

**GEORGE M O'BRIEN CENTER
FOR ADVANCED RENAL MICROSCOPY AND ANALYSIS**

TENTATIVE COURSE SCHEDULE – April 22 – April 26, 2019

MONDAY, April 22, 2019	An Overview of Intravital 2-photon Microscopy	
7:30 am - 8:30 am	BREAKFAST – R2 Lobby	R2 Lobby
8:30 am - 9:20 am	Overview. Advancing Nephrology through Intravital Imaging: Achievements and Challenges Bruce Molitoris – IUSM	R2 101
9:20 am - 10:10 am	Intravital Multiphoton Microscopy Ken Dunn – Indiana Center for Biological Microscopy, IUSM	R2 101
10:10 am - 10:20 am	BREAK (10 minutes)	R2 Lobby
10:20 am - 11:10 am	Dynamics of Membrane Remodeling in Live Animals Roberto Weigert – NCI-DCR	R2 101
11:10 am - 12:00 pm	PLENARY LECTURE The Phasor analysis of FLIM Images Enrico Gratton- UCI Samueli School of Engineering	R2 101
12:00 PM	LUNCH	R2 Lobby
1:00pm – 1:50pm	Practical Intravital Imaging Ruben Sandoval - IUSM	R2 101
2:00 pm - 6:00pm	CONCURRENT WORKSHOP ACTIVITIES	R2 202
2:00 pm – 3:45 pm	Session 1	
3:45 pm - 4:15 pm	BREAK (30 minutes)	
4:15 pm - 6:00 pm	Session 2	
6:00 pm - 7:00 pm	DINNER (group introduction, posters presentation)	R3 Lobby
7:00 pm - 10:00 pm	Individual projects by arrangement	R2 202

TUESDAY, April 23, 2019

3D Visualization and Quantification

7:30 am - 8:30 am	BREAKFAST	R2 Lobby
8:30 am - 9:20 am	Introduction and Application of Large Scale 3D Tissue Imaging and Cytometry Tarek Ashkar - IUSM	R2 101
9:20 am - 10:10 am	Mesoscale Imaging Michael Ferkowicz – IUSM	R2 101
10:10 am - 10:20 am	BREAK (10 minutes)	R2 Lobby
10:20 am - 11:10 am	3D Visualization and Analysis Jeffrey Clendenon – 3D Visualization and Analysis	R2 101
11:10 am - 12:00 pm	Large scale 3D Image Analysis and Big Data Implications Seth Winfree - IUSM	TBA
12:00 -1 PM	LUNCH	R2 Lobby
1:00 pm - 5:00pm	CONCURRENT WORKSHOP ACTIVITIES	R2 202
1:00 pm – 2:45pm	Session 1	
2:45 pm - 3:15 pm	BREAK (30 minutes)	
3:15 pm - 5:00 pm	Session 2	
5:00pm - 6:00 pm	Round Table	R2 101
6:00 pm - 7:00 pm	DINNER	R3 Lobby
7:00 pm - 10:00 pm	Individual projects by arrangement	R2 202

WEDNESDAY, April 24, 2019 Rapidly Evolving Imaging Technologies

7:30 am - 8:30 am	BREAKFAST	R2 Lobby
8:30 am - 9:20 am	PLENARY LECTURE 3D, Multicolor and Live-cell Super-resolution Microscopy for Cell Biological Research Joerg Bewersdorf – Yale University	R2 101
9:20 – 10:10 am	Next-generation MALDI Imaging Mass Spectrometry Enabling the Construction of Comprehensive Molecular Maps of Human Kidney Tissue Jeffrey Spraggins – Vanderbilt University	R2 101
10:10 am - 10:20 am	BREAK (30 minutes)	R2 Lobby
10:20 am - 11:10 am	Imaging Mass Cytometry-based KIDNEY MAPPS Elucidate Architectural Variability in the Human Kidney Nikhil Singh – Yale School of Medicine	R2 101
11:10 am - 12:00 pm	Measuring Nephron Endowment and mapping Glomeruli Using Magnetic Resonance Imaging Kevin Bennett – Washington University in St. Louis	R2 101
12:00 -1PM	Lunch	R2 Lobby
1:00 pm - 5:00pm	CONCURRENT WORKSHOP ACTIVITIES	R2 202
1:00 pm – 2:45pm	Session 1	
2:45 pm - 3:15 pm	BREAK (15 minutes)	
3:15 pm - 5:00 pm	Session 2	
6:00pm - 7:00 pm	DINNER	R3 Lobby
7:00pm – 10:00pm	Individual projects by arrangement	R2 202

THURSDAY, April 25, 2019

7:30 am - 8:30 am	BREAKFAST	R2 Lobby
8:30 am - 9:20 am	Functional Imaging of the Proximal Tubule Endo-Lysosomal System Andrew Hall – University of Zurich, Switzerland	R2 101
9:20 am - 10:10 am	Pathophysiology of septic AKI: an Intravital Approach Pierre Dagher - IUSM	R2 101
10:10 am - 10:20 am	BREAK (30 minutes)	R2 Lobby
10:20 am - 11:10 am	FRET - FLIM Measurements with a slice of PIE Richard Day– IUPUI	R2 101
11:10 am – 12:00 pm	Delivering, Expressing, and Utilizing Fluorescent Proteins in Rodent Kidney Robert Bacallao – IUSM	R2 101
12:00 -1PM	LUNCH	R2 Lobby
1:00 pm - 5:00pm	CONCURRENT WORKSHOP ACTIVITIES	R2 202
1:00 pm – 2:45 pm	Session 1	
2:45 pm - 3:15 pm	BREAK (30 minutes)	
3:15 pm - 5:00 pm	Session 2	
6:00 pm - 9:00 pm	DINNER	

FRIDAY, APRIL 26, 2019

7:30 am - 8:30 am	BREAKFAST	R2 Lobby
8:30 am - 9:20 am	Using Biosensors to Understand Biology Christopher Reissaus– IUPUI	R2 101
9:20 am - 10:10 am	Nanoparticles Takashi Hato – IUSM	R2 101
10:10 am - 10:20 am	BREAK (30 minutes)	R2 Lobby
10:20 am – 12:00 pm	Presentation of data acquired by Attendees during the course.*	R2 101
12:00 -1PM	LUNCH	R2 Lobby

Afternoon open to individual studies on the microscopes

*Attendees are encourage to arrange individual imaging sessions using their own reagents.