Monday, May 8, 2023:

Speck Auditorium, Rowe Building, MBL

14:00 – 15:00  Registration

15:00 – 15:15  Welcoming Remarks
Gary Laevesky, Princeton University
Abhishek Kumar, Marine Biological Laboratory

15:15 – 16:00  “Optical Sectioning and basic fluorescence microscopy”
Michelle Itano, University of North Carolina Chapel Hill

16:00 – 16:45  “Anatomy of a lightsheet microscope”
Kate McDole, MRC Laboratory of Molecular Biology

16:45 – 17:00  Coffee Break

17:00 – 17:45  “Choosing cameras for purpose, Cost vs function vs speed.”
Simon Watkins, University of Pittsburgh

17:45 – 18:30  “Practical aspects of objective lens design”
Steven Ross, Nikon USA (Virtual)

18:30 – 20:30  Dinner and Poster

20:30 – 21:15  “Considerations for lightsheet image processing and analysis” Holly Gibbs, Texas A&M University
Tuesday, May 9, 2023:

Speck Auditorium, Rowe Building, MBL

08:45 – 09:00  Introduction  
Gary Laevsky, Princeton University

09:00 – 09:45  “Light-sheet fluorescence microscopy across spatial and temporal scales”  
Reto Fiolka, U T Southwestern

09:45 – 10:30  “Timekeeping in endosomal trafficking”  
Senthil Arumugam, Monash University

10:30 – 11:00  Coffee Break

11:00 – 11:45  “Imaging seizures in zebrafish with volumetric light sheet imaging and adaptive optics”  
Peter Kner, University of Georgia

11:45 – 12:30  “Light sheet for the masses!”  
Emmanuel Reynaud, University College of Dublin

12:30 – 13:30  Lunch

13:30 – 14:15  “A modular approach to tissue clearing”  
Douglas Richardson, Harvard Medical School
14:15 – 15:15  
**Early Career Session**

“Decoding how biology uses physics to sculpt an inner organ”  
Noah Mitchell, University of California, Santa Barbara

“Developing new tools for exploring cephalopod embryogenesis”  
Caroline Albertin, Marine Biological Laboratory

“Understanding neurodevelopment and disease across scales in zebrafish”  
Liz Haynes, Morgridge Institute for Research

15:15 – 15:30  
**Coffee Break**

15:30 – 17:30  
**Vendor Talks**

17:30 – 20:30  
**Reception Dinner, Meigs Room**

20:30 – 22:00  
**Data Handling and Image Analysis (Main Lab, Loeb Building)**
Wednesday, May 10, 2023:

Loeb Laboratory, Main Lab 2nd Floor, MBL

08:45 – 09:00  Introduction  
Gary Laevsky, Princeton University

09:00 – 09:45  “Practical considerations for quantitative light sheet fluorescence microscopy”  
Chad Hobson, Janelia Research Campus

10:00 – 12:00  Laboratory 1

12:00 – 13:30  Lunch

13:30 – 15:30  Laboratory 2

15:30 – 16:00  Coffee Break

16:00 – 18:00  Laboratory 3

18:30 – 21:30  “What can you do with really fast light-sheet microscopy?”  
Keynote Lecture, Meigs Room  
Elizabeth Hillman, Columbia University

21:30 – 22:30  Free Time on Microscopes
Thursday, May 11, 2023:

Loeb Laboratory, Main Lab 2nd Floor, MBL

08:45 – 09:00  Introduction  Gary Laevsky, Princeton University
09:00 – 11:00  Laboratory 4
11:00 – 13:00  Laboratory 5
13:00 – 14:30  Lunch (Box Lunch)
14:30 – 16:30  Laboratory 6
16:30 – 17:00  Coffee Break
17:00 – 18:30  Data Handling and Image Analysis
               “Tutorial in Image Processing For Light Sheet Microscopy”
               Anthony Mautino, Marine Biological Laboratory
               “Multi-view Image Fusion in FIJI”
               Carsten Wolff, Marine Biological Laboratory
18:30 – 21:30  Dinner and Workshop Fun with Kate and Emmanuel
21:30 – 22:30  Free Time on Microscopes
Friday, May 12, 2023:

Loeb Laboratory, Main Lab 2nd Floor, MBL

08:45 – 09:00  Introduction
Gary Laevsky, Princeton University

09:00 – 09:45  “Seeing is believing: using lightsheet microscopy to gain cell biological insights into zebrafish eye and brain development with undergraduates”
Kara Cerveny, Reed College

10:00 – 12:00  Laboratory 7

12:00 – 13:00  Lunch

13:00 – 15:00  Laboratory 8

15:00 – 15:30  Coffee Break

15:30 – 17:30  Laboratory 9

17:30 – 18:00  Discussion

18:00 – 20:00  Dinner

20:00 – 22:00  Free Time on Microscopes
Saturday, May 13, 2023:

Loeb Laboratory, Main Lab 2nd Floor, MBL

08:45 – 09:00  Introduction
              Gary Laevsky, Princeton University

09:00 – 09:45  “The path to the lightsheet: sample preparation considerations”
              Rebecca Adikes, Siena College

10:00 – 12:00 Laboratory 10

12:00 – 13:00 Lunch

13:00 – 15:00 Laboratory 11

15:00 – 15:30 Coffee Break

15:30 – 17:30 Data Handling and Image Analysis

17:30 – 18:00 Discussion

18:00 – 21:00 Dinner, Student Lightening Talks, Happy Hour
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