

Oulu BioImaging (OBI) Network Workshop in April 10, 2013

A joint event between imaging laboratories of University of Oulu and Oulu University Hospital

Theme: Presenting the personnel, imaging instruments and image analysis methodologies covering molecular and cell biology, medical and pre-clinical imaging, optoelectronics, material sciences, and machine vision techniques.

Date and time: Wednesday, 10th April, 2013, at 08:30 - 16:30.

Location: Lecture Hall 202F, Department of Pharmacology, Medical Campus at Kontinkangas, Aapistie 5A.

Study credits : 0.3 ECTS, certificate of participation will be written.

PROGRAM FOR THE 2ND OBI NETWORK WORKSHOP

08:30-09:00 *Getting together, posters and refreshments in front of the lecture hall*

National and European-level strategies for imaging infrastructures

09:00-09:15 **Sinikka Eskelinen**, BCO: Opening words and integration of Oulu bioimaging to the European infrastructure.

09:15-09:45 **Vuorio Eero**, Biocenter Finland: National and European-level strategies for implementing open access research infrastructures.

Session 1:

09:45-10:10 **Joonas Autio**, OU: Small animal magnetic resonance imaging.

10:10-10:35 **Mikko Finnilä**, OU: Current status of Oulu uCT facilities and recent advances in uCT imaging.

10:35-11:00 **Zoltan Szabo**, BCO, OU: Pre-clinical micro-ultrasound imaging.

11:00-11:25 **Tomi Pitkäaho**, Oulu Southern Institute OU: Digital holographic microscopy in morphometric analysis of three-dimensional cell cultures.

11:25 – 12:15 *Lunch break*

Session 2:

12:15-12:40 **Janne Ihalainen**, JyU: Raman microspectroscopy: tools to see molecular details from tissue, cells, and solutions.

12:40-13:05 **Jouni Jussila**, Specim: Hyperspectral imaging.

13:05-13:30 **Sanntu Heinilehto**, MNT center OU: X-ray photoelectron spectroscopy (XPS) in chemical surface analysis.

13:30-13:55 **Alessandra Scarpellin**, Nikon: Nikon's solutions for high-resolution imaging of mesoscopic-scale biological specimens.

13:55 – 14:30 *Coffee and posters*

Session 3:

14:30-14:55 **Veli-Pekka Ronkainen**, BCO: Advanced light microscopy modalities at BCO.

14:55-15:20 **Matti Kinnunen**, OU: Photoacoustic excitation and imaging of guided waves along bone covered with tissue phantom.

15:20-15:45 **Gabriela Lorite**, OU: Atomic Force Microscopy: Principles and application in biosciences.

15:45-16:10 **Esa Rahtu**, OU: Computer vision methods for cancer classification and malaria detection from microscopic images.

Closing of the OBI Day

16:10-16:30 Open discussion on the future strategies to develop local imaging infrastructures and their integration to the national and European imaging networks.