

Emerging Investigators Highlight

The *American Journal of Respiratory and Critical Care Medicine* thanks all the authors in this issue for submitting their stellar work to the Journal. As part of this, the editors would like to highlight the following Emerging Investigators who worked on articles in this issue. Readers can see past highlighted Emerging Investigators in the Journal by visiting <https://www.atsjournals.org/ajrccm/emerging-investigators>.



Francesca Polverino, M.D., Ph.D., is a physician-scientist and endowed professor at Baylor College of Medicine, where she leads the COPD Translational Research Group. Her work focuses on genetic, genomic, and developmental drivers of individual susceptibility to cigarette smoke in chronic airway diseases. After training in Italy, she completed her Ph.D. and joined the faculty at Harvard Medical School in 2015. She has received numerous honors, including the ERS COPD Gold Medal and the ATS Parker B. Francis Award. Dr. Polverino has published over 130 peer-reviewed papers and is a spokesperson for the American Lung Association.

The Resilience of the Human Lungs: Evolution, Smoke, and Disease (page 1343)

Husham Sharifi, M.D., M.S., is a Clinical Assistant Professor at Stanford School of Medicine. He received his medical degree and residency training from Yale and fellowship training from Stanford. His passion for improving the lives of persons with life-threatening lung disease after life-saving interventions has led him to research transplant-related pulmonary fibrosis, which includes fibrotic complications of the lung parenchyma or the airways after cell and lung transplant. He applies artificial intelligence strategies to quantitative imaging of the chest to achieve earlier detection and more precise identification of pulmonary disease in this vulnerable population. His website is: <https://www.sharifi.com>.

Addressing Knowledge Gaps in the Early Detection of Bronchiolitis Obliterans Syndrome after Hematopoietic Cell Transplantation: An Official American Thoracic Society Research Statement (page 1369)



Rebecca Hull, Ph.D., is a postdoctoral researcher at the University of Dundee, UK, in the laboratory of Prof. James Chalmers. She completed her Ph.D. at the University of Sheffield and joined Dundee in 2022. Her research focuses on chronic infections in bronchiectasis, with a particular interest in host-pathogen interactions. She uses multiomic approaches, including bacterial genomics, proteomics, and microbiome analysis, to investigate disease mechanisms. Her work aims to identify new therapeutic targets, enhance existing treatments, and support a more personalized approach to managing chronic respiratory infections.

Endotypes of *Pseudomonas aeruginosa* Infection in Bronchiectasis Are Associated with Inhaled Antibiotic Response: Results from Two Randomized, Double-Blind, Placebo-controlled, Phase III Trials (ORBIT 3 and ORBIT 4) (page 1397)



Sandeep Bodduluri, M.S., Ph.D., is an Assistant Professor of Medicine in Pulmonary, Allergy, and Critical Care and Director of AI Research at the University of Alabama at Birmingham's (UAB) Center for Lung Analytics and Imaging Research (CLAIR). He also serves as Director of AI Programs at the Marnix E. Heersink Institute for Biomedical Innovation (MHIBI) at the UAB Heersink School of Medicine. He obtained his M.S. and Ph.D. in Biomedical Engineering from the University of Iowa. His research interests are to develop novel imaging markers and artificial intelligence solutions for early diagnosis and prognosis of COPD.

Mechanically Affected Lung and Progression of Emphysema (page 1409)

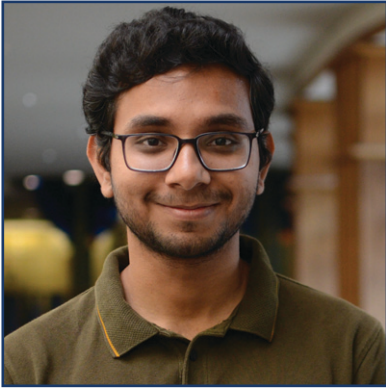
David Hajage, M.D., Ph.D., is Professor of Biostatistics at Sorbonne University and a member of the Pierre Louis Institute of Epidemiology and Public Health (INSERM UMR-S1136) in Paris. As a public health practitioner, he develops statistical methods for causal inference with both observational and experimental data, with a focus on emulated target trials, propensity score techniques, and robust variance estimation. His research aims to improve the evaluation of complex therapeutic strategies, including in critical care and pharmacoepidemiology, by strengthening the validity of causal conclusions. He contributes to both statistical methodology and applied clinical research, bridging methodological innovation and real-world clinical questions.

Improving the Reporting of Trials Evaluating Organ Support Therapies Using Multistate Modeling (page 1418)



Idunn Morris, M.B.Ch.B., F.R.C.A., F.C.I.C.M., is a lecturer in critical care (University of Sydney, Sydney, Australia), an intensive care specialist (Nepean Blue Mountains, Sydney, Australia), and a Ph.D. candidate (University of Toronto, Toronto, Canada). Her clinical and research training has taken her across England, Australia, and Canada, through which she developed specific interests in respiratory physiology, acute respiratory failure, and mechanical ventilation. Her doctoral studies—under the supervision of Dr. Ewan Goligher and Dr. Niall Ferguson—focus on diaphragm neurostimulation for lung and diaphragm protection during invasive mechanical ventilation, alongside the development of noninvasive screening tools for the early detection of inspiratory muscle weakness.

Continuous On-Demand Diaphragm Neurostimulation to Prevent Diaphragm Inactivity During Mechanical Ventilation: A Phase 1 Clinical Trial (STIMULUS) (page 1442)



Swaraj Bose, M.S., is a Biostatistics Ph.D. student at the University of Michigan. He simultaneously provides statistical expertise to Pulmonary/Critical Care Internal Medicine faculty to further research in pulmonary fibrosis, COPD, and lung cancer. His training is part of a long-standing joint mentoring of Biostatistics graduate students by both Pulmonary and Biostatistics faculty. As to his Ph.D. work, he focuses on developing cutting-edge statistical tools to effectively interpret and consolidate understanding of mobile device data. His thesis fills a needed gap in how to determine causality for patient-specific mobile device interventions on health outcomes using micro-randomized trials (MRTs), where subjects can be re-randomized to interventions multiple times, daily.

Proteomic Biomarkers of Survival in Non-Idiopathic Pulmonary Fibrosis Interstitial Lung Disease (page 1452)

Matt S. Zinter, M.D., is an Associate Professor of Pediatric Critical Care Medicine at the University of California San Francisco. He runs a translational research program that studies respiratory failure in children with immune dysfunction, including those with malignancies, immunodeficiencies, and prior stem cell transplantation. He also directs the Pediatric Immunocompromised Critical Care program at UCSF Benioff Children's Hospital and hopes to leverage research to improve critical care diagnostics and treatments for this unique pediatric population.

Biologic Mechanisms Underlying the Heterogeneous Response to Tight Glycemic Control among Differentially Inflamed Patients in the HALF-PINT Trial (page 1463)



Clove S. Taylor, B.Sc., is a pediatric critical care researcher in the Sapru Lab at the UCLA David Geffen School of Medicine. They graduated with highest honors from the Computational & Systems Biology program at UCLA, and will be pursuing a Ph.D. in Immunology at Stanford University. Their research focuses on integrating new computational methods into the critical care field to better understand complex conditions such as acute respiratory distress syndrome and sepsis. Their goal is to develop a new perspective of disease trajectory driven by biomarkers and their interactions. Clove was recently awarded an Abstract Scholarship for their work on molecular endotype prediction at the ATS 2025 International Conference.

Biologic Mechanisms Underlying the Heterogeneous Response to Tight Glycemic Control among Differentially Inflamed Patients in the HALF-PINT Trial (page 1463)



Shiyun Liu, M.D., Ph.D., completed her M.D. and Ph.D. at The First Affiliated Hospital of Guangzhou Medical University. Dr. Liu is currently a resident physician at The Third Affiliated Hospital of Sun Yat-sen University. She focuses on the mechanisms underlying the pathogenesis of pulmonary vascular remodeling and pulmonary hypertension (PH), with a particular emphasis on the biological effects of calcium channels and DNA damage on pulmonary vascular endothelial cells. Her systematic investigations have delineated the potential link between chemotherapy exposure and PH development and determined the crucial role of the Fanconi anemia pathway in protecting PH, thereby providing a novel and effective therapeutic target for this disease.

Deficient FANCL Predisposes Endothelial Damage: A New Therapeutic Target for Pulmonary Hypertension (page 1474)

Xiaoqian Shan, M.D., M.S., completed her M.D. at Xinxiang Medical University, Henan, China, and her M.S. at Inner Mongolia Medical University, Inner Mongolia, China. She is now a Ph.D. candidate at The First Affiliated Hospital of Guangzhou Medical University, focusing on respiratory medicine and pulmonary vascular diseases, especially the molecular mechanism underlying pulmonary hypertension (PH). She is currently investigating the mechanisms and interventions of early-stage development of pulmonary vascular remodeling during PH associated with chronic lung diseases, such as COPD.

Deficient FANCL Predisposes Endothelial Damage: A New Therapeutic Target for Pulmonary Hypertension (page 1474)



Athénaïs Boucly, M.D., Ph.D., is an Associate Professor of Respiratory Medicine at Université Paris-Saclay and a consultant at the French Referral Center for Pulmonary Hypertension at Hôpital Bicêtre, France. She completed a postdoctoral fellowship at Imperial College London, focusing on proteomics in pulmonary hypertension. Her research centers on risk stratification, treatment goals, and biomarkers in pulmonary arterial hypertension, combining clinical approaches with expertise in big data and proteomics. Dr. Boucly was a task force member on risk stratification and treatment goals at the 7th World Symposium on Pulmonary Hypertension and currently serves as the early career representative for ERS Assembly 13 on pulmonary vascular diseases.

Clustering Patients with Pulmonary Hypertension Using the Plasma Proteome (page 1492)



Saskia Janssen, M.D., Ph.D., is a consultant in Medicine and Infectious Diseases from the Netherlands. She specializes in research on TB and other mycobacterial diseases, with specific interest in the development of new therapeutics for TB, including phage therapy. She currently works at TASK in South Africa and Radboudumc in the Netherlands. She has worked in HIV care in different sub-Saharan African settings, including Gabon and South Africa. The magnitude of the TB and HIV epidemic and the challenges faced in the care of co-infected patients inspired her to dedicate her career to improve patient care for these diseases.

Telacebec, a Potent Agent in the Fight Against Tuberculosis: Findings from a Randomized, Phase 2 Clinical Trial and Beyond (page 1504)