

# 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)
- 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

- 13:30 – 14:00 Ayelet Erez (Weizmann Institute, Israel)  
**The role of amino acid metabolism in carcinogenesis**
- 14:00 – 14:30 Alexei Vazquez (Beatson Institute, UK)  
**Formate overflow is a hallmark of oxidative cancer**
- 14:30 – 14:45 Francesca R. Auciello (Beatson Institute, UK)  
**A stromal lysolipid-autotaxin signalling axis promotes pancreatic tumour progression**
- 14:45 – 15:00 Guillermo Burgos Barragan (MRC Laboratory of Molecular Biology, UK)  
**Dissecting the role of endogenous genotoxic formaldehyde in one-carbon metabolism**
- Break
- 15:30 – 16:00 Oliver Maddocks (University of Glasgow, UK)  
**Non-essential amino acid dependencies in cancer**
- 16:00 – 16:30 Brendan Manning (Harvard University, US)  
**The PI3K-mTOR signaling network and anabolic growth**
- 16:30 – 16:45 Angela Bonini (University of Hawaii Cancer Center, US)  
**Germline BAP1 mutations impair IP3R3-mediated Ca<sup>2+</sup> flux to mitochondria and induce a Warburg effect**
- 16:45 – 17:00 Zach Schug (The Wistar Institute, US)  
**Expression of oncogenic levels of MYC in human mammary epithelial cells promotes lipid metabolism and calcium signalling**
- 17:00 – 19:00 Poster session II and drinks reception
- 19:00 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)  
**Metabolism, epigenetics 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 Mehzari (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)

14:15 **Close**