

August 2, 2024

To all students and faculty members,

### **Announcement on 2024 Intensive Course in Basic Science Fundamentals & Multidisciplinary Seminars**

We are delighted to announce 2024 Intensive Course in Basic Science Fundamentals & Multidisciplinary seminars as a formal class for graduate students in the Graduate School of Medicine. This course is co-sponsored by Research Center for Animal Life Science and Central Research Laboratory.

This intensive course is a part of 2024 special seminar series organized by Central Research Laboratory and is open for all students and staff in SUMS.

We will deliver the online-lecture using Zoom and video. However, the practice should be hands-on training and no video training will be provided. We will send the URL and passcode separately.

■ Date: September 10th (Tuesday) - September 13th (Friday), 2024

■ Program: see reverse side

Regarding abstract of each lecture and practice, please refer to the CRL website.

URL: [http://www.crl.shiga-med.ac.jp/home/seminar/toku\\_sem/sp2024/prog.html](http://www.crl.shiga-med.ac.jp/home/seminar/toku_sem/sp2024/prog.html)

(SUMS website TOP > Departments > Research Centers and Facilities >

Central Research Laboratory > Information > 2024 An Intensive Course in Basic Science Fundamentals & Multidisciplinary Seminars / CRL Special Seminars)

■ To students in "Basic Science Fundamentals & Multidisciplinary Seminars" in 2024:

Basic Science Fundamentals & Multidisciplinary Seminars are a part of an obligatory subject, Common core curriculum, in the PhD course at SUMS. All students have to attend 3 or more lectures and/or practices of the Seminars for acquiring credits.

After attending the recorded lecture, you must submit a report using WebClass (A4 size within 1 page, PDF format) on the lecture to WebClass. Those who have taken the face-to-face lecture or practice do not need to submit a report.

The deadline for all reports is September 27 (Friday), 5:00PM.

■ Access to Web Class:

WebClass login (<https://latte.shiga-med.ac.jp/>) > Add Course >

“テクニカルセミナー (2024-通年)” > “メンバーになる (Join this Course)”

**【Contact information (for inquiries)】**

Central Research Laboratory

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## Program of 2024 Intense Course in Basic Science Fundamentals & Multidisciplinary Seminars

### ■ Tuesday, September 10

- 14:00-15:20 **Introduction of How to Handle Laboratory Animals (In Japanese)**  
Toshifumi Morimura, Hideaki Tsuchiya (Research Center for Animal Life Science)  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 15:30-16:50 **Overview of Immunohistochemistry and Histochemistry (In English)**  
Kinji Asahina (Central Research Laboratory (CRL))  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 17:00-18:20 **Preparation of tissue sections from frozen and paraffin blocks (In English/Japanese)**  
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado, Kumi Okamoto,  
Sachiko Fukunaga (CRL)  
Microscopy Sample Preparation Room #2, 4th floor, CRL [[on-site](#)]

### ■ Wednesday, September 11

- 14:00-15:20 **Practical Use of MMC and IT Security for Medical Research (In Japanese)**  
Kenji Shigetoshi, Takashi Ashihara (MultiMedia Center)  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 15:30-16:50 **Introduction to Modern Confocal Microscopy and its Applications (In English)**  
Claudia Florindo, Toshiyuki Watanabe (Andor Technology, Oxford Instruments)  
Asahina K, Yamamoto T (CRL)  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 17:00-18:20 **Observation of Tissue Sections Using Microscope (In English/Japanese)**  
Asahina K, Yamamoto T, Mori Y, Terado T, Okamoto K, Fukunaga S (CRL)  
Confocal Laser Scanning Microscope Lab #2 & #4, 4th floor, CRL [[on-site](#)]

### ■ Thursday, September 12

- 14:00-15:20 **Principle and Application of Nuclear Magnetic Resonance Spectroscopy (In Japanese)**  
Yasuyuki Mori, Yoshio Furusho (Division of Chemistry)  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 15:30-16:50 **Cytometry and Fluorescence Activated Cell Sorter (In English)**  
Mariko Ikuo, Yoshiyasu Ooie (Nippon Becton Dickinson), Asahina K, Mori Y (CRL)  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 17:00-18:20 **Cytometry and Fluorescence Activated Cell Sorter (In English/Japanese)**  
Ikuo M, Ooie Y (Nippon Becton Dickinson), Asahina K, Yamamoto T, Mori Y, Terado T,  
Okamoto K, Fukunaga S (CRL)  
Cell Engineering Lab #4, 4th floor, Central Research Laboratory [[on-site](#)]

### ■ Friday, September 13

- 14:00-15:20 **Introduction to magnetic resonance imaging (MRI) in animals (In Japanese)**  
Atsushi Yamada (Medical Innovation Research Center)  
Lecture Room A, 2nd floor, Basic Lecture and Practice Building [[on-site/zoom/video](#)]
- 15:30-16:50 **Introduction of Bioinformatics - Next Generation Sequencer and RNA-seq (In Japanese)**  
Yosuke Kadota, Takashi Ashihara (Information Technology and Management Center)  
MultiMedia Center, 1st floor, Browsing room [[on-site](#)]
- 17:00-18:20 **Cell culture and passaging (In English/Japanese)**  
Asahina K, Yamamoto T, Mori Y, Terado T, Okamoto K, Fukunaga S (CRL)  
Cell Culture Room, 4th floor, Central Research Laboratory [[on-site](#)]