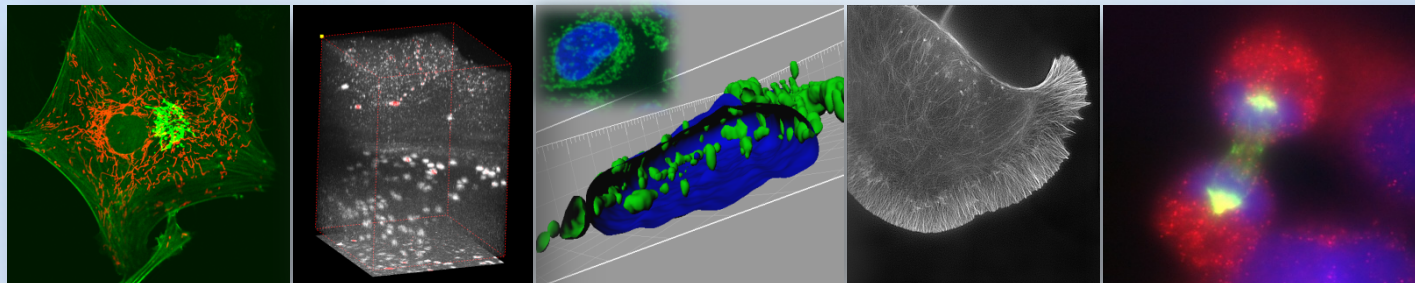


2nd AIST International Imaging Workshop

December 9-14, 2014

DBT-AIST International Laboratory for Advanced Biomedicine (DAILAB)
National Institute of Advanced Industrial Science and Technology (AIST)
1-1-1 Higashi, Tsukuba, Japan



The 2nd AIST International Imaging Workshop is a residential one-week course held at the DAILAB, Biomedical Research Institute, AIST offering a wide range (from the principles of light microscopy to spectral imaging) of microscopy training to young talented researchers. Participants will be trained through hands-on practical sessions in several critical and important issues related to imaging technologies.

Who can join?

The course is suitable for both beginners and experienced users wanting to gain a greater understanding of the microscope. Students are selected through recommendation from their supervisor internationally from a range of backgrounds. Preference will be given to doctoral level students.

Language?

The course, including the course materials, will be conducted in English.

The course will have a maximum of 12-15 delegates.

Support?

Selected candidates will be provided (1) Air fare return by economy class through the most direct route from the international airport in their home country to Japan, (2) Bus fare from Narita International airport to Tsukuba Center, (3) Single room accommodation at the AIST Guest House or Hotels around and (4) Allowance to cover the daily meals.

Course Details

Laboratory Course 1: Basic training in Microscopy

Anatomy of the light microscope, Basic Optics, Lenses, Bright field, Phase contrast, DIC, Fluorescence, Fluorochromes and Filters, Fluorescence imaging, Basic microscope maintenance

Laboratory Course 2: Basic training in Laser Scanning Microscopy

3D imaging, Time-lapse imaging, Spectral imaging

Laboratory Course 3: Training in Multi-photon Laser Microscopy

Observation of a deep brain layer by using two-photon excitation

Laboratory Course 4: Training in Super-resolution Microscopy

2D and 3D imaging, Multi-color imaging

Laboratory Course 6: Training in FCS analysis by Laser Microscopy

Learn the principle of Fluorescent Correlation Spectrometry analysis

Laboratory Course 5: Training in Bioluminescence Screening & Imaging

Learn the principle and techniques in high throughput screening & cell imaging based on bioluminescence technology

Several lectures on the novel techniques of microscopy will be given (TBA)

Program

December 8, 2014 *Arrival and Reception*

December 9, 2014

Course 1: *Basic training in Microscopy*

December 10, 2014

Course 2: *Basic training of LSM*

December 11, 2014 ~ December 12, 2014

Course 3: *Multi-photon Laser Microscopy*

Course 4: *Super Resolution Microscopy*

Course 5: *FCS analysis*

Course 6: *Bioluminescence Screening & Imaging*

*Course 3- 6 will be held with a group of 3-5 members by rotation

December 13, 2014 *Tour to imaging or life sciences Institutes in and around Tsukuba*

December 14, 2014 *Departure*

Organizers: Y. Ohmiya, R. Wadhwa, M. Doi and S. Kaul

Request for application form and further information should be mailed to: doi-m@aist.go.jp or s-kaul@aist.go.jp

Deadline for application: September 15, 2014

Sponsors: Nikon, Olympus, Carl Zeiss, ATTO