

IRM Conference 2023 program



International Respiratory Medicine (IRM) Conference 2023

Wyndham Lake Buena Vista Resort, Orlando, Florida
1850 Hotel Plaza Boulevard, Lake Buena Vista, FL, 32830

February 11 to 13, 2023

Day 1, 2/11/2023, 3PM to 9PM

3-3:20 PM Check in.

3:20-3:30 PM Opening by Drs Zhiyu Dai and Ke Yuan

Session 1: Pulmonary hypertension and Trainees Session

Session chair: Ke Yuan

Trainees Session 1

3:30- 3:45 PM, Alina Yang,

Graduate Student, Brown University

Title: Antiviral Activities of Phospholipid Scramblase 1 (Plscr1) in Influenza A Virus (IAV) Infection in Mice

3:45- 4:00 PM, Zhongli Xu, MD/PhD student,

Tsing-Hua Pitt joint program, University of Pittsburgh

Title: A transcriptome-wide study of total IgE in nasal epithelium from children and adolescents

4:00 -4:15 PM, Yinshan Fang, PhD

Associate Research Scientist, Columbia University

Title: Lep^{r+} myofibroblasts contribute to pulmonary fibrosis

Session 1: Pulmonary hypertension

4:15-4:35 PM, Dr. Yang Zhou

Assistant Professor, Brown University

Title: Chitinase and its receptors in lung fibrosis and pulmonary vascular remodeling

4:35 to 4:55 PM, Dr. Ke Yuan



IRM Conference 2023 program

Assistant Professor, Boston Children's Hospital and Harvard Medical School
Title: Pericytes are essential for pulmonary circulation

4:55 to 5:25 PM, Dr. You-Yang Zhao

Professor and Director, Northwestern University

Title: Targeting endothelial dysfunction for treatment of PAH: a HIF2a story

5: 25 to 5: 45 PM, Dr Yunchao Su

Professor and Founder of CALA, Augusta University

Title: Vascular metabolic mechanism of pulmonary hypertension

Sponsors Session

5:45-5:55PM Pratish Adhikari, GenScript

5:55-6:05PM Sophia Ju, RWD Life Science

6:05-6:15PM Qingcong Lin, Biocytogen

6:15-6:25PM Peter Chen, Vazyme

6:25-6:35PM David Li, MedChemExpress

Reception: 6:35-8PM

8 to 8:40 PM Keynote speaker

Dr. Xin Sun, Professor, University of California at San Diego

Title: Pushing the Boundary: Consider the Lung as a Sensory Organ

8:40 PM to 9PM, Discussion and Networking

Day 2, 2/12/2023, 8:30 AM to 6PM

Session 2: Airway biology, asthma and other infection lung diseases

Session chair: Xiaobo Zhou

8:30-8:50 AM, Dr. Peisong Gao

Associate Professor, The John Hopkins University

IRM Conference 2023 program



Title: Mannose decorated exosomes with RNA nanoparticles for miR-511-3p delivery in asthma

8:50-9:10 AM, Dr. Jing Liu

Associate Professor, University of Illinois at Chicago

Title: Role of the transcription factor Miz1 in COPD.

9:10-9:30 AM, Dr. Yong Cheng

Assistant Professor, Oklahoma State University

Title: Extracellular Vesicles in Tuberculosis

9:30-9:50 AM, Dr. Yuefeng Huang

Assistant Professor, Columbia University

Title: Dual function of group 2 innate lymphoid cells in asthma

9:50-10:10 AM, Dr. Anny Xiaobo Zhou

Associate Professor, Brigham and Women's Hospital, Harvard Medical School

Title: Function of the 17q asthma GWAS genes: ORMDL3 and GSDMB

Coffee Break 20 min

Session 3: Mechanism and treatment for IPF

Session chair: Dianhua Jiang

10:30-10:50 AM, Dr. Gang Liu

Professor, The University of Alabama at Birmingham

Title: The role of alveolar epithelial senescence in lung fibrosis

10:50-11:10 AM, Dr. Carol Liang

Associate Professor, Cedars Sinai Medical Center

Title: Alveolar progenitor aging

11:10-11:30 AM, Dr. Beiyun Zhou



IRM Conference 2023 program

Associate Professor, University of Southern California

Title: Aging, ER stress and Pulmonary fibrosis

11:30-11:50 AM, Dr. Yingze Zhang

Professor, University of Pittsburg

Title: TOLL-interacting Protein in IPF: Abiding by the Goldilocks Principle.

11:50-12:10 PM, Dr. Yan Sanders

Associate Professor, The University of Alabama at Birmingham

Title: Brd4 and acetylated histone in lung fibrosis

12:10-12:30 PM, Dr. Dianhua Jiang

Professor, Cedars Sinai Medical Center

Title: Targeting the fibrotic niche for IPF treatment

Lunch break

Session 4: Lung Development and Regeneration

Session chair: Jianwen Que

2:00-2:20 PM, Dr. Yuru Liu

Associate Professor, University of Illinois at Chicago

Title: Regulation of alveolar type II cell in lung homeostasis and in response to injury

2:20-2:40 PM, Dr. Xiaoyun Wang, Ph.D

Assistant Professor, University of Georgia

Title: MMP-8 Deficiency Improves Host Responses to Influenza Viral Infections

2:40-3:00 PM, Dr. Hongmei Mou

Assistant Professor, Mass General Hospital, Harvard Medical School

Title: Human Normal Airway Basal Cells Can Undergo Reversible Squamous Differentiation with Reshaped Mucosal Immunity



IRM Conference 2023 program

3:00-3:20 PM, Dr. Xiangming Ji

Assistant Professor, Georgia State University

Title: E-cigarette smoking induced ferroptosis in lung epithelium

3:20-3:40 PM, Dr. Jianwen Que

Professor, Columbia University

Title: p63+ Krt5- progenitor cells contribute to alveolar regeneration

Coffee Break: 20 min

Session 5: Acute lung injury and and Trainees Session

Session chair: Yutong Zhao

4:00-4:20 PM, Dr. Yutong Zhao

Professor, Ohio State University

Title: ISGylation regulates lung endothelial cell inflammation

4:20-4:40 PM, Dr. Duo Zhang

Assistant Professor, University of Georgia

Title: Extracellular Vesicle-mediated Small RNA Delivery: A Novel Therapy for Acute Lung Injury

4:40-5:10 PM, Dr. Hongpeng Jia

Associate Professor, The Johns Hopkins University

Title: Study long-COVID using a novel humanized ACE2 mouse model.

5:10-5:30 PM, Dr. John Shyy

Professor, University of California, San Diego

Title: Endothelial ACE2 in COVID-19 Endotheliitis

Trainees Session 2: 5:30-6:30 PM

5:30-5:45 PM, Dr. Xuexi Zhang

Postdoctoral Scientist, Cedars-Sinai Medical Center



IRM Conference 2023 program

Title: Mesenchymal adipogenesis promotes alveolar type II cell renewal in lung fibrosis

5:45-6:00 PM, Xue Liu, PhD

Project Scientist, Cedars Sinai Medical Center

Title: Transcriptional profiling of physically interacting cells in the lung

6:00-6:15 Dr. Yujuan Su

Postdoctoral Fellow, UCSD

Title: Brain-lung communication in asthma

6:15-6:30 Jiaxing Miao

Graduate student, Ohio State University

Title: Deubiquitinase USP40 protects lung injury through reducing lung endothelial inflammation and barrier dysfunction

7PM to 8:30 PM Dinner and Networking evening

Location: **Benihana**, 1751 Hotel Plaza Blvd, Lake Buena Vista FL 32830

Day 3, 2/13/2023, 8:30 to 1PM

Session 6: Lung immunology

Session chair: Jie Sun

8:30-8:50 AM, Dr. Peter Di

Associate Professor, University of Pittsburgh

Title: Epithelium mediated host immunity against antibiotic-resistant bacterial infection in a pandemic era

8:50-9:10 AM, Dr. Jie Sun

Professor, University of Virginia

Title: Immunity and Immunopathology after COVID-19

9:10-9:30 AM, Dr. Kai McKinstry

Associate Professor, College of Medicine, University of Central Florida

IRM Conference 2023 program



Title: Deconstructing transcriptional regulation required for protective CD4 T cell responses against influenza A virus

9:30-9:50 AM, Dr. Qi Yang

Associate Professor, Rutgers University

Title: Function and regulation of mucosal associated invariant T cells in the lung

9:50-10:10 AM, Dr. Tara Strutt

Associate Professor, College of Medicine, University of Central Florida

Title: IL-2 and inflammation during influenza A virus infection

10:10-10:30 AM, Dr. Baohua Zhou

Associate Professor, Indiana University

Title: FOXP3 isoforms in persistent allergic airway inflammation

Coffee Break 20 mins

Session 7: Novel technology and lung bioengineering

Session chair: Wei Chen and Yifan Yuan

10:50-11:10 AM, Dr. Wei Chen

Professor, School of Medicine, University of Pittsburgh, UPMC Children's Hospital of Pittsburgh

Title: Spatial transcriptomic analysis of lung tissue

11:10-11:30 AM, Dr. Chaofan Li

Research Assistant professor, Infectious Disease Division, University of Virginia,

Title: The single-cell landscape of respiratory immune responses in patients with post-acute sequelae of COVID-19

11:30- 11:50 AM, Dr. Charlie (Xi) Ren

Assistant Professor, Carnegie Mellon University

Title: Engineer Cellular Interactions to Guide Lung Tissue Morphogenesis



IRM Conference 2023 program

11: 50- 12:10 PM, Dr. Ruogang Zhao

Associate Professor, Department of Biomedical Engineering, State University of New York at Buffalo

Title: Engineered lung microtissue to model macrophage-regulated pulmonary fibrosis and anti-fibrosis treatment

12:10-12:30 PM, Dr. Ya-Wen Chen

Assistant Professor, Icahn School of Medicine at Mount Sinai

Title: TBD

12:30 to 1:10 PM

Closing Keynote speaker: Steve Black, PhD, Florida International University

Title: Metabolic reprogramming and pulmonary vascular disease

IRM Conference 2023 is organized by Chinese-American Lung Association

Chairs: Yin Chen, Jianwen Que, Ke Yuan, Zhiyu Dai

Contact Ke Yuan (Ke.Yuan@childrens.harvard.edu) or Zhiyu Dai (zhiyudai@arizona.edu, Cell 312-792-6813) for any questions.

Acknowledgment

Thanks GenScript (<https://www.genscript.com>), MedChemExpress (<https://www.medchemexpress.com>), and RWD Life Science (<https://www.rwdstco.com>), Biocytogen (<https://biocytogen.com>) and Vazyme Biotech (<https://www.vazymebiotech.com>) donation to support CALA event.