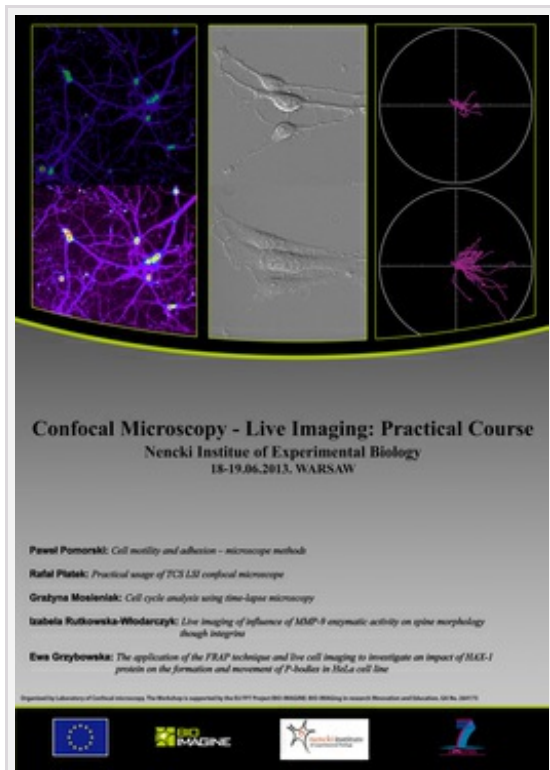


# Nencki Institute of Experimental Biology

## Workshop of Confocal Microscopy

2013-05-26




The poster features three panels at the top: a 3D reconstruction of a neuron in purple and blue, a DIC image of a cell, and two circular insets showing high-magnification views of cellular structures. Below the images, the text reads: 'Confocal Microscopy - Live Imaging: Practical Course', 'Nencki Institute of Experimental Biology', '18-19.06.2013, WARSAW'. It lists four lecturers and their topics: Paweł Pomorski (Cell motility and adhesion), Rafał Piatak (Practical usage of TCS LSI confocal microscope), Grazyna Moeżniak (Cell cycle analysis), Izabela Kulkowska-Włodarczyk (Live imaging of MMP-9), and Ewa Grzybowska (FRAP technique).

**Confocal Microscopy - Live Imaging: Practical Course**  
Nencki Institute of Experimental Biology  
18-19.06.2013, WARSAW

**Paweł Pomorski:** Cell motility and adhesion – microscope methods  
**Rafał Piatak:** Practical usage of TCS LSI confocal microscope  
**Grazyna Moeżniak:** Cell cycle analysis using time-lapse microscopy  
**Izabela Kulkowska-Włodarczyk:** Live imaging of influence of MMP-9 enzymatic activity on spine morphology through integrins  
**Ewa Grzybowska:** The application of the FRAP technique and live cell imaging to investigate an impact of MAX-1 protein on the formation and movement of P-bodies in HeLa cell line

Supported by laboratory of Confocal microscopy. The Workshop is supported by the EU FP7 Project 601 861008. EU-Modeling in research: Researcher and Innovation. EU No. 249779



The practical part of the workshop will include:

- Visualization, analysis and reconstruction of 3D images with Auto Quant and Imaris softwares.
- Studies of intracellular processes using Spinning Disc Microscope.
- Recording of fast processes in cells using resonance scanner (Leica TCS SP5).
- Cells migration and adhesion study – DIC contrast and Interference Reflection Microscopy.
- Technics of the calcium signaling measurement – fluorescence microscopy.

Experiments will be conducted on tissue cells, ciliates and plant cells. Lecturers will present the results of studies concerning neuronal plasticity, cells ageing and proliferation, intracellular transport and the tissue structure of mammalian organs.