## 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]

Ref. CRL laboratories: http://www.crl.shiga-med.ac.jp/home/haichizu/crl map en.pdf