

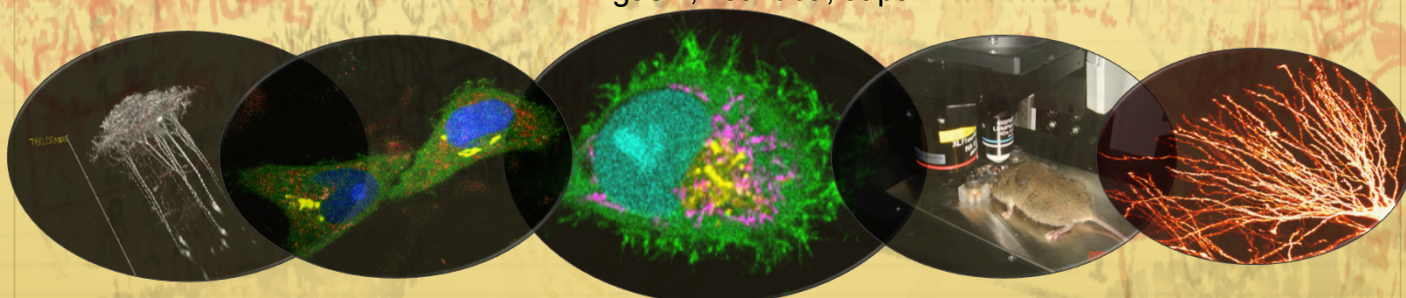
1st AIST International Imaging Workshop

January 19-25, 2014

Biomedical Research Institute

National Institute of Advanced Industrial Science and Technology (AIST)

1-1-1 Higashi, Tsukuba, Japan



The 1st AIST International Imaging Workshop is a residential one-week course held at the 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) Airfare 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

Learn the basic technique for a confocal microscopy

Laboratory Course 3: Training in Multi-photon Laser Microscopy

*Observation of a deep brain layer by using two-photon
Photo activation, Calcium imaging after laser stimulation*

Laboratory Course 4: Training in Spectral confocal & Super-resolution Microscopy

*Separation of cellular components from four-color fluorescent-labeled cells.
Learn the technique for super-resolution observation*

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

January 19, 2014 *Arrival and Reception*

January 20, 2014

Course 1- *Basic training in Microscopy*

Course 2: *LSM*

(All members)

January 21, 2014 ~ January 23, 2014

Course 3: *Multi-photon Laser Microscopy*

Course 4: *Spectral & Super Resolution Microscopy*

Course 5: *Bioluminescence Screening & Imaging*

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

January 24, 2014 *Tour to imaging or life sciences companies in and around Tsukuba*

January 25, 2014 *Farewell and Departure*

Instructors: Y. Ohmiya, Y. Onishi, K. Katoh, T. Ebihara, T. Ochiishi, M. Doi, T. Mizuno and A. Nagasaki

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

Sponsors: Nikon and Olympus

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

Deadline for application: November 15, 2013