciello (Beatson Institute, UK)
A stromal lysolipid-autotaxin signalling axis promotes pancreatic tumour progression
- 15:15 – 15:30 Guillermo Burgos Barragan (MRC Laboratory of Molecular Biology, UK)
Dissecting the role of endogenous genotoxic formaldehyde in one-carbon metabolism
- Break
- 16:00 – 16:30 Oliver Maddocks (University of Glasgow, UK)
(Non) essential amino acid dependencies in cancer
- 16:30 – 17:00 Brendan Manning (Harvard University, US)
The PI3K-mTORsignaling network and anabolic growth
- 17:00 – 17:15 Angela Bonini (University of Hawaii Cancer Center, US)
Germline BAP1 mutations impair IP3R3-mediated Ca²⁺ flux to mitochondria and induce a Warburg effect
- 17:15 – 17:30 Zach Schug (The Wistar Institute, US)
Expression of oncogenic levels of MYC in human mammary epithelial cells promotes lipid metabolism and calcium signalling
- 17:30 – 19:30 Poster session II and drinks reception
- 19:30 Conference social

Wednesday, June 27

- 09:00 – 09:30 Christian Frezza (University of Cambridge, UK)
Mitochondrial dysfunction and cancer
- 09:30 – 10:00 Kathryn Wellen (University of Pennsylvania, US)
Acetyl-CoA metabolism and tumorigenesis
- 10:00 – 10:15 Daniel Crooks (National Institutes of Health, US)
Acute loss of iron-sulfur clusters results in metabolic reprogramming and generation of lipid droplets in mammalian cells
- 10:15 – 10:30 Laura Hulea (McGill University, Canada)
EIF4F links translation to energy stress response in cancer
- Break
- 11:00 – 11:30 Heather Christofk (UCLA, US)
Metabolic transitions in cancer: lessons from viral infection
- 11:30 – 12:00 Eyal Gottlieb (Technion Israel Institute of Technology, Israel)
Metabolic adaptations of TCA cycle-truncated tumors
- 12:00 – 12:15 Michela Menegollo (Department of Biomedical Sciences, University of Padua Italy)
Mitochondrial subtypes of luminal breast cancer have different carbon source preference

12:15 – 12:30 Linoy Mehazri (Bar-Ilan University, Israel)
Fer/FerT support metabolic flexibility in metastatic lung cancer cells

Lunch

13:30 – 13:45 Daniel Tennant (University of Birmingham, UK)
R132H-mutated IDH1 promotes enhanced proline synthesis through PYCR1 to decouple TCA cycle activity from respiration

13:45 – 14:15 Joshua Rabinowitz (Princeton University, US)
Metabolic exchange between tissues (and tumors)

14:15 **Close**