



Making and Genetically Manipulating Mouse Embryos

March 9-12, 2026

The Jackson Laboratory in Bar Harbor, Maine

Sunday, March 8, 2026

3:00-6:00pm **Registration & Check-In** (Highseas)

6:00-7:00pm **Dinner** (Highseas)

Monday, March 9, 2026

7:00-8:00am **Breakfast** (Highseas)

8:00-8:30am **Course Overview and Introductions** (Highseas Classroom, 3rd floor)
Robert Taft, Ph.D. Bree Sargent, M.S., Leanne Miceli, A.S., and
Jennifer Corrigan, M.S., The Jackson Laboratory

8:30-9:00am **Cryobiology**
Robert Taft, Ph.D., The Jackson Laboratory

9:00-9:30am **Male and Female Reproductive Anatomy**
Robert Taft, Ph.D., The Jackson Laboratory

9:30-9:45am **Break**

9:45-10:45am **Using Assisted Reproductive Technologies (ARTs) to Generate Zygotes and Preserve Embryos**
Robert Taft, Ph.D., The Jackson Laboratory

10:45-11:00am **Break**

11:00-12:00pm **Anesthesia, Analgesia and Aseptic Surgery Methods**
Hironori Kawano, D.V.M., The Jackson Laboratory

12:00-1:00pm **Lunch** (Highseas)

1:00-1:30pm *Transportation from Highseas to GRB Training Lab (meet in Highseas lobby)*

1:30- 2:45pm	Biomethods: Handling, Restraint & IP and Sub Q Injections (Lab, GRB 3245) Biomethods Training Team, The Jackson Laboratory
2:45-3:00pm	Break
3:00-4:30pm	Male and Female Anatomy: Demonstration and Practical (Lab, GRB 3245) Jennifer Corrigan, M.S., Leanne Miceli, A.S., The Jackson Laboratory
4:30pm	<i>Transportation from GRB Training Lab to Highseas</i>
6:00-7:00pm	Dinner (Highseas)

Tuesday, March 10, 2026

7:00-8:00am	Breakfast (Highseas)
8:00 – 8:15am	<i>Transportation from Highseas to Bld 64, B115</i>
8:15-9:00am	Liquid Nitrogen Safety, Dry Shippers, Biobank (Bld 64, B115) Michelle Burns and Bree Sargent, M.S., The Jackson Laboratory
9:00-9:15am	Walk to GRB Training Laboratory (Lab, GRB 3245) Michelle Burns and Bree Sargent, M.S., The Jackson Laboratory
9:15-11:15am	Concurrent Electives: Demos and Hands-on (Lab, GRB 3245) <ul style="list-style-type: none"> • Microcapillary Transfer Pipetting • Pulling Microcapillary Transfer Pipettes • Flushing Embryos produced from Natural Matings • Selecting Mice in Estrus for the Generation of Pseudopregnant Females Bree Sargent, M.S., Rachael Pelletier, B.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory
11:30-12:30pm	In-Vitro Fertilization: Strain Selection, Superovulation, Project Planning and Trouble Shooting (Breezeway Classroom) Bree Sargent, M.S., The Jackson Laboratory
12:30-1:30pm	Lunch (Roscoe's)
1:30-3:00pm	How to Generate New Mouse Models Using CRISPR Technology (Breezeway Classroom) Rebecca Boumil, Ph.D., The Jackson Laboratory
3:00-3:15pm	Break

3:15-5:30pm	Non-Surgical Embryo Transfer (NSET and Cervical Manipulation) (Lab, GRB 3245) Barbara Stone, Ph.D., Paratechs
5:30pm	<i>Transportation from GRB Training Lab to Highseas</i>
6:00-7:00pm	Lobster Dinner (Highseas)

Wednesday, March 11, 2026

7:00-8:00am	Breakfast (Highseas)
8:00-8:15am	<i>Transportation from Highseas to GRB Training Lab</i>
8:15-9:45am	In-Vitro Fertilization Using Fresh Sperm (Lab, GRB 3245) Bree Sargent, M.S., Rachael Pelletier, B.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory
9:45-10:00am	Break
10:00-12:15pm	CRISPR Reagent Delivery via Electroporation of Mouse Zygotes (Lab, GRB 3245) Peter Kutny, B.S., The Jackson Laboratory
12:00-1:00pm	Lunch (Roscoe's)
1:00-1:30pm	In Vitro Fertilization Change-Over (Lab, GRB 3245) Bree Sargent, M.S., Rachael Pelletier, B.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory
1:30-1:45pm	Break
1:45-4:00pm	Surgical Procedures: Vasectomy and Embryo Transfer (Lab, GRB 3245): Bree Sargent, M.S., Rachael Pelletier, B.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory
4:00pm	<i>Transportation from GRB Training Lab to Highseas</i>
6:00-7:00pm	Dinner (Highseas)

Thursday, March 12, 2026

7:00-8:00am	Breakfast (Highseas)
-------------	-----------------------------

8:00am	<i>Transportation from Highseas to GRB Training Lab</i>
8:15-8:45am	Count/Evaluate Embryos from IVF (Lab, GRB 3245) Leanne Miceli, A.S., Jennifer Corrigan, M.S., and Bree Sargent, M.S., The Jackson Laboratory
8:45-9:45am	Evaluate Electroporated Zygotes and Q&A (Lab, GRB 3245) Peter Kutny, B.S., The Jackson Laboratory
9:45-10:00am	Break
10:00-10:45am	Introduction to Embryo Cryopreservation: Controlled Rate & Vitrification (Breezeway Classroom) Bree Sargent, M.S., The Jackson Laboratory, Barbara Stone, Ph.D., Paratechs
10:45-12:00pm	Embryo Cryopreservation: Controlled Rate Freeze Method (Lab, GRB 3245) Bree Sargent, M.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory
12:00-1:00pm	Lunch (Roscoe's)
1:00-2:00pm	Embryo Cryopreservation: Vitrification Method (Lab, GRB 3245) Barbara Stone, Ph.D., Paratechs
2:00-3:00pm	Thawing Embryos: Demonstration & Hands-on (Lab, GRB 3245) <ul style="list-style-type: none"> Controlled Rate Method Bree Sargent, M.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory Vitrification Method Barbara Stone, Ph.D., Paratechs, Bree Sargent, M.S., Leanne Miceli, A.S., and Jennifer Corrigan, M.S., The Jackson Laboratory
3:00pm	<i>Transportation from GRB Training Lab to Highseas</i>
6:00-7:00pm	Dinner (Highseas)

Friday, March 13, 2026

7:00-9:00am	To-Go Breakfast & Check Out Participants may remain on the 1 st floor until 12:00pm if needed
-------------	--