

THE COURSE “MORE THAN THE EYE CAN SEE: TOOLS AND METHODS IN CELL VISUALIZATION AND IMAGE ANALYSIS”

in Gothenburg, Sweden, May 20-21, 2010

Organizers: Milos Pekny, Ulrika Wilhelmsson, Yolanda de Pablo, Till Puschmann, Michelle Porritt, Michael Nilsson and Marcela Pekna. Center for Brain Repair and Rehabilitation, Dept. of Clinical Neuroscience, Inst. of Neuroscience and Physiology, Sahlgrenska Academy, Sweden

Sponsored by: Olympus, Leica, Nikon and NordForsk

Course, day 1: Thursday, May 20

- 9.45 **Course Opening** (Ivan Östholm Lecture hall, Medicinaregatan 13)
- 10.00-10.40 *Methodological approaches to live cell imaging*, Kyle Gee, Life Technologies, USA
- 10.40-11.00 Discussion (moderated by Yolanda de Pablo)
- 11.00-11.40 *Colored cells, from sample preparation to different applications of Fluorescence Activated Cell Sorting (FACS)*, Maria Johansson, Karolinska Institute, Stockholm
- 11.40-12.00 Discussion (moderated by Till Puschmann)
- 12.00-13.00 Lunch Break
- 13.15-14.00 *Multiplexing – applications and interpretation*, Ulf Andreasson, Sahlgrenska Academy at the University of Gothenburg
- 14.00-14.30 Discussion (moderated by Michelle Porritt)
- 14.30-15.00 Break, moving to the Center for Cellular Imaging
- 15.00-16.45 *Ca²⁺ imaging in astrocytes - practical demonstration and problem solving*, Kristian Euren, Olympus, Sweden
- 16.45-17.15 Break, returning to the lecture hall
- 17.15-18.15 *Practical solutions to problems with imaging: sample preparation*, Ulla Sundberg, Leica, Sweden

Course, day 2: Friday, May 21

- 9.00-9.50 *Image acquisition and principles of stereological cell quantification*, Georg Kuhn, Sahlgrenska Academy at the University of Gothenburg (Ivan Östholm Lecture hall, Sahlgrenska Academy, Medicinaregatan 13)
- 9.50-10.05 Discussion
- 10.05-10.45 *Cell tracking*, Cecilia Sahlgren, Turku Centre for Biotechnology, Åbo Akademi, Turku, Finland
- 10.45-11.05 Discussion (moderated by Milos Pekny)
- 11.05-11.25 Break
- 11.25-12.05 *Confocal Imaging*, Kristian Euren, Olympus, Sweden
- 12.05-12.25 Discussion (moderated by Ulrika Wilhelmsson)
- 12.25-13.25 Lunch Break
- 13.40-14.30 *High-content image analysis state-of-the-art – from general principles to specific applications*, Mike Dragunow, University of Auckland, New Zealand
- 14.30-14.50 Discussion (moderated by Marcela Pekna)
- 14.50-15.10 Break
- 15.10-15.50 *Practical solutions to problems with imaging and analysis*, Ulla Sundberg, Leica, Sweden
- 15.50-16.10 Discussion (moderated by the organizers)

Course applications: Please apply to nordicimaging@neuro.gu.se by May 7, 2010