



## Mouse Colony Management: Principles, Practices, & Biometrics

August 18<sup>th</sup>- August 22<sup>nd</sup>, 2025

Schedule is subject to change.

*All sessions will be held in the Highseas 3<sup>rd</sup> floor classroom unless stated otherwise.*

### Sunday, August 17<sup>th</sup>, 2025 (In person participants only)

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- 4:00 pm Highseas opens for participant arrivals and registration
- 5:00 pm Welcome reception (Highseas 1<sup>st</sup> floor)
- 6:00 pm Dinner (Highseas dining room)

### Monday, August 18<sup>th</sup>, 2025: Biometrics Group 1

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- 7:00 am Breakfast (Highseas dining room)
- 8:00 am Transportation from Highseas to GRB Training Laboratory
- 8:15 am **Welcome & Introductions** (GRB Training Laboratory)  
Leanne Miceli, A.S., Angela Begin, MLAS, LVT, RLATg, Kristin Cough, B.S., LATg, Ben Carter and Samantha Shaneybrook, The Jackson Laboratory
- 8:45 am **Mouse handling, restraint and injections: IP, subcutaneous**
- 10:15 am **Oral gavage and Tail Vein Injection**
- 12:15 pm Lunch (Roscoe's)
- 1:15 pm **Blood collection: submental, submandibular, tail tip and cardiac puncture**
- 3:00 pm **Primary and secondary euthanasia: CO<sub>2</sub>, cervical dislocation, decapitation, thoracic puncture, perfusion**
- 5:30 pm Transportation from GRB Training Laboratory to Highseas
- 6:00 pm Dinner (Highseas dining room)

### Tuesday, August 19<sup>th</sup>, 2025

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- 7:00 am Breakfast (Highseas dining room)
- 8:00 am **Welcome**  
Leanne Miceli, A.S., The Jackson Laboratory
- 8:15 am **Mouse Genetics and Strain Nomenclature**  
Crystal Davis M.S., The Jackson Laboratory
- 9:30 am Break

- 10:00 am **Colony Set-up and Breeding Strategies**  
Jason Beckwith, M.S., The Jackson Laboratory
- 12:00 pm Lunch (Highseas Dining room)
- 1:00 pm **Genetic Background Effects on Phenotype**  
Greg Cox, Ph.D., The Jackson Laboratory
- 2:00 am **Tools for Analyzing Colony Data**  
Vivek Philip, Ph.D., The Jackson Laboratory
- 3:00 am Break
- 3:15 pm **Mouse Genome Informatics and Other Resources**  
David Shaw, M.S., The Jackson Laboratory  
(Problem set will be available in Canvas. Participants will need to provide their own laptop to work through problem set with instructors during this session or at your leisure.)
- 4:45 pm Free period
- 6:00 pm Lobster Dinner (Highseas dining room)

Wednesday, August 20<sup>th</sup>, 2025

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- 7:00 am Breakfast (Highseas dining room)
- 8:00 am **Practical Guidelines for Maintaining Mouse Health**  
Amine Alioua, Ph.D., The Jackson Laboratory
- 9:00 am **Maintaining Severely Immune Compromised Mice**  
Amine Alioua, Ph.D., The Jackson Laboratory
- 9:30 am **Eliminating Infectious Contaminants**  
Amine Alioua, Ph.D., The Jackson Laboratory
- 10:15 am Break
- 10:30 am **Cryopreservation: A Cool Approach to Colony Management**  
Bree Means M.S., The Jackson Laboratory
- 11:15 pm **Using Assisted Reproductive Technologies (ARTs) to Rederive, Rescue, and Rapidly Expand Colonies**  
Bree Means M.S., The Jackson Laboratory
- 12:00 pm Lunch (Highseas dining room)
- 1:00 pm **Nutritional Aspects of Maintaining Animal Health and Phenotype**  
Melanie Hoar, PMI Nutrition International
- 2:00 pm Break
- 2:15 pm **Genetic Quality Control**  
Jason Beckwith, M.S., The Jackson Laboratory
- 3:00 pm **The Microbiome**  
Karen Svenson, Ph.D., Research Science and Education
- 4:00 pm Free period

6:00 pm Dinner (Highseas dining room)

Thursday, August 21<sup>st</sup>, 2025

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7:00 am Breakfast (Highseas dining room)

8:30 am **Behavioral Phenotyping Using Computer Vision Systems**  
Vivek Kumar, The Jackson Laboratory

9:30 am Break

10:00 am **Technologies & Repositories: PDX, CRISPR-Cas, KOMP, T1D, & JAX Mice**  
Peter Kelmenson, BA, The Jackson Laboratory

11:30 am Lunch (Highseas dining room)

12:30 pm **The Importance of Biomethods Training in Enhancing Animal Welfare and Mitigating Confounding Research Variables**  
Jessica Wong, DVM, PhD, DACVP, The Jackson Laboratory

1:00 pm **How to Prepare and Submit Samples for Diagnostic Pathology**  
Jessica Wong, DVM, PhD, DACVP, The Jackson Laboratory

1:30 pm Break

1:45 pm **Breeding Efficiency Using Electronic Tracking**  
TBD, TransnetYX

2:45 pm Free period

6:00 pm Dinner (Highseas dining room)

Friday, August 22<sup>nd</sup>, 2025: Biomethods Group 2

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7:00 am Breakfast (Highseas dining room)

8:00 am Transportation from Highseas to GRB Training Laboratory

8:15 am **Welcome & Introductions** (GRB Training Laboratory)  
Leanne Miceli, A.S., Angela Begin, MLAS, LVT, RLATg, Kristin Cough, B.S., LATg, Ben Carter and Samantha Shaneybrook, The Jackson Laboratory

8:45 am **Mouse handling, restraint and oral gavage**

10:15 am **Injections: IP, subcutaneous and tail vein**

12:15 pm Lunch (Roscoe's)

1:15 pm **Blood collection: submental, submandibular, tail tip and cardiac puncture**

3:00 pm **Primary and secondary euthanasia: CO<sub>2</sub>, cervical dislocation, decapitation, thoracic puncture, perfusion**

5:30 pm Transportation from GRB Training Laboratory to Highseas

6:00 pm Dinner (Highseas dining room)

Saturday, August 23<sup>rd</sup>, 2025 (In person participants only)

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7:00 am            Breakfast to go (Highseas snack room)

9:00 am            Check out (Participants may occupy the 1<sup>st</sup> floor until noon)

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**Additional Online Content:** Registered participants will have access to online content for 3 months following the workshop. Participants will have access to online modules that are intended to complement and enhance the in-person workshop experience. This optional information will be made available to registered participants a few weeks prior to the start of the course.