

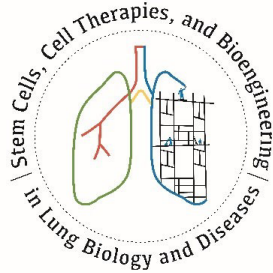
# *20<sup>th</sup> Anniversary*

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



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

*20<sup>th</sup> Anniversary*  
**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  
Jaime Hook, MD, 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

# 20<sup>th</sup> Anniversary

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

July 7-10, 2025

Hosted by: The University of Vermont

### AGENDA

#### MONDAY, JULY 7

8:30-4:00 PM      **Pre-Conference Workshop** (Optional)

4:30-5:30          **Welcome Reception** and Registration Check-In, Hotel Vermont

Transition to: *COURTYARD BURLINGTON HARBOR HOTEL*, HARBOR ROOM

#### **Session I:**      **Celebrating 20 Years of Progress in Lung Stem Cell Biology and Bioengineering**

*Moderators:*

**Daniel Weiss, MD, PhD, University of Vermont**

**Robert Hynds, PhD, University College London, UK,  
2025 Conference Co-Chair**

5:30-5:40          **Opening Remarks**  
**Representative of the University of Vermont**

5:40-6:10          *Featured Presentation: Title TBC*  
**Zea Borok, MD ~ UC San Diego, CA**

6:10-6:40          *Featured Presentation: Title TBC*  
**Bernard Thébaud, MD, PhD ~ Ottawa Hospital Research Institute, Canada**

6:40-6:50          *Break*

6:50-7:20          *Featured Presentation: Title TBC*  
**Laura Niklason, MD, PhD ~ Yale School of Medicine, New Haven, CT**

7:20-7:50          *Featured Presentation: Improving mucociliary clearance in the face of climate change*  
**Brigitte Gomperts, MD ~ University of California, Los Angeles, CA**

7:50-8:20          *Featured Presentation: Pluripotent Stem Cells to Model and Treat Lung Disease*  
**Darrell Kotton, MD ~ Boston University, Boston, MA**

## **TUESDAY, JULY 8**

All sessions at the *Dudley H. Davis Center*, UVM Campus, Grand Maple Ballroom.

- 7:45-8:45 AM      **Breakfast and Breakfast Session I**  
*What Editors Are Looking For (or How to Avoid Desk Rejection) ~ Panel Discussion*  
*Moderators:*  
**Janette Burgess, PhD ~ University Medical Centre Groningen, NL**  
*Panelists:*  
**Rory Morty ~ Chief Editor, European Respiratory Review**  
**Juile Stacey ~ Editor-in-chief, eBioMedicine**  
**Andrew Halayko ~ Editor-in-chief, American Journal of Respiratory Cell and Molecular Biology**
- 8:45-9:00 AM      **Welcoming Remarks**  
**Amy Ryan, PhD and Robert Hynds, PhD – 2025 Conference Co-Chairs**
- Session II: Endogenous Lung Stem Cells**  
*Moderators:*  
**Laure-Emmanuelle Zaragosi , PhD, Université Côte d'Azur**  
**Jaymin Kathiriya, PhD, Mount Sinai**
- 9:00-9:25 AM      *Featured Presentation: Title TBC*  
**Mitsuru Morimoto, PhD ~ RIKEN BDR, Kobe, Japan**
- 9:25-9:50          *Featured Presentation: Title TBC*  
**Xin Sun, PhD ~ UC San Diego, CA**
- 9:50-10:15        *Featured Presentation: Title TBC*  
**Purushothama Rao Tata, PhD ~ Duke University, Durham, NC**
- 10:15-10:30       *Outstanding Abstract Achievement Award Presentation*
- 10:30-10:50       *Panel Discussion*
- 10:50-11:15       *Coffee and Networking Break*
- 11:15-11:20       **Introductory Remarks ~ Kirk Dombrowski, PhD ~ Vice President for Research, UVM**
- 11:20-12:00       ***“Minute To Win it” Competition***  
*Moderators and Judges TBC*  
  
*One minute elevator pitches for junior trainees. 1 slide. 1 minute buzzer. two prizes.*
- 12:00-1:00 PM    **MENTORING / MEET THE FACULTY LUNCH**
- 1:00-2:30         **Poster Session #1**

**Session III: The Julia Polak Memorial Session on Bioengineering:  
Lessons from Transplantation**

*Moderators:*

**Harry Karmouty-Quintana, PhD, University of Texas Health Science Center at Houston**  
**Lei Wang, PhD ~ University Medical Center Groningen, Groningen, NL**

2:30-2:55 *Featured Presentation: Early Warning signs of Chronic Lung Diseases:  
New Imaging Modalities to the Rescue*  
**Anna Podolanczuk, MD, MS ~ Weill Cornell, New York, NY**

2:55-3:20 *Featured Presentation: Animal Models for Lung Transplantation*  
**Kalpaj Parekh, MBBS ~ University of Iowa, Iowa City, IA**

3:20-3:45 *Featured Presentation: Title TBC*  
**Marcelo Cypel, MD ~ University of Toronto, Canada**

3:45-4:00 *Outstanding Abstract Achievement Award Presentation*

4:00-4:15 *Panel Discussion*

4:15-4:30 *Coffee and Networking Break*

**Session IV: Careers in Lung Stem Cells, Cell Therapies, and Bioengineering**

*Moderator:*

**Amy Ryan, PhD, University of Iowa**

4:30-5:15 *Featured Presentation: TBD*  
**Darcy Wagner, PhD ~ McGill University, Montréal, Canada**

5:15-6:30 **LUNG STEM CELLS, CELL THERAPIES AND BIOENGINEERING PANEL AND  
NETWORKING**

*Panelists:*

**Patricia Prelock, PhD ~ University of Vermont, Burlington, VT**  
**Enid Neptune, MD ~ Johns Hopkins University, Baltimore, MD**

**WEDNESDAY, JULY 9**

7:30-8:30 AM **Breakfast and Breakfast Session II**  
*What Funders are Looking For (or How to Get Your Grant)*  
*Moderator:*  
**Claudia Loebel, PhD ~ University of Michigan, MI**  
*Panelist:*  
**Katherine Tuggle, PhD ~ The Cystic Fibrosis Foundation**

**Session V: Lung Extracellular Matrix and Matrix-Based Therapies**

*Moderators:*



**Janette Burgess, PhD, University Medical Center Groningen**

**René Girard, MSc ~ University of Texas Health Science Center at Houston, Houston, TX**

8:30-8:55

*Featured Presentation: Novel Approaches for Visualizing Cell-Matrix Mechanical Interactions*

**Apeksha Shapeti, PhD ~ KU Leuven, Belgium**

8:55-9:20

*Featured Presentation: ECM Remodeling in the Vascular System and the Role of Soluble ECM Fragments*

**Grazyna Kwapiszewska, PhD ~ Medical University of Graz/Institute for Lung Health, Giessen**

9:20-9:45

*Featured Presentation: Tissue Engineered Avatars for Regenerative Medicine and Cancer Research*

**Mary (Cindy) Farach-Carson, PhD ~ University of Texas Health Science Center at Houston**

9:45-10:00

*Outstanding Abstract Achievement Award Presentation*

10:00-10:20

*Panel Discussion*

10:20-10:50

*Coffee and Networking Break*

## **Session VI: Patient Access to Stem Cell-Based Therapies**

Co-sponsored by the International Society for  
Cell & Gene Therapy (ISCT)



*Moderator:*

**Laertis Ikononou, PhD ~ University at Buffalo, Buffalo, NY,**

**Chair of the ISCT Committee on the Ethics of Cell and Gene Therapy**

10:50-11:00

*Introduction to ISCT*

**Laertis Ikononou, PhD ~ University at Buffalo, Buffalo, NY**

11:00-11:20

*Featured Presentation: The Regulatory Foundation to Protect Patients from Stem Cell Fraud*

**Bambi Grilley, B.S. ~ Baylor College of Medicine, Houston, TX**

11:20-11:40

*Prosecuting a Stem Cell Clinic: Lessons Learned*

**Mark Alonzo, JD ~ Vinson Law, Tampa, FL**

11:40-12:00

*Panel Discussion*

12:00-1:00 PM

**LUNCH**

1:00-2:30

## **Poster Session #2**

2:30-2:40

*Coffee and Networking Break*

## **Session VII: Immune Regulation of Lung Regeneration**

*Moderators:*

**Amy Ryan, PhD, University of Iowa**  
**Sarah Moore, MD ~ Mount Sinai, New York, NY**

- 2:45-3:10      *Featured Presentation: The Lymphatic Vasculature in Lung Homeostasis and Disease*  
**TBD**
- 3:10-3:35      *Featured Presentation: Intercellular Communication Between Immune Cells and the Epithelium in Alveolar Repair*  
**Ana Pardo-Saganta, PhD ~ Justus Liebig University, Giessen, Germany**
- 3:35-4:00      *Featured Presentation: Immune Cell Regulation of Terminal Bronchiole Remodeling*  
**Tillie-Louise Hackett, PhD ~ University of British Columbia, Vancouver, Canada**
- 4:00-4:15      *Outstanding Abstract Achievement Award Presentation*
- 4:15-4:35      *Panel Discussion*
- 4:40-5:20      *Buses*
- 6:00      **Dinner Cruise on Lake Champlain ~ Award Ceremony**  
*(Cruise boards from 6:00-6:15 and departs promptly at 6:30pm.)*
- 9:00      *Cruise disembarks.*  
*(Please advise UVM in advance if you will need transportation back to the hotel following the cruise. The distance to walk is about two blocks uphill.)*

## **THURSDAY, JULY 10**

- 7:30-8:30 AM      **Breakfast and Breakfast Session III**  
*Transitioning to Independence (or How to Start Your Lab)*  
*Moderator:*  
**Amy Ryan, PhD ~ University of Iowa, IA**  
*Panelists:*  
**Ruobing Wang, MD ~ Boston Children's Hospital, MA**  
**Thomas Lynch, PhD ~ Nationwide Children's Hospital, OH**  
**Sinem Koc Günel ~ University of Frankfurt, Germany**

## **Session VIII: Physics and Engineering Principles in Lung Biology**

- Moderator:*  
**Jaime Hook, MD, Mount Sinai, New York**
- 8:30-8:55      *Featured Presentation: Title TBC*  
**Pankaj Mehta, PhD ~ Boston University, Boston, MA**
- 8:55-9:20      *Featured Presentation: Lung Branching Morphogenesis: A Physics-Based Perspective*  
**Uduak George, PhD, San Diego State University, CA**
- 9:20-9:45      *Featured Presentation: Title TBC*

**Bela Suki, PhD ~ Boston University, Boston, MA**

9:45-10:00 *Outstanding Abstract Achievement Award Presentation*

10:00-10:15 *Panel Discussion*

10:15-10:35 *Coffee and Networking Break and Group Photo*

## **Session IX: The Darwin Prokop Memorial Session on Mesenchymal Stromal Cells**

*Moderator:*

**Anna Krasnodembskaya, PhD, Queen's University, Belfast**

10:35-11:00 *Featured Presentation: GMP grade MSC EVs as a Therapy for Bronchopulmonary Dysplasia: Large-Scale Manufacturing and Mechanisms of Action*

**Michela Pozzobon, PhD ~ University of Padova, Padova, Italy**

11:00-11:25 *Featured Presentation: Title TBC*

**Duncan Stewart, MD ~ Ottawa Hospital Research Institute, Ottawa, Canada**

11:25-11:50 *Featured Presentation: MSC Mitochondrial Transplantation as a Novel Therapeutic Approach for Vascular Cell Therapy*

**Juan Melero-Martin, PhD ~ Boston Children's Hospital, Boston, MA**

11:50-12:05 *Outstanding Abstract Achievement Award Presentation*

12:05-12:20 PM *Panel Discussion*

12:20-1:00 **LUNCH**

## **Session X: iPSC Models of Lung Health and Disease**

*Moderator:*

**Ruth Olmer, PhD, Hannover Medical School**

1:00-1:25 *Featured Presentation: Title TBC*

**Killian Hurley, MB BCh BAO, PhD ~ Royal College of Surgeons in Ireland, Ireland**

1:25-1:50 *Featured Presentation: Title TBC*

**Ruobing Wang, MD, PhD ~ Boston Children's Hospital, Boston, MA**

1:50-2:15 *Featured Presentation: iPSC Models of Airway Disease for Discovery and Therapy*

**Finn Hawkins, MBBCh ~ Boston University, Boston, MA**

2:15-2:30 *Outstanding Abstract Achievement Award Presentation*

2:30-2:45 *Panel Discussion*

2:45-3:00 *Coffee and Networking Break*



## Session XI: Concluding Discussion

*Moderator:*

**Daniel J. Weiss, MD, PhD, University of Vermont**

3:00-4:00

*Open Discussion – Feedback, Priority Setting and Recommendations*