Great Lakes Advanced Molecular Sciences: Advanced Microscopy 2024

Holland, MI

June 25-28, 2024

Tuesday, June 25

11 AM Check-in

Location: Haworth Hotel and Conference Center

12:00 PM Lunch and Vendor Fair

Location: Haworth Hotel and Conference Center

2:00 PM Lecture 1

Location: Bioeconomy Institute Auditorium Room 4107 Topic: **General Introduction to Light Microscopy**

Lecturer: Dr. Melinda Frame

3:30 PM Break

3:45 PM Lecture 2

Location: Bioeconomy Institute Auditorium Room 4107

Topic: **Tissue Clearing** Lecturer: Dr. Ripla Arora

5:15 PM **Evening Break and Travel Time**

6:00 PM Dinner/Keynote/Opening Reception

Location: Haworth Conference Center

Keynote: Dr. Chao Zhou

Title: Ultrahigh Speed Optical Coherence Tomography and its Biomedical

Applications

Wednesday, June 26

8:30 AM Breakfast

Location: Bioeconomy Institute

9:00 AM Lecture 3

Location: Bioeconomy Institute Auditorium Room 4107
Topic: **Light Sheet and Super Resolution Microscopy**Lecturer(s): Drs. Jennifer Peters and Eric Rentchler

10:30 AM Coffee/Snack Break

Location: Bioeconomy Institute

11:00 AM Lecture 4

Location: Bioeconomy Institute Auditorium Room 4107 Topic: **Single Molecule Localization Microscopy** Lecturer(s): Dr. Jens Schmidt, Dr. Sara Cole

12:30 PM Lunch & Learn Sponsored by Imaris

Location: Bioeconomy Institute Auditorium Room 4107

Topic: Introduction to Imaris

Lecturer: Taylor Smith, Andor Technology Inc

1:30 PM Labs/Demos

Location: Bioeconomy Institute Lab 4208

Practical Session 1 Group 1: Tissue Clearing and Confocal Microscopy for

Whole Organs

Practical Session 2 Group 2: STORM Nanoscopy and Single-Molecule Live

Cell Imaging

Practical Session 3 Group 3: Live Cell Confocal Microscopy

5:00 PM **Evening Break and Travel Time**

6:00 PM Dinner/Keynote/Poster Sessions

Location: Haworth Conference Center

Keynote: Dr. Sabrina Spencer

Title: Proliferation-quiescence-senescence decisions in single cells

Thursday, June 27

8:30 AM Breakfast

Location: Bioeconomy Institute

9:00 AM Lecture 5

Location: Bioeconomy Institute Auditorium Room 4107

Topic: Confocal and 2-Photon Microscopy
Lecturer(s): Drs. Bryan Smith and Sangbum Park

10:30 AM Coffee/Snack Break

Location: Bioeconomy Institute

11:00 AM Lecture 6

Location: Bioeconomy Institute Auditorium Room 4107

Topic: New Innovations in Microscopy

Lecturer(s): Dr. Zhen Qiu

12:30 PM **Lunch**

Location: Bioeconomy Institute Library Room 4105

1:30 PM Labs/Demos

Location: Bioeconomy Institute Lab 4208

Practical Session 1 Group 2: Tissue Clearing and Confocal Microscopy for

Whole Organs

Practical Session 2 Group 3: STORM Nanoscopy and Single-Molecule Live

Cell Imaging

Practical Session 3 Group 1: Live Cell Confocal Microscopy

5:00 PM **Evening Break and Travel Time**

6:00 PM **Dinner/Networking/Poster Session**s

Location: Haworth Conference Center

Friday, June 28

8:30 AM Breakfast

Location: Bioeconomy Institute

9:00 AM Labs/Demos

Location: Bioeconomy Institute Lab 4208

Practical Session 1 Group 3: Tissue Clearing and Confocal Microscopy for

Whole Organs

Practical Session 2 Group 1: STORM Nanoscopy and Single-Molecule Live

Cell Imaging

Practical Session 3 Group 2: Live Cell Confocal Microscopy

Check-out and return borrowed laptop if necessary