



Program
„Metabolism in Cancer“ 2010
28-29 May 2010
Robert Koch- Lecture Hall, Charité

Friday, 28th May 2010

- 9:00 Welcome/ Introduction
Clemens A. Schmitt
- Session I *Deregulated glycolysis in cancer*
9:15 - 10:45 Chairs: Clemens A. Schmitt, Reuben J. Shaw
- 9:15 - 09:45 Amato Giaccia
“Targeting glucose transport as a targeted approach to treat renal cancer”
- 9:45 - 10:15 Markus Ralser
“Regulatory adaptation to oxidative stress through a glycolysis/pentose phosphate pathway transition”
- 10:15 - 10:45 Matthew G. Vander Heiden
“Evidence for an alternative glycolytic pathway in cancer”
- 10:45 - 11:15 Coffee break
- Session II *Calorie restriction and differential stress response/chemosensitivity*
11:15 - 12:30 Chairs: Thorsten Cramer, Amato Giaccia
- 11:15 - 11:45 Valter Longo
“Differential Cellular Protection and Sensitization in Cancer Treatment”
- Mini talk session
11:45 - 12:30 Philipp Mergenthaler
“Interaction of mitochondrial hexokinase II and Pea-15 protects against cell death”
- Heike Stachelscheid
“Insulin/IGF-I signalling controls epidermal morphogenesis by regulating G2/M cell cycle progression”
- Gabriele Varano
“The Role of the B-Cell Antigen Receptor in c-MYC-transformed B-Lymphoma Cells”
- 12:30 - 15:00 Lunch/Poster session
- Session III *PI3K/Akt/mTOR-, LKB1/AMPK- and deregulated FoxO signalling cascades*
15:00 - 17:30 Chairs: Bernd Dörken, Guido Kroemer

- 15:00 – 15:30 Dario Alessi,
“The structure and function of LKB1 “
- 15:30 – 16:00 Reuben J. Shaw
“The LKB1/AMPK tumor suppressor pathway coordinates cell growth and metabolism”
- 16:00 – 16:30 Jean Zhao
“PI3K in cancer and metabolism”
- 16:30 – 17:00 Coffee break
- 17:00 – 17:30 David Sabatini
“Control of growth by the mTOR pathway”
- Session IV *Hypoxia, p53 function and aberrant growth*
17:30 – 18:30 Chairs: Lothar Willmitzer, Matthew G. Vander Heiden
- 17:30 – 18:00 Thorsten Cramer
“Targeting metabolism and HIF-1 for cancer therapy”
- Mini talk session*
18:00 – 18:30 Anna Pavlina Haramis
“LKB1 is essential for survival under energetic stress in zebrafish”
- Torsten Steinbrunn
“Oncogenic Ras and constitutively activated Akt promote tumor cell survival independently of each other”
- Approx. 19:30 Speakers' Dinner

Saturday, 29th May 2010

- Session V *Autophagy, Apoptosis, Senescence and metabolic dysregulation*
09:00 – 12:15 Chairs: Georg Lenz, David M. Sabatini
- 09:00 – 09:30 Guido Kroemer
“Autophagy in stress adaptation, avoidance of cell death and longevity”
- 09:30 – 10:00 Masashi Narita
“Autophagy in cellular senescence”
- 10:00 – 10:30 Coffee break
- 10:30 – 11:00 Kevin Ryan
“Autophagy in the control of tumor cell death”
- 11:00 – 11:30 Clemens Schmitt

"Metabolic Implications of Therapy-Induced Senescence"

11:30 – 12:00 Ben F. Cravatt
"Mapping Dysregulated metabolic Pathways in Cancer by Activity-based Proteomics"

12:00 – 13:00 Lunch

Mini talk session

13:00 – 13:45 Zhixiong Li
"Leukemia induced by altered TRK-signaling is sensitive to treatment with mTOR inhibitors in a preclinical model"

Stefan Kempa
"Integrative metabolomics strategy to analyse cellular metabolism of cancer cells"

Jan Budczies
"Comparison of malign and benign breast tissues by GC-TOF based metabolomics reveals strong changes in nucleotide phosphate and choline metabolism"

Session VI

13:45 – 15:45 Targeting cancer metabolism
Chairs: Britta Siegmund, Dario Alessi

13:45 – 14:15 Sybille Mazurek
"Bi-functional role of pyruvate kinase M2 within the tumor metabolome: Applications in diagnosis and potential for therapy"

14:15 – 14:45 Wolfgang Mueller-Klieser
"Therapeutic aspects of tumor glycolysis"

14:45 – 15:15 Coffee break

Bionas Workshop

15:15 – 15:45 Pedro Mestres
"The Bionas technology for anticancer drug screening"

15:45 Final remarks
Clemens A. Schmitt