# Workshop on Colony Management and Biomethods

**September 30th- October 4th, 2024**

**Schedule is subject to change.**

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

**Sunday, September 29th, 2024** (In person participants only)

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| 4:00 pm | Highseas opens for participant arrivals and registration |
| 5:00 pm | Welcome reception (Highseas 1st floor) |
| 6:00 pm | Dinner (Highseas dining room) |

**Monday, September 30th, 2024:** Biomethods Group 1: First 20 participants to register will attend this session, The second 20 to register will attend Biomethods on Friday, October 4th)

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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)<br>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: $CO_2$, cervical dislocation, decapitation, thoracic puncture, perfusion** |
| 5:30 pm | Transportation from GRB Training Laboratory to Highseas |
| 6:00 pm | Dinner (Highseas dining room) |

**Tuesday, October 1st, 2024**

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

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| 10:00 am | **Colony Set-up and Breeding Strategies**<br>Jason Beckwith, M.S., The Jackson Laboratory |
| 12:00 pm | Lunch (Highseas Dining room) |
| 1:00 pm | **Genetic Background Effects on Phenotype**<br>Greg Cox, Ph.D., The Jackson Laboratory |
| 2:00 am | **Tools for Analyzing Colony Data**<br>Vivek Philip, Ph.D., The Jackson Laboratory |
| 3:00 am | Break |
| 3:15 pm | **Mouse Genome Informatics and Other Resources**<br>David Shaw, M.S., The Jackson Laboratory<br>(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, October 2nd, 2024**

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| 7:00 am | Breakfast (Highseas dining room) |
| 8:00 am | **Practical Guidelines for Maintaining Mouse Health**<br>Amine Alioua, Ph.D., The Jackson Laboratory |
| 9:00 am | **Maintaining Severely Immune Compromised Mice**<br>Amine Alioua, Ph.D,, The Jackson Laboratory |
| 9:30 am | **Eliminating Infectious Contaminants**<br>Amine Alioua, Ph.D., The Jackson Laboratory |
| 10:15 am | Break |
| 10:30 am | **Cryopreservation: A Cool Approach to Colony Management**<br>Bree Means M.S., The Jackson Laboratory |
| 11:15 pm | **Using Assisted Reproductive Technologies (ARTs) to Rederive, Rescue, and Rapidly Expand Colonies**<br>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**<br>Melanie Hoar, PMI Nutrition International |
| 2:00 pm | Break |
| 2:15 pm | **Genetic Quality Control**<br>Steven Ciciotte, M.S., The Jackson Laboratory |
| 3:00 pm | **The Microbiome**<br>Karen Svenson, Ph.D., Research Science and Education |
| 4:00 pm | Free period |
| 6:00 pm | Dinner (Highseas dining room) |

**Thursday, October 3rd, 2024**

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|---|---|
| 7:00 am | Breakfast (Highseas dining room) |
| 8:30 am | **Behavioral Phenotyping Using Computer Vision Systems**<br>Vivek Kumar, The Jackson Laboratory |
| 9:30 am | Break |
| 10:00 am | **Technologies & Repositories: PDX, CRISPR-Cas, KOMP, T1D, & JAX Mice**<br>Peter Kelmenson, BA, The Jackson Laboratory |
| 11:30 am | Lunch (Highseas dining room) |
| 12:30 pm | **Breeding Efficiency Using Electronic Tracking**<br>Christa Starling, B.S., TransnetYX |
| 1:30 pm | Free period |
| 6:00 pm | Dinner (Highseas dining room) |

**Friday, October 4th, 2024:** 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)<br>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: $CO_2$, cervical dislocation, decapitation, thoracic puncture, perfusion** |
| 5:30 pm | Transportation from GRB Training Laboratory to Highseas |
| 6:00 pm | Dinner (Highseas dining room) |

**Saturday, October 21st, 2023** (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 1st floor until noon) |

**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.