2021 PROGRAM NEWSLETTER

RESPIRATORY DISEASE Young Investigators' Forum

Developing the next generation of physician-scientists: a research and career mentorship opportunity for fellows and early career faculty.

FORUM HELD ONLINE OCTOBER 14-16, 2021

- Meet the 2021 Forum winners
- Learn how the Forum impacts the future of physician-scientists
- Share with colleagues who are eligible to submit abstracts in 2022



This activity is supported by an educational grant from AstraZeneca Pharmaceuticals LP.

"As a former Young Investigator and former Research Advisor for YIF, I was honored to be one of the Program Chairs this year. This program is more important than ever as COVID has interrupted research in many areas to focus on clinical patient care. COVID has also really driven home for all of us in medicine how very crucial the physician-scientist's role is."

-Jennifer Taylor-Cousar, MD, MSCS (Program Co-Chair)



Dear Colleague:

The Seventeenth Annual Respiratory Disease Young Investigators' Forum was planned to take place in Denver, CO, October 14-17, 2021, but due to rising COVID case rates and hospitalizations was held virtually.

A world-class faculty selected 30 abstracts and invited the submitting young investigators (fellows and junior faculty in pediatric and adult pulmonary, allergy and immunology) to present their research in a collegial setting. Throughout the online forum, young investigators connected with expert faculty and peers in the respiratory disease field to improve research methodologies, enhance presentation and communication skills, and stimulate pursuit of an academic career in respiratory disease and allergy research.

This forum is a valuable event for fellows and junior faculty who are beginning their research careers. The forum has continued to be one of the most unique and successful opportunities for young investigators to engage with senior faculty. The forum's goals — to encourage and support young investigators, to pursue a career as a physician-scientist, to develop communication skills related to presenting their research, to enhance their research presentation, and to build networks of peers and mentors — were achieved.

Sincerely,

Sans Malo MD

Barry Make, MD Program Co-Chair National Jewish Health

Junque & Vapa Center, MD, MSCS, ATSF

Jennifer Taylor-Cousar, MD, MSCS Program Co-Chair National Jewish Health

"This was an exceptional experience and surpassed any expectations." - 2021 Young Investigator

2021 Expert Faculty

Neil Aggarwal, MD University of Colorado Denver, CO

Mario Castro, MD, MPH The University of Kansas School of Medicine Kansas City, KS

Harold R. Collard, MD University of California San Francisco San Francisco, CA

Marie Egan, MD Yale School of Medicine New Haven, CT

Ravi Kalhan, MD, MS Northwestern University Feinberg School of Medicine Chicago, IL **Barry Make, MD** National Jewish Health Denver, CO

Elizabeth Matsui, MD, MHS University of Texas at Austin Dell Medical School Austin, TX

Susanna A. McColley, MD Northwestern University Feinberg School of Medicine Chicago, IL

Jennifer Taylor-Cousar, MD, MSCS National Jewish Health Denver, CO

Research Advisors

Jane E. Gross, MD, PhD National Jewish Health Denver, CO

Victor E. Ortega, MD, PhD, ATSF Mayo Clinic in Arizona Phoenix, AZ

Deepika Polineni, MD, MPH University of Kansas Medical Center Kansas City, KS

2021 Award Recipients

First Place Basic Science



Umar Salimi, MD

Yale University New Haven, CT

> "The Young Investigators' Forum was a unique opportunity to meet and learn from other pulmonary and critical care physician-scientists from around the country. I truly enjoyed this opportunity to network with my colleagues and was inspired by their dedication and passion. The clinical and basic science presented was relevant and inspiring, and I left the forum reinvigorated about my own research."

Research Title: Effects of Bacterial Elastase on Alveologenesis following Neonatal Pneumonia

"I am humbled and honored to be chosen for an award from a truly talented field of young investigators. The work I presented is the product of tremendous mentorship and collaboration, and I owe a huge debt of gratitude to all of my faculty, lab mates, and supporters."

First Place Clinical Research



Matthew Moll, MD, MPH

Brigham and Women's Hospital Boston, MA

> "The National Jewish Health Young Investigators' Forum (YIF) was a phenomenal experience. It provided opportunities to receive scientific feedback from expert faculty and peers, as well as to network with both faculty members and other young physician-scientists from across the country. The presentations by expert faculty were especially helpful, and included developing our reputation as early career scientists, guidance on funding opportunities, life-work balance, and incorporating diversity into our careers to achieve excellence. Overall, the YIF helped me to step back and take a broader look at my career trajectory, and to reflect deeply on how my scientific pursuits could impact the lives of patients. This experience also helped me to identify potential hurdles that I am likely to encounter as a physician-scientist and potential solutions. Most of all, I walked away with a sense that there is a respiratory science community that is supportive and dedicated to improving the lives of patients with lung disease."

Research Title:

Development of A Blood-Based Transcriptional Risk Score for Chronic Obstructive Pulmonary Disease

"I am extremely grateful to win this award. There are many challenges and rejections in research, but those challenges make this award even more meaningful to me. I feel particularly honored to be acknowledged amongst this group of peers. While this was a virtual conference, it was easy to stay engaged because the other young investigators brought forth a high level of science, elegant presentations, and thoughtful discussions. Moreover, the opportunity to be a part of the YIF has inspired me to think more deeply about my own work and reaffirmed my commitment to academic medicine."

2021 Award Recipients

Second Place Basic Science



Georgios Triantafyllou, MD

University of Pittsburgh Medical Center Philadelphia, PA

"I had an amazing experience participating in the 17th Annual Young Investigators' Forum! I got invaluable input from expert faculty on how to navigate a career as a physician-scientist. The best part was that I got exposed to research done by my peers (senior pulmonary fellows). It was really cool to see what everyone has been doing. I cannot think of another event where only young physician-scientists gather and exchange ideas. The YIF is a truly unique opportunity!"

Research Title:

Mitochondria Targeted Reactive Oxygen Species Scavenging With MitoTEMPO Improves Exercise-Induced Pulmonary Hypertension In a Novel Rat Model of Combined Pre- and Post-Capillary Pulmonary Hypertension

"I feel very honored and excited to win the 2nd place in basic science research at the 17th YIF! Recognition of the results of very hard work gives me even more motivation to continue this exciting journey. I am very grateful to my mentors and collaborators for their support."

Second Place Clinical Research



Esther de Boer, MD, PhD

University of Colorado Aurora, CO

"The level of expertise and knowledge of the organizers was excellent. Enormously appreciate their honesty and willingness to share their experiences, career paths and explain grant structure concepts. Lots of opportunities to ask questions. I enjoyed sharing my research and experiences with others during the small group workshops."

Research Title: Mitochondrial Dysfunction Associated with Post-Covid-19 Syndrome

"My overall goal in life is to leave a positive mark in this world by serving a cause greater than myself. The fact that my research was recognized and led to being awarded at the forum affirmed me that I did just that with the work I performed with my wonderful mentors and colleagues at National Jewish Health and the University of Colorado."

2021 Award Recipients

Third Place Basic Science



David Ziehr, MD

Massachusetts General Hospital, Harvard Medical School Boston, MA

"While it seems increasingly challenging to foster community and connectedness, the RDYIF did just that. It was a privilege to share ideas with such an impressive group of both young investigators as well as established physician-scientists. Discussions that began during the forum have continued in the weeks that followed, and I am confident that these conversations will soon become collaborations.

Research Title: Inhibition of Lactate Export Via Monocarboxylate Transporter 4 Prevents Myofibroblast Differentiation and Ameliorates Pulmonary Fibrosis

"The quality of the investigation presented at the forum was stunning and I am humbled to have my work recognized in such company. With all of the stumbling and self-doubt that comes with research, just participating in the forum was a self-affirming exercise. I am grateful to have had this opportunity and to have met such an impressive group of colleagues."

Third Place Clinical Research



Aaron Baugh, MD

University of California San Francisco San Francisco, CA

"Entering the community of physician-scientists can sometimes be intimidating. One spends a lot of time alone, wrestling with their own data. The YIF feels conceived almost as if to address these hardest points. There is a strong sense of community, from your fellow investigators to the most senior names in our field, all of whom make themselves open and accessible. One discovers not only the commonality of challenges, but gets practical advice on how to fix them, and finally, a deeply imbued sense that others are just like you. It is a taste of the diverse, intellectually stimulating, inquisitive community that we all aspire to be a part of when we first considered this career path, but which there aren't many other opportunities to attain until much later stages of professional development. A unique experience that fills a real gap."

Research Title:

Worse Sleep Quality & Social Adversity are Associated with Increased COPD Exacerbation Risk

"I am honored to be selected from among so much truly excellent and insightful work. This recognition is different than most any others, in that we had not only the chance to present, but to improve. While every award is a cause for celebration, this one is special in capturing so much of the spirit of the scientific method."

Forum Feedback

Young Investigators report changes they may make in their career trajectory after participating in this activity:

- I am considering industry collaborations more strongly, and incorporating additional omics and mechanistic investigations into my work.
- I am even more motivated to pursue a career as a physician-scientist.
- I will seek more collaboration and mentorship outside of my institutions.
- Email faculty members from other institutions who I networked with to discuss research.
- Look for opportunities to become a co-investigator on trials while pursuing clinical work.

2021 Young Investigators

Brian Ahn, MD University of Colorado Denver Denver, CO

Aaron Baugh, MD University of California San Francisco San Francisco, CA

Charles Bengtson, MD, MS University of Kansas Medical Center Kansas City, KS

Marlene Cano, MD, PhD Washington University in St. Louis St. Louis, MO

Joe W. Chiles III, MD University of Alabama at Birmingham Birmingham, AL

Esther de Boer, MD, PhD University of Colorado Denver Denver, CO

Auyon Ghosh, MD, MPH Brigham and Women's Hospital Boston, MA

Khushboo Goel, MD University of Colorado Denver Denver, CO Sue Gu, MD University of Colorado Denver Denver, CO

Arnav Gupta, MD University of Colorado Denver Denver, CO

Manuel Izquierdo, DO Wake Forest School of Medicine Winston-Salem, NC

Shannon Kay, MD, MS Yale University New Haven, CT

Jennifer Keen, MD University of Minnesota Minneapolis, MN

Jennifer Thi Wing Krall, MD Wake Forest School of Medicine Winston-Salem, NC

Michael Lam, MD, PhD University of California San Diego San Diego, CA

Cathryn Lee, MD University of Chicago Chicago, IL **Justin Lui, MD** Boston University School of Medicine Boston, MA

David MacDonald, MD University of Minnesota Minneapolis, MN

Aravind Menon, MD Brigham and Women's Hospital Boston, MA

Matthew Moll, MD, MPH Brigham and Women's Hospital Boston, MA

Peter Moore, MD University of Colorado Denver Denver, CO

Eli Rhoads, MD University of Nebraska Medical Center Omaha, NE

Umar Salimi, MD Yale University New Haven, CT

Joseph Simonson, MD Donald and Barbara Zucker School of Medicine at Hofstra/Northwell Uniondale, NY Gail Stanley, MD , MPH Yale University New Haven, CT

Peter Szachowicz, MD University of Iowa Iowa City, IA

Georgios Triantafyllou, MD University of Pittsburgh Medical School Pittsburgh, PA

Aaron Vose, MD Duke University Durham, NC

David Ziehr, MD Massachusetts General Hospital Boston, MA

Richard Zou, MD University of Pittsburgh Medical School Pittsburgh, PA

What was the biggest benefit of participating in the program?

"To see the work being done by my peers was both inspirational and thoughtprovoking. It also helped to develop a shared experience of what it's like to be at this stage in a career consisting of clinical and research work."

- 2021 Young Investigator

Young investigators represented all the states shown in blue for the last five years.

