



Comprehensive Approaches to the *in vivo* Assessment of Cardiovascular Function in Mice

June 21-26, 2008

Contact: Erin McDevitt – Events and Meetings Planner
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Course Schedule

Saturday, June 21, 2008

PM

4:00-6:00 **Registration**
Bar Harbor Club, Palmer Room

Sunday, June 22, 2008

AM

7:45 **Jax shuttle van pick-up at Harborside Hotel**

8:00-8:45 **Breakfast**
Roscoe's

9:00-10:30 **Mouse genetics and genetic tools**
John Macauley, Ph.D., The Jackson Laboratory
C.C. Little Auditorium

10:30-11:30 **Mouse genetic nomenclature: What's in a name?**
Jennifer Corrigan, M.S., The Jackson Laboratory
C.C. Little Auditorium

11:30-12:30 **Mouse models for cardiovascular disease**
Karen Svenson, The Jackson Laboratory
C.C. Little Auditorium

12:30-1:30 **Lunch**
Roscoe's

PM

1:30-2:30 **Induced models of cardiac disease**
Robert F. Hoyt, Jr., DVM, MS, DACLAM, NHLBI
C.C. Little Auditorium

2:30-3:30 **Anesthesia and analgesia**
Anthony Nicholson, B.V.S.c., Ph.D., The Jackson Laboratory
C.C. Little Auditorium

3:30-4:30 **Biomethods**
GRB Training Lab

4:30 **Jax shuttle vans pick-up at Main Lab**

Monday, June 23, 2008

AM

7:45 **Jax shuttle van pick-up at Harborside Hotel**

8:00-8:45 **Breakfast**
Roscoe's

9:00-10:00 **Introduction to High-Resolution Micro-Ultrasound Focused on Cardiac Micro-Imaging in the Mouse *in vivo***
Stuart Foster, Ph.D., VisualSonics Inc.
GRB Training Lab

10:00-10:30 **Break**
GRB Training Lab Hallway

10:30-11:30 ***In Vivo* Imaging demonstration and hands-on student session on general and cardiovascular imaging**
Quynh-Ai (Ai) Lockard, Ph.D., VisualSonics Inc.
GRB Training Lab

PM

11:30-12:30 **Lunch**
Roscoe's

- 12:30-4:30 ***In vivo* Imaging demonstration and hands-on student session on general and cardiovascular imaging in Normal, Artherosclerosis and Myocardial Infarct mouse models**
Quynh-Ai (Ai) Lockard, Ph.D., VisualSonics Inc.
GRB Training Lab
- 4:30 **Jax shuttle vans pick-up at Main Lab**

Tuesday, June 24, 2008

AM

- 7:45 **Jax shuttle van pick-up at Harborside Hotel**
- 8:00-8:45 **Breakfast**
Roscoe's
- 9:00-10:00 **History of CV measurement and telemetry**
Steve Hachtman, DSI
C.C. Little Auditorium
- 10:00-11:00 **Telemetry Applications in Small Animals**
Klaas Kramer, Ph.D., Free University, Amsterdam
C.C. Little Auditorium
- 11:00-12:00 **Animal Telemetry: Successes, Threats & New Opportunities**
Steven Swoap, Williams College
C.C. Little Auditorium

PM

- 12:00-12:30 **ECG & BP Measurements in Mice**
GRB Training Lab
- 12:30-1:30 **Lunch - Roscoe's**
- 1:30-4:30 **Lab: Telemetry (DSI) EKG, BP**
GRB Training Lab
- **ECG Telemetry implantation demonstration and hands on student surgery session**
 - **BP carotid implantation demonstration student BP implantation**
 - **Telemetry System Demonstration and data acquisition and analysis**
- 4:30 **Jax shuttle vans pick-up at Main Lab**

Wednesday, June 25, 2008

AM

7:45 Jax shuttle van pick-up at Harborside Hotel

8:00-8:45 **Breakfast**
Roscoe's

9:00-10:00 **Comparative cardiac physiology**
Ronglih Liao, Ph.D., Harvard Medical School
C.C. Little Auditorium

10:00-11:30 **Mouse Solid State Pressure Volume catheter technology theory and application**
Jeff Harris, ADInstruments and Ronglih Liao, Ph.D., Harvard Medical School
C.C. Little Auditorium

11:30-12:30 **Lunch**
Roscoe's

PM

12:30-2:30 **Demonstration and hands-on student sessions**
GRB Training Lab

- **Catheterization techniques**
- **intra-cardiac pressure-volume measurements**
- **LV catheter placement utilizing real-time PV Loop feedback**
- **Left ventricular pressure volume data collection**

2:30-5:30 **Catheterization options**
GRB Training Lab

- **Carotid vs. apical stab approach**
- **Recording saline bolus data**
- **Calibration cuvette usage for blood volume measurements**
- **Comparison of heart disease model data vs. control**

5:30 Jax shuttle vans pick-up at Main Lab

Thursday, June 26, 2008

AM

7:45 **Jax shuttle van pick-up at Harborside Hotel**

8:00-8:45 **Breakfast**
Roscoe's

9:00-10:30 **Data analysis (ADI)**
GRB Training Lab

- **Calibrating for absolute volume and parallel conductance**
- **PV loop interpretation**
- **Cardiac function data generation**
- **IVC occlusion and other experimental variants**

10:30-12:00 **Analysis and interpretation of HF ultrasound**
Ronglih Liao, Ph.D., Harvard Medical School
GRB Training Lab

PM

12:00-1:00 **Lunch**
Roscoe's

1:00- 3:00 **Course Wrap-Up**
Anthony Nicholson, Ph.D., The Jackson Laboratory and Ronglih Liao, Ph.D., Harvard Medical School
GRB Training Lab

3:00 **Jax shuttle vans pick-up at Main Lab**