

Imaging for Life. From Molecules to Diagnostics and Therapy

International Workshop, 8th and 9th November 2016
CosmoCaixa Barcelona. c/ Isaac Newton, 26. Barcelona



International Center
for Scientific Debate
BARCELONA

Website : <<http://www.bdebate.org/en/forum/imaging-life-molecules-diagnostics-and-therapy>>
Register now! : at <<https://en.xing-events.com/BD-Imaging-Life.html>>

Scientific leaders

Francesc Xavier Avilés & Boris Turk

Institute for Biotechnology & Biomedicine, Universitat Autònoma de Barcelona
and Ljubljana Jozef Stefan Institute (& Univ. Ljubljana)

Tuesday, 8th November, 2016

- 9:15 **Welcome**
- 9:25 **SESSION 1: State of the Art in in-vivo Imaging, Approaches and Challenges**
- 9:30 **Functional and structural connectivity of the normal and diseased mouse brain**
Markus Rudin (ETH & University of Zurich, Switzerland)
- 10:00 *Pending title*
Carsten Schultz (EMBL, Heidelberg, Germany)
- 10:30 **Coffee break**
- 11:00 **Well-defined Polypeptide-based architectures: applications in drug delivery and molecular imaging** María J. Vicent (CIPF, Valencia)
- 11:30 **OPTiSPIM: Getting the best of both worlds**
James Sharpe (CRG-PRBB, Barcelona)
- 12:30 **Lunch**
- 14:00 **SESSION 2: Subcellular, Cellular and Small Animal Imaging**
- 14:00 **Nanoscale imaging and spectroscopy of living cell membranes using single molecule optical nanotools**
María F. García-Parajo (ICFO, Barcelona)
- 14:30 **Assessing tumoral microenvironment: hypoxia with F18-MISO PET-CT in Cancer Research**
Francisca Mulero (CNIO, Madrid)
- 15:00 **Molecular Imaging in Drug Development**
Oliver Plettenburg (Institute of Medicinal Chemistry at HelmholtzZentrum, Munich, Germany)
- 15:30 **Coffee break**
- 16:00 **Imaging Model Diseases in Transparent Organs**
Julien Colombelli (IRB-PCB, Barcelona)
- 16:30 *Pending title*
Simó Schwartz (Hospital Vall d'Hebron, Institut de Recerca -VHIR-, Barcelona)
- 17:00 **Open debate on Sessions 1-2**

Wednesday, 9th November, 2016

9:25 **SESSION 3: Combining Different Imaging Approaches**

Sensitivity, resolution and long-term biodistribution studies by H and C digital autoradiography : moving from 2D to 3D imaging

9:30

Vincent Dive (CEA-Saclay, France)

10:00 **PET in drug discovery and development: an overview**

J. Raul Herance (Vall d'Hebron Institut de Recerca -VHIR-, Barcelona)

10:30 **Coffee break**

11:00 **Multimodality Imaging - The Ideal Solution to Advance Molecular Imaging?**

Tim Wokrina (Bruker BioSpin, Ettlingen, Germany)

11:30 **Unraveling therapy response in preclinical glioblastoma using MRSI-based molecular imaging and source analysis**

Ana Paula Candiota (CIBER / Dept. Bioquímica i Biologia Molecular, UAB, Barcelona)

12:00 *Pending title*

Rainer Kneuer (NOVARTIS, Basel, Switzerland)

12:30 **Lunch**

14:00 **SESSION 4: Towards Translational Imaging and Theranostics**

14:00 **Small molecule protease probes for imaging cancer and infectious diseases**

Matthew Bogyo (University of Stanford, USA)

14:30 **Optical Tomography and Its Role in Multimodality Imaging**

Kevin P. Francis (Perkin Elmer, USA)

15:00 **Precision Markers for Color-Coded Surgery - Imaging tumors and nerves**

Quyên T. Nguyen (University of San Diego, USA)

15:30 **Coffee break**

16:00 **Imaging targeted drug delivery in colorectal cancer models**

Ramon Mangués (Hospital de Sant Pau, Institut d'Investigacions Biomèdiques, Barcelona)

16:30 **Cysteine cathepsins as targets for noninvasive whole body imaging and targeted drug delivery**

Boris Turk (Jozef Stefan Institute, Ljubljana)

17:00 **Open debate on Sessions 3-4 and general discussion**

18:15 **Concluding remarks and closing of the meeting**