



International
Respiratory Infections
Society

2024 IRIS Research Forum

SUMMARY REPORT



International Respiratory Infections Society (IRIS) is a non-profit corporation whose purpose is to address, educate, coordinate, and promote research in the field of respiratory infections on a global level. We provide education by giving free lectures and slideshows as well as utilizing social media channels and the corporation's website to provide facts, statistics, and other related data on causes, current efforts and solutions to promote research in the field of respiratory infections. To maximize our impact on current efforts, we may seek to collaborate with other non-profit organizations which fall under the 501(c)(3) section of the internal revenue code and are operated exclusively for educational and charitable purposes. At times, per the discretion of the board of directors, we may provide internships or volunteer opportunities which shall provide opportunities for involvement in said activities and programs to have a greater impact for change. This objective shall be achieved by coordinating and facilitating research related activities of IRIS members. To attain its objective, and for no other purpose, the Society will, through its members:

1. Promote all aspects of research in respiratory infections.
2. Disseminate scientific information concerning all aspects of research in respiratory infections.
3. Organize congresses, conferences, symposia, and seminars in the field of respiratory infections.
4. Encourage and support continuous education and training in respiratory infections research, including vaccines and vaccine-preventable diseases.
5. Promote and support education on topics with global health importance.
6. Collaborate with other national and international organizations having similar objectives.

2024 IRIS Research Forum Summary

The 2024 International Respiratory Infections Society (IRIS) Research Forum was held on Saturday, May 18th, at the Marriott Marquis San Diego Marina Hotel in San Diego, California. The 2024 Research Forum was a collaboration between the International Respiratory Infections Society, a 501 c(3) non-profit organization, and UpToDate™, and provided an unparalleled opportunity for an international audience to engage with and learn from leading experts from around the globe.

The goals of the 2024 Research Form were to: 1) bring together individuals with expertise in respiratory infection to share current research in their fields along with future research ideas, and 2) foster a dialogue among participants to generate new ideas and implementation approaches recognizing the increasing presence and importance of artificial intelligence in healthcare.

This year, the meeting pivoted around two themes:

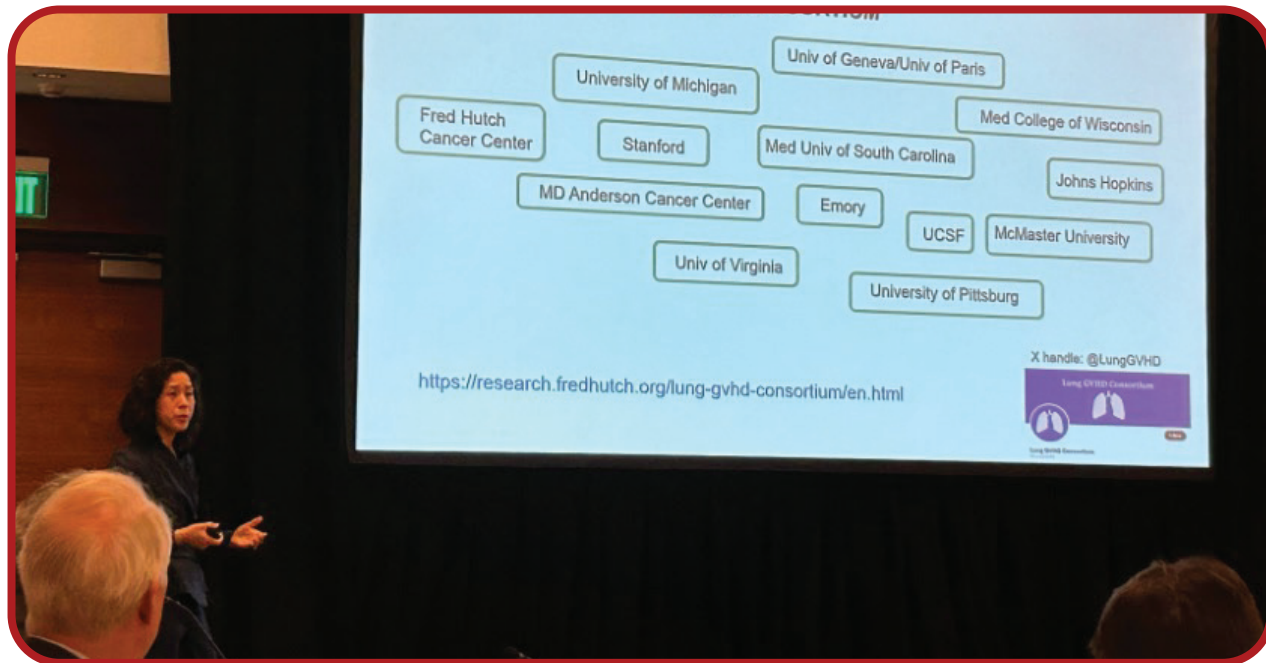
1. Pneumonia and other respiratory infections: Challenges in 2024
2. Artificial intelligence in healthcare: Opportunities in 2024

This summary report has been compiled to provide an overview of the Research Forum discussions and to serve as a prompt for continued education and research in the relevant fields.

The process of the Research Forum involved scientific input from fifteen international opinion leaders, each delivering 15-minute presentations, followed by a 15-minute brainstorming session. The Research Forum was broadcast live via Zoom and was streamed online to an international audience. In-person attendance was by invitation only, with 45 participants attending the in-person segment of the meeting.









2024 IRIS Research Forum Agenda

7:30 AM to 8:15 AM

Registration and Breakfast
Location: Marina Ballroom Foyer

8:15 AM to 8:30 AM

Welcome and Introductions
Dr. Julio Ramirez [IRIS]
Location: Marina Ballroom

8:30 AM to 10:30 AM

Session 1 Presenters and Presentations:

8:30 AM - Antoni Torres, MD. University of Barcelona, Hospital Clinic of Barcelona, Barcelona, Spain
"Severe CAP ERS/ESICM/ESCMID/ALAT 2023 Guidelines"

Dr. Antoni Torres presented a review of the 2023 guidelines for the management of patients with severe community-acquired pneumonia. These guidelines were developed by members of several international societies (ERS/ESICM/ESCMID/ALAT). Various aspects of management were discussed by the meeting participants.

9:00 AM - Nathan Dean, MD. University of Utah, Intermountain Medical Center, Murray, US

"SMART on FHIR Interoperable Clinical Decision Support for Emergency Department Patients with Pneumonia: First Year Hurdles and Successes"

Dr. Nathan Dean reviewed data generated during the first year of his research project involving an interoperable clinical decision support system to aid in the management of patients with community-acquired pneumonia in the emergency department. The group discussed the hurdles and successes of the program.

9:30 AM - Marcos Restrepo, MD. University of Texas Health, South Texas Veterans Health Care System, San Antonio, US

"Pneumonia in Vulnerable Populations in the United States - Adult Perspective"

Dr. Marcos Restrepo presented data on vulnerable adult populations in the United States and their risk of developing pneumonia. The discussion emphasized mechanisms to optimize pneumonia prevention in these populations.

10:00 AM - Barbara Jones, MD.

University of Utah, Salt Lake City, US

"Leverage Pandemic Practice Change to Optimize Pneumonia Care: A Mixed Methods Study of the VA Healthcare System"

Dr. Barbara Jones presented data from her research indicating changes in the management of patients with pneumonia during the COVID-19 pandemic. Several investigators described their different experiences during the pandemic in the ensuing discussion.

10:30 AM to 11:00 AM

Coffee Break and Networking
Location: Marina Ballroom Foyer

11:00 AM to 12:30 PM

Session 2 Presenters and Presentations:

11:00 AM - Mehdi Mirsaeidi, MD.

University of Florida, Florida, USA

"Phage Power: Using Bacteriophages to Treat and Prevent Pneumonia"

Dr. Mehdi Mirsaeidi presented his research on using bacteriophages to treat and prevent pneumonia. Several aspects of research methodology using bacteriophages were debated during the discussion.

11:30 AM - Rosario Menendez, MD.

University and Polytechnic Hospital La Fe, Valencia, Spain

"Recognizing At-Risk Patients for 1-Year Mortality After CAP"

Dr. Rosario Menendez reviewed her research on the long-term mortality of pneumonia and the importance of recognizing patients at risk for 1-year mortality after pneumonia.

12:00 PM - Julio Ramirez, MD. Norton Infectious Diseases Institute, University of Louisville, Louisville, US

"Cognitive Impairment and Mortality After CAP"

Dr. Julio Ramirez presented a research protocol on cognitive impairment and mortality after pneumonia. The study hypothesis posits that in patients with community-acquired pneumonia, there are alterations in the normal physiology of the gut-lung-brain axis.



12:30 PM to 1:00 PM

Lunch and Networking
Location: Coronado Terrace

1:00 PM to 3:00 PM

Session 3 Presenters and Presentations:

1:00 PM - Charles Dela Cruz, MD.
Yale University, New Haven, US

"Intranasal Approaches to Boost Immune and Antiviral Response"

Dr. Charles Dela Cruz reviewed his research on the use of intranasal approaches to boost immune and antiviral responses. The discussion emphasized the potential clinical applications of this research.

1:30 PM - Scott Evans, MD. University of Texas MD Anderson Cancer Center, Houston, US

"Immunometabolic Modulation of Lung Epithelial Cells to Protect Against Pneumonia"

Dr. Scott Evans reviewed his research on the immunometabolic modulation of lung epithelial cells, aiming to modulate immunity to protect against pneumonia.

2:00 PM - Richard Wunderink, MD.
Northwestern University, Chicago, US

"Is It Time to Rethink Combination Aminoglycoside/Beta-Lactam Therapy for Pseudomonas Pneumonia?"

Dr. Richard Wunderink discussed his current research on the treatment of severe pneumonia due to Pseudomonas. The discussion centered on the need to use combination therapy with aminoglycosides and beta-lactams for Pseudomonas pneumonia.

2:30 PM - Yuichiro Shindo, MD.
Nagoya University, Nagoya, Japan

"What Is the Consensus on Appropriate Antibiotic Use in Community-Acquired Pneumonia?"

Dr. Yuichiro Shindo reviewed his research on the optimal therapy for patients with community-acquired pneumonia. The discussion emphasized the role of resistant pathogens in determining appropriate initial empiric therapy.

3:00 PM to 3:30 PM

Coffee Break and Networking
Location: Marina Ballroom Foyer

3:30 PM to 6:00 PM

Session 4 Presenters and Presentations:

3:30 PM - Guang-Shing Cheng, MD.
University of Washington, Seattle, US

"Impact of Respiratory Viral Infection on Bronchiolitis Obliterans Syndrome After Hematopoietic Cell Transplant"

Dr. Guang-Shing Cheng discussed her research on the impact of respiratory viral infections in developing bronchiolitis obliterans syndrome after hematopoietic cell transplantation.

4:00 PM - Kei Nakashima, MD. Osaka Metropolitan University, Osaka, Japan

"Low-Dose Trimethoprim-Sulfamethoxazole for Non-HIV PCP"

Dr. Kei Nakashima presented his research on the role of low-dose Trimethoprim-Sulfamethoxazole in treating Pneumocystis pneumonia in the non-HIV population.

4:30 PM - Cristina Vazquez Guillamet, MD.
Washington University in St Louis, Missouri, US

"AI Methods in Hospital-Acquired Pneumonia"

Dr. Cristina Vazquez Guillamet described her research using artificial intelligence to predict which patients are at risk of developing hospital-acquired pneumonia.

5:00 PM - Sheila Bond, MD.
Brigham and Women's Hospital, Boston, US

"Clinical Generative AI: Perspectives from UpToDate"

Dr. Sheila Bond described UpToDate's perspective on implementing generative artificial intelligence to facilitate patient care which generated a vivid discussion on the role of this new technology in all aspects of medicine.

5:50 PM
Closing Remarks

6:00 PM to 8:00 PM
Networking Dinner
Location: Coronado Terrace

Acknowledgments

We would like to express our gratitude to UpToDate and the International Respiratory Infections Society for their financial support in covering the conference logistics, preparation, management, and implementation expenses.



We also extend our thanks to Pfizer Inc., Dompe Pharmaceuticals, and Paratek Pharmaceuticals for their generous support. Their contributions facilitated the technological connections that allowed the 2024 Research Forum to reach an international audience. Additionally, their support made possible the working lunch and networking dinner, greatly enhancing the overall experience for all attendees.

