

**GEORGE M O'BRIEN CENTER  
FOR ADVANCED RENAL MICROSCOPY AND ANALYSIS  
TENTATIVE COURSE SCHEDULE – April 10 – April14, 2017**

**MONDAY, April 10, 2017**

|                            |   |                 |
|----------------------------|---|-----------------|
| <b>7:30 am - 8:30 am</b>   | <b>BREAKFAST – R2 Lobby</b>   | <b>R2 Lobby</b> |
| 8:30 am -9:20 am           | <b>Overview: Advancing Nephrology through Intravital Imaging: Achievements and Challenges</b><br>Bruce Molitoris – Indiana Center for Biological Microscopy | R2 101          |
| 9:20 am -10:10 am          | <b>Intravital Multiphoton Microscopy</b><br>Ken Dunn – Indiana Center for Biological Microscopy   | R2 101          |
| <b>10:10 am - 10:20 am</b> | <b>BREAK (10 minutes)</b>   | <b>R2 Lobby</b> |
| 10:20 am - 11:10 am        | <b>Practical Intravital Imaging</b><br>Ruben Sandoval - Indiana Center for Biological Microscopy  | R2 101          |
| 11:10 am - 12:00 pm        | <b>Use of an Abdominal Imaging Window for Intravital Microscopy</b><br>Saskia Ellenbroek - Cancer Biophysics, Hubrecht Institute, Utrecht Netherlands       | R2 101          |
| <b>12:00 PM</b>            | <b>LUNCH</b>  | <b>R2 Lobby</b> |
| <b>12:30 pm - 1:00 pm</b>  | Bruce Molitoris<br><b>Introduction to Workshops</b>   | <b>R2 101</b>   |
| <b>1:00 pm - 5:00pm</b>    | <b>CONCURRENT WORKSHOP ACTIVITIES</b>   | <b>R2 202</b>   |
| 1:00 pm – 2:45 pm          | <b>Session 1</b>  |                 |
| <b>2:45 pm - 3:15 pm</b>   | <b>BREAK (30 minutes)</b>   |                 |
| 3:15 pm - 5:00 pm          | <b>Session 2</b>  |                 |
| <b>5:00pm - 6:00 pm</b>    | <b>ROUND TABLE</b><br>Bruce Molitoris – Indiana Center for Biological Microscopy  | <b>R2 101</b>   |
| <b>6:00 pm - 7:00 pm</b>   | <b>DINNER</b>   | <b>R2 Lobby</b> |
| 7:00 pm - 10:00 pm         | <b>Individual projects by arrangement</b>   | R2 202          |

**TUESDAY, April 11, 2017**

|                            |  |                     |
|----------------------------|--|---------------------|
| <b>7:30 am - 8:30 am</b>   | <b>BREAKFAST</b>   | <b>R2 Lobby</b>     |
| 8:30 am - 9:20 am          | <b>Large Scale Deep Tissue Imaging and SPIM</b><br>Tarek Ashkar - Indiana University                 | R2 101              |
| 9:20 am - 10:10 am         | <b>Use of Digital Image Analysis for Studies of Renal Physiology</b><br>Ed Delp – Purdue University  | R2 101              |
| <b>10:10 am - 10:20 am</b> | <b>BREAK (10 minutes)</b>  | <b>R2 Lobby</b>     |
| 10:20 am - 11:10 am        | <b>Fluorescent Proteins and Biosensors</b><br>Richard Day – Indiana University                       | R2 101              |
| 11:10 am - 12:00 pm        | <b>Using Fluorescent Probes to Study Acute Kidney Injury</b><br>Pierre Dagher – Indiana University   | R2 101              |
| <b>12:00 -1 PM</b>         | <b>LUNCH</b>   | <b>R2 Lobby</b>     |
| <b>1:00 pm - 5:00pm</b>    | <b>CONCURRENT WORKSHOP ACTIVITIES</b>  | <b>R2 202</b>       |
| 1:00 pm – 2:45pm           | <b>Session 1</b>   |                     |
| <b>2:45 pm - 3:15 pm</b>   | <b>BREAK (30 minutes)</b>  |                     |
| 3:15 pm - 5:00 pm          | <b>Session 2</b>   |                     |
| <b>5:00pm - 6:00 pm</b>    | <b>PLENARY LECTURE</b>   | <b>R2 101</b>       |
|                            | <b>Membrane Remodeling through Membrane Trafficking in Live Animals</b><br>Roberto Weigert – NCI-CCR |                     |
| <b>6:00 pm - 7:00 pm</b>   | <b>DINNER</b>  | <b>R2<br/>Lobby</b> |
| 7:00 pm - 10:00 pm         | <b>Individual projects by arrangement</b>  | R2 202              |

**WEDNESDAY, April 12, 2017**

|  |   |                 |
|--|---|-----------------|
| <b>7:30 am - 8:30 am</b>                       | <b>BREAKFAST</b>  | <b>R2 Lobby</b> |
| 8:30 am - 9:20 am                              | <b>Expanding the Toolbox for Intravital Imaging of Kidney Using Gene Delivery Techniques</b><br>Robert Bacallao– Indiana University           | R2 101          |
| 9:20 – 10:10 am                                | <b>Optimizing Microscope Design for Multiphoton Excitation Studies</b><br>Warren Zipfel - Cornell University                                  | R2 101          |
| <b>10:10 am - 10:20 am</b>                     | <b>BREAK (30 minutes)</b>   | <b>R2 Lobby</b> |
| 10:20 am - 11:10 am                            | <b>3D Visualization and Analysis</b><br>Jeffrey Clendenon - Aeon Imaging  | R2 101          |
| 11:10 am - 12:00 pm                            | <b>Forster Resonance Energy Transfer Microscopy and Fluorescence Lifetime Microscopy</b><br>Richard Day - Indiana University                  | R2 101          |
| <b>12:00 -1PM</b>                              | <b>Lunch</b>  | <b>R2 Lobby</b> |
| <b>12:10 -1:00pm</b><br>(lecture during lunch) | <b>Applications of Micropuncture Techniques and Fluorescence Lifetime Imaging for Intravital Studies</b><br>Takashi Hato – Indiana University | R2 101          |
| <b>1:00 pm - 5:00pm</b>                        | <b>CONCURRENT WORKSHOP ACTIVITIES</b>   | <b>R2 202</b>   |
| 1:00 pm – 2:45pm                               | <b>Session 1</b>  |                 |
| <b>2:45 pm - 3:15 pm</b>                       | <b>BREAK (15 minutes)</b>   |                 |
| 3:15 pm - 5:00 pm                              | <b>Session 2</b>  |                 |
| <b>5:00pm - 6:00 pm</b>                        | <b>Round Table</b>  | R2 101          |
| <b>6:00pm - 7:00 pm</b>                        | <b>DINNER</b>   | <b>R2 Lobby</b> |

**THURSDAY, April 13, 2017**

|                          |   |                 |
|--------------------------|---|-----------------|
| <b>7:30 am - 8:30 am</b> | <b>BREAKFAST</b>  | <b>R2 Lobby</b> |
| 8:30 am - 9:20 am        | <b>Using Fluorescent Probes to Study Tubule Metabolism</b><br>Tim Sutton – Indiana University                     | R2 101          |
| 9:20 am - 10:10 am       | <b>Building Your Own 2-Photon Microscope: Challenges, Advantages and Limitations</b><br>Roberto Weigert – NCI-CCR | R2 101          |
| 11:10 am – 12:00 pm      | <b>Writing a Shared Instrumentation Grant</b><br>Ken Dunn – Indiana University                                    | R2 101          |
| <b>12:00 -1PM</b>        | <b>LUNCH</b>  | <b>R2 Lobby</b> |
| <b>1:00 pm - 5:00pm</b>  | <b>CONCURRENT WORKSHOP ACTIVITIES</b>   | <b>R2 202</b>   |
| 1:00 pm – 2:45 pm        | <b>Session 1</b>  |                 |
| <b>2:45 pm - 3:15 pm</b> | <b>BREAK (30 minutes)</b>   |                 |
| 3:15 pm - 5:00 pm        | <b>Session 2</b>  |                 |
| <b>6:00 pm - 9:00 pm</b> | <b>DINNER</b>   |                 |

**FRIDAY, APRIL 14, 2017**

**Open to individual studies on the microscopes**

