

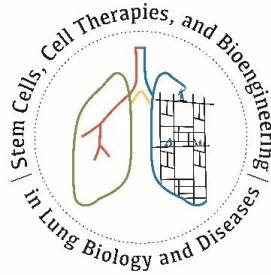
20th Anniversary

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



July 7-10, 2025
University of Vermont
Burlington, Vermont

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



2025 Executive Committee:

Conference Chairs: Amy L. Ryan, PhD
University of Iowa, Iowa City, IA
Robert E. Hynds, PhD
University College London, United Kingdom

Vice Chair: Claudia Loebel, PhD
University of Michigan, Ann Arbor, MI

Founder and Emeritus Chair: Daniel J. Weiss, MD, PhD
(2005-2015) University of Vermont, Burlington, VT

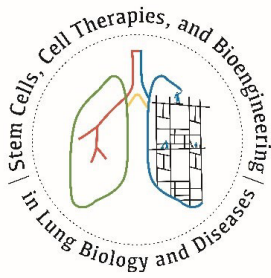
Emeritus Chair: Darcy Wagner, PhD
(2017-2019) Lund University, Sweden

Senior Organizing Committee:

Janette Burgess, PhD, University Medical Center Groningen, Groningen, NL
Laertis Ikonomou, PhD, University at Buffalo, Buffalo, NJ
Jamie Hook, MD, PhD, Mount Sinai, New York, NY
Jaymin Kathiriya, PhD, Mount Sinai, New York, NY
Harry Karmouty-Quintana, PhD, University of Texas Health Science Center at Houston, Houston, TX
Anna Krasnodembskaya, PhD, Queen's University, Belfast, United Kingdom
Ruth Olmer, PhD, Hannover Medical School, Hannover, Germany
Laure-Emmanuelle Zaragosi, PhD, Université Côte d'Azur, Sophia-Antipolis, France

Junior Organizing Committee:

Junior Committee Chair: Sinem Koc-Günel, MD
University of Frankfurt, Frankfurt, Germany



20th Anniversary Celebration Stem Cells, Cell Therapies, and Bioengineering in Lung Biology and Diseases

High School STEM Day on Lung Science and Bioengineering

*Leaders: Amy L. Ryan, PhD, University of Iowa
Daniel J. Weiss MD, PhD, University of Vermont*

AGENDA

MONDAY, JULY 7

- | | |
|----------------|---|
| 8:00 AM | Arrive at UVM Stafford Building |
| 8:30-8:55 | Continental Breakfast ~ Benedict Auditorium, UVM campus |
| 8:55-9:00 | Welcome and Introductions ~ Benedict Auditorium |
| 9:00-9:40 | <u>Lab Activity - Air In, Air Out: Uncovering the Mechanics of Breathing and Lung Health - Part 1</u>

Led by Amy Ryan, PhD, University of Iowa, Iowa City, IA |
| 9:40-9:50 | Refresh Break |
| 9:50-10:30 | <u>Lab Activity - Air In, Air Out: Uncovering the Mechanics of Breathing and Lung Health - Part 2</u>

Led by Amy Ryan, PhD, University of Iowa, Iowa City, IA |
| 10:30-11:00 | Coffee and Networking Break |
| 11:00-12:30 PM | <u>Laboratory Techniques Workshop Options</u>

<i>Workshop 1: Using Precision Cut Lung Slices (PCLS) to Study Lung Biology & Disease
Led by Darcy Wagner, PhD (McGill University, Canada)</i>

<i>Workshop 2: Application of Organoids and Gene Editing to Study Lung Biology & Disease
Led by Dawei Sun, PhD (Broad Institute, MA)</i>

<i>Workshop 3: Application of Flexivent to Study Biomechanical Regulation of Lung Function
Led by Bradford Smith, PhD (University of Colorado Denver, Denver, CO)</i> |

12:30-2:00

Mentoring Lunch

Each High School Student will be paired with a graduate student or postdoc for a mentoring lunch

2:00-2:40

Scientific Pathways (How did you get there)

Led by:

Amy L. Ryan, PhD, University of Iowa, Iowa City, IA

Dan J. Weiss, MD, University of Vermont, Burlington, VT

Join Dr. Amy Ryan and Dr. Dan Weiss as they share their personal journeys through science and medicine. This session will highlight the diverse routes into pulmonary and cardiopulmonary research, offering insights into pivotal decisions, challenges overcome, and the motivations that shaped their careers.

2:40-2:50

Refresh Break

2:50-3:30

Scientific Destinations (What you can do)

Led by:

Amy L. Ryan, PhD, University of Iowa, Iowa City, IA

Dan J. Weiss, MD, University of Vermont, Burlington, VT

Panel Members:

Qing Lu, Ph.D, DVM Program Director, National Heart Lung and Blood Institute, National Institutes of Health

David Kaminsky, PhD, University of Vermont, Burlington, VT

Theodore Marcy, MD MPH, University of Vermont, Burlington, VT

Shannon Wiehe, PharmD, Boehringer-Ingelheim, Ridgefield, CT

This interactive panel will showcase unconventional and inspiring career paths in the biomedical sciences. From biotech and policy to science communication and global health, panelists will discuss what a “day in the life” looks like beyond traditional research roles, offering students a broadened perspective on where scientific training can lead.

3:30-4:15

Coffee and Networking Session

4:20-4:40

Shuttle bus from Stafford Hall to the Courtyard Burlington Harbor Hotel