

## **Preclinical Imaging Workshop: Multiple Modality Imaging in Translational Research**

27<sup>th</sup> & 28<sup>th</sup> March 2017

Hosted by: Prof. Moustapha Hassan

Karolinska University Hospital, PKL, Preclinical Imaging Facility

Huddinge, Sweden

Sponsor: Strategic Research Programme in Cancer - Stratcan

Location: Novum, Hörsalen (Large Lecture Hall), 4th floor

The workshop is organized to give an overview on using non-invasive small animal imaging for *in vivo* biomedical applications. The topics cover the theoretical background for the imaging modalities that are available at PIF, data analysis and potential applications in oncology, neurology, cardiology and stem cell research etc. Graduate students, postdoctoral fellows, senior researchers, and scientific laboratory professionals, individuals with experience in small animal imaging as well as beginners are welcome.

Free of entrance. Please contact Dr. Ying Zhao at [ying.zhao.1@ki.se](mailto:ying.zhao.1@ki.se) or Prof. Moustapha Hassan at [Moustapha.Hassan@ki.se](mailto:Moustapha.Hassan@ki.se) if you would like to attend.

### Topics

- Bioluminescence imaging
- Fluorescence imaging
- CT
- Ultrasound
- Photoacoustic imaging
- MRI
- PET
- Multimodality imaging
- Imaging probes
- Data analysis

Day 1

**Monday, 27<sup>th</sup> March**

9:00 – 9:15	<b>Opening lecture.</b>  Prof. Moustapha Hassan
9:15 – 09:30	<b>Ultrasound, molecular imaging and targeted drug delivery</b>  Dr. Dmitry Grishenkov, KTH-STH
09:30 – 10:15	<b>Multi-modal molecular imaging in pre-clinical research.</b>  Dr. Jithin Jose, FUJIFILM VisualSonics
10:15 – 10: 45	Coffee break and discussion
10:45 – 11.00	<b>3D ultrasound to follow tumor growth in a mouse model of colon cancer.</b>  Dr. Marco Gerling, Bionut
11:00 – 11:15	<b>“Modifying” embryos using ultrasound guidance.</b>  Dr. Nevin Witman, ICMC
11:15 – 12:00	<b>In-vivo photoacoustic molecular imaging and therapy of tumors.</b>  Dr. Jithin Jose, FUJIFILM VisualSonics
12:00 – 12:15	<b>Ultrasound as requirement for murine pancreatic cancer experiments, photoacoustics as add-on to measure hypoxia in tumors.</b>  Dr. Rainer Heuchel, CLINTEC

Day 1

Monday, 27<sup>th</sup> March

13:15 – 14:00	<b>Optical imaging: Research at the speed of light</b>  Dr. Jorg Hamm, PerkinElmer
14:00 – 14:15	<b>IVIS luminescence and fluorescence imaging in exosome research</b>  Dr. Samir El-Andaloussi, LABMED
14:15 – 14:30	<b>The use of <i>in vivo</i> imaging to monitor and detect vaccine-induced immune responses.</b>  Dr. Lars Frelin, LABMED
14:30 – 15:00	Coffee break and discussion
15:00 – 15:45	<b>Advances in Quantum MicroCT <i>in-vivo</i> Imaging: Applications in Preclinical Disease Models.</b>  Dr. Sasha Belenkov, PerkinElmer
15:45 – 16:00	<b>Characterization of mesenchymal stem and progenitor cells in health and hematological malignancy.</b>  Dr. Hong Qian, HERM

Day 2

Tuesday, 28<sup>th</sup> March

9:00 – 09:45	<b>High-end Solutions for Translational Imaging: nanoScan PET-systems of Mediso</b>  Dr. Sandor Hobor, Mediso
9:45 – 10:00	<b>Preclinical Nuclear Medicine Imaging at LBIC</b>  Dr. Gustav Grafström, Lund University Bioimaging Center
10:00 – 10: 20	Coffee break and discussion
10:20 – 11:00	<b>High-performance preclinical PET/MRI systems of Mediso</b>  Dr. Sandor Hobor, Mediso
11:00 – 11:30	<b>In Vivo Imaging of Small Animals using the Mediso PET/MR® and PET/CT® Systems</b>  Dr. Jenny Häggkvist, CNS
11:30 – 12:00	<b>High quality, user friendly µPET imaging: G8</b>  Dr. Jorg Hamm, PerkinElmer
12:00-13:00	Lunch break
13:00 – 15:00	Meet the specialists and group discussion