

Stem Cells, Cell Therapies, and Bioengineering in Lung Biology and Diseases

Practical/Theoretical Course: Coordinated by Weiss Laboratory at UVM Hands-On Workshop, Rowell Building, UVM Campus Monday, July 24, 2017

Please join us for a full day of lectures, demonstrations and hands-on experience with techniques relevant to lung regenerative medicine. Experts in each technique as well as representatives from relevant biotechnology sources will lead the participants through each area. The sessions will be held at the University of Vermont Rowell Building on the main campus. Shuttle bus service and lunch will be provided.

Schedule

8:30-8:45AM Shuttle from hotel to lab in Rowell Building, Room 113, orientation and continental breakfast

9:00-10:00 Didactics: General techniques of lung regenerative medicine

10:00-12:00PM Rotating demonstrations and hands-on experience

- Mouse euthanasia and harvest of heart-lung blocs
- Techniques of lung de-cellularization
- Techniques of lung re-cellularization
- Bioreactors, ventilation, perfusion pumps
- Bone marrow harvest and cell preparations

12:00-1:00 Lunch

1:00-2:00 Didactics: Advanced techniques and Q/A

- 3D Bioprinting
- Flexivent
- CRISPR-caspase

2:00-4:00 Rotating demonstrations

4:00-4:30 Final Q/A session

4:30PM Shuttle back to hotel

The number of participants is limited to 40 on a first-come, first-served basis. The sessions are geared primarily towards trainees and junior investigators but all investigators are welcome.

Participation fee is \$150. Please note that this is in addition to the registration fee for the conference.

You must indicate when registering if you will be participating in didactics and demonstration sessions only or will be additionally participating in hands-on sessions involving rodents (mice and rats).

All animals utilized in the sessions will undergo euthanasia by trained UVM personnel prior to being utilized in the training sessions. All activities utilizing euthanized rodents have undergone UVM IACUC approval.