

## WORKSHOP

**From Childhood to Adulthood:**

**Unraveling the Relevance of Developmental Pathways to Pulmonary Vascular Disease for Therapeutic Development**

**Thursday, March 27, 2025**

**7:30 am – 4:00 pm**

7:30am **Sign-in and Continental Breakfast**

7:55 **Welcome and Introduction**

8:00am **Setting the Stage: Interdisciplinary Care of the Infant and Young Child with PH Associated with Developmental Lung Disorders (a subtype of Group 3 PH)**

**Session 1: Normal, Abnormal, and Repaired Cardiopulmonary Development**

8:30 **Key factors in the regulation of Cardiac Morphogenesis**

9:00 **Lung development, repair, regeneration, and potential for therapeutic development**

9:30 **Defining the Typical Course of Persistent Pulmonary Hypertension of the Newborn: What Characterizes an Atypical Course?**

9:50 *Break*

**Session 2: Features and Modulation of the Lung Microenvironment Across the Lifespan**

- 10:00 **Familial Experience with a Rare Lung Disease Diagnosis, Syndrome Recognition, and Formation of Disease-Targeted Foundation (Title to be determined)**
- 10:20 **Introduction: TBX4Life Lecture**
- 10:25 **The TBX4Life Lecture**
- “Is Adult PAH a Pediatric Disease?” Transcriptional Programs That Orchestrate Fetal Lung Development Reactivate in Adult PAH Patient-Derived Lung Cells**
- 11:00 **Lung Microenvironment’s Modulation of Gene Transcription Across the Lifespan**
- 11:30 **Lunch on your own**
- Session 3: Therapeutic Approaches to Target Pulmonary Vascular Disease, Lung Protection and Regeneration:**
- What is Possible and Where Are We Headed?**
- 1:00 **Beyond “Possible”: *In Utero* Gene Therapy for Developmental and Other Diseases**
- 1:30 **Mesenchymal Cell therapy trial to heal the lungs of preterm infants**
- 2:00 **Gene Therapy Targeting the Lung Microvascular Endothelium as a Treatment for Pulmonary Vascular Diseases**
- 2:30 *Break*
- 2:40 **Generation of Induced Pluripotent Stem Cells to Develop Individualized Drug Therapeutic Approaches**
- 3:10 **Known Drugs Doing New Things: Repurpose of Existing Drug Therapies to Treat Pulmonary Vascular Diseases**
- 3:40 **Rare Inform the Common: Preserving Vascular Development for the Prevention and Treatment of Neonatal PH**
- 4:15 **Adjourn**