



Workshop on Colony Management: Principles and Practices

Schedule is subject to change.

All sessions will be held in the Highseas Conference Center unless stated otherwise.

Online Modules: Registered participants will be provided with access to online modules approximately two weeks prior to the start of the workshop. Participants are strongly encouraged to view this content in advance of the workshop as it covers pre-requisite material and topics not covered during the in-person course.

- **Mouse Strains and Resources**
- **Basic Genetics**
- **Mouse Strain Nomenclature**
- **Reproductive Biology of the Laboratory Mouse**
- **Basics of Cre-lox**

Sunday, March 31

3:00 pm **Participant Arrivals**
6:00 Dinner (Highseas dining room)

Monday, April 1st, 2019

7:00 am Breakfast (Highseas dining room)
8:00 Group A: Meet in Highseas Lobby: Transportation to GRB Training Laboratory
8:15 **Welcome & Introductions**
8:45 **Mouse handling, restraint and oral gavage**
10:15 **Injections: IP, subcutaneous and tail vein**
12:15pm Lunch (Roscoe's)
1:15 **Blood collection: submandibular, retro orbital, tail tip and cardiac puncture**
3:00 **Primary and secondary euthanasia: CO₂, cervical dislocation, decapitation, thoracic puncture, perfusion**
5:00 Transportation to Highseas

Tuesday, April 2nd, 2019

- 7:00 am Breakfast (Highseas dining room)
- 8:00 **Welcome & Canvas**
Jennifer Corrigan, M.S., The Jackson Laboratory
- 8:30 **Mouse Genetics**
Cat Lutz, Ph.D., The Jackson Laboratory
- 9:30 **Break**
- 10:00 **Colony Set-up and Breeding Strategies**
Cat Lutz, Ph.D., The Jackson Laboratory
- 12:00 pm Lunch (Highseas dining room)
- 1:00 **Genetic Background Effects on Phenotype**
Greg Cox, Ph.D., The Jackson Laboratory
- 2:00 **Genetic Quality Control**
Krista Geister, Ph.D., The Jackson Laboratory
- 3:30 Break
- 4:00 **Hands-On Workshop: Mouse Genome Informatics and Other Resources**
David Shaw, M.S., MGI User Support Specialist, The Jackson Laboratory
- 6:00 Dinner (Highseas dining room)

Wednesday, April 3rd, 2019

- 7:00 am Breakfast (Highseas dining room)
- 8:00 **Practical Guidelines for Maintaining Mouse Health**
Bonnie Lyons, D.V.M., The Jackson Laboratory
- 9:30 Break
- 10:00 **Maintaining Severely Immune Compromised Mice**
Bonnie Lyons, D.V.M., The Jackson Laboratory
- 11:00 **Eliminating Infectious Contaminants**
Bonnie Lyons, D.V.M., The Jackson Laboratory
- 12:00 pm Lunch (Highseas dining room)
- 1:00 **Cryopreservation: A Cool Approach to Colony Management**
Jennifer Corrigan, M.S., The Jackson Laboratory
- 2:00 Break
- 2:30 **Using Assisted Reproductive Technologies (ARTs) to Rederive, Rescue, and Rapidly Expand Colonies**
Jennifer Corrigan, M.S., The Jackson Laboratory
- 3:30 **Technologies & Repositories: PDX, CRISPR-Cas, KOMP, T1D, & JAX Mice**
Peter Kelmenson, BA, The Jackson Laboratory
- 4:30 **Effects of Housing Density on the Physiological Well-being of Research Mice**
Karen Svenson, Ph.D., The Jackson Laboratory
- 6:00 Dinner (Highseas dining room)

Thursday, April 4th, 2019

- 7:00 am Breakfast (Highseas dining room)
- 8:00 **Nutritional Aspects of Maintaining Animal Health and Phenotype**
Melanie Hoar, Ph.D., PMI Nutrition International
- 9:00 **The Microbiome**
James Fahey, Ph.D., DVM, DACVM, The Jackson Laboratory
- 10:00 **Using Database Systems for Research Animal Management and Working With Mobile Devices in Animal Rooms**
Charles Donnelly, B.S., RockStep Solutions Inc.
Abigail Ames, B.A., RockStep Solutions Inc.
Julie Morrison, RockStep Solutions Inc.
- 12:00 Lunch (Highseas dining room)
- 1:00 **Leveraging Digital Biomarkers to Improve Animal Health & Scientific Outcomes**
Laura Schaevitz, Ph.D., Vium
- 2:00 **Animal Care and Use Committees**
Brenna Fenton, A.S., LVT, RLATg, The Jackson Laboratory
- 6:00 Dinner (Highseas dining room)

Friday, April 5th, 2019

- 7:00 am Breakfast (Highseas dining room)
- 8:00 Group B: Meet in Highseas Lobby: Transportation to GRB Training Laboratory
- 8:15 **Welcome & Introductions**
- 8:45 **Mouse handling, restraint and oral gavage**
- 10:15 **Injections: IP, subcutaneous and tail vein**
- 12:15 Lunch (Roscoe's)
- 1:15 **Blood collection: submandibular, retro orbital, tail tip and cardiac puncture**
- 3:00 **Primary and secondary euthanasia: CO₂, cervical dislocation, decapitation, thoracic puncture, perfusion**
- 5:00 Transportation to Highseas

Saturday, April 6th, 2019

- 7:00 am Breakfast (Highseas dining room)
- 9:00 Room check-out