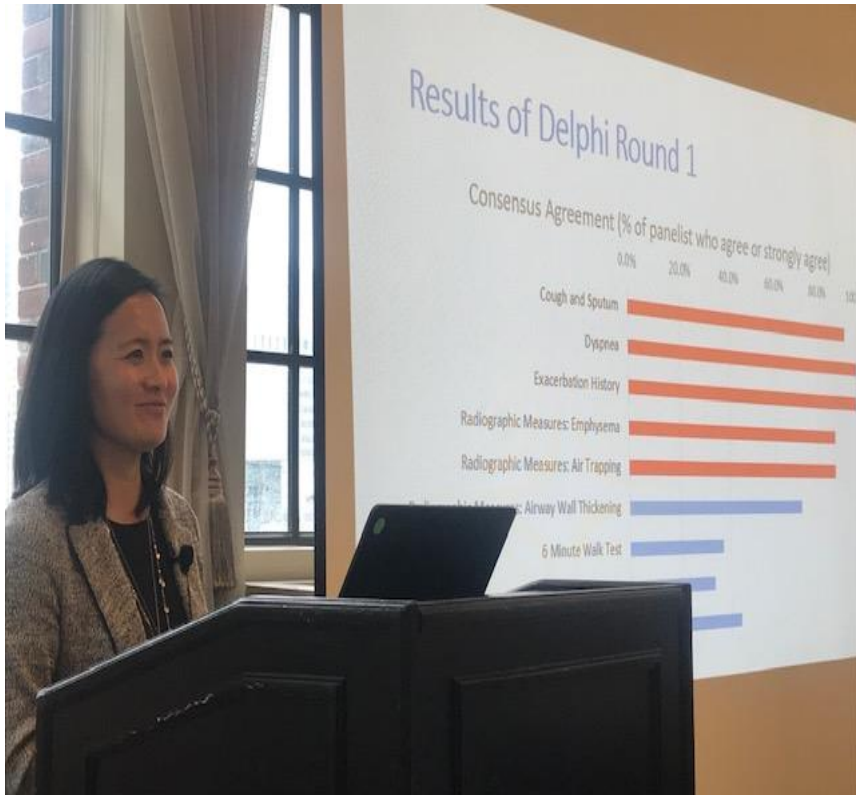


15th Annual

RESPIRATORY DISEASE Young Investigators' Forum

Developing the next generation of physician-scientists



Outcomes Summary

Grant ID: 49773243



49773243	15 th Annual Respiratory Disease Young Investigators' Forum		
<p>Educational Objectives: Identify new areas of respiratory research that offer new inroads to effective therapies and treatment; Discuss research study designs that may improve on current approaches to respiratory research; Evaluate strengths and weaknesses of the research presented and incorporate peer/expert feedback effectively to enhance data presentations; Review key strategies for career development as a physician scientist; Describe overall process and important components of securing grants to support research</p>			
<p>Intended Audience: Pulmonary, allergy and immunology fellows and junior faculty who are beginning their research careers.</p>	<p>Actual Reach: 21 young investigators; 9 expert faculty, 3 research advisors</p>	<p>Modality/# Activities: Three day live forum consisting of junior faculty/fellow presentations, expert faculty panel, and structured feedback</p>	
<p>Program Location: Chicago, IL</p>	<p>Dates (Live Activity): October 10-12, 2019</p>	<p>Relevant Links: N/A</p>	
<p>Outcomes Levels: Level 1, 2, 3 and 4</p>	<p>Outcomes Planning: Pre-test and post-test; program evaluation</p>		
<p>Summary: The 15th Annual Respiratory Disease Young Investigators' Forum aimed to connect young investigators with expert faculty and peers in the respiratory disease field to improve research methodologies, enhance presentation and communication skills, and stimulate an academic career in respiratory disease and allergy research. The meeting was successfully implemented from October 10-12, 2019, with 100% of participants reporting that they would recommend this program to their colleagues.</p>			

Program Overview

15th Annual

RESPIRATORY DISEASE Young Investigators' Forum



The 15th Annual Respiratory Disease Young Investigators' Forum, a live independent medical education activity accredited by National Jewish Health (NJH), took place October 10-12, 2019 in Chicago, IL. The Forum is designed to enable **pulmonary, allergy and immunology fellows and junior faculty** to present their research and interact with expert faculty in order to improve research methodologies and presentation skills, enhance communication in the field of respiratory disease and allergy, develop relationships with faculty mentors, assist in translating laboratory research into useful bedside application, and stimulate an academic career in respiratory disease and allergy research. In its 15th year, the Forum continues to prove to be a valuable and impactful annual event for fellows and junior faculty who are beginning their research careers.



Pictured: All young investigators and most expert faculty.

Program Design

The content of the program was based on basic science and clinical research in the field of respiratory disease submitted by young investigators, who compete for acceptance into the program and then serve as the program presenting faculty. The program enabled 28 fellows enrolled in fellowship programs such as allergy, respiratory tract disease, or pulmonary medicine, to present the results of their basic science or clinical research to an experienced expert faculty panel.

The program consisted of:

- ✓ Personalized feedback and coaching from presentation advisors during rehearsals
- ✓ Clinical and scientific junior faculty presentations
- ✓ One-on-one mentoring
- ✓ Networking with peer leaders and expert faculty
- ✓ An expert faculty panel providing real time feedback
- ✓ Expert faculty presentations on topics relevant to junior faculty
- ✓ Q&A

15th Annual

RESPIRATORY DISEASE Young Investigators' Forum



Pictured: Neil Aggarwal, MD expert faculty presentation

Young Investigator Awards

15th Annual

RESPIRATORY DISEASE Young Investigators' Forum



The top presenting faculty with the best research in both Basic Science and Clinical Research were presented with a plaque and awarded an educational grant to be used toward future research or to attend a national respiratory meeting such as the AAAAI or the ATS. The grant is provided to the recipient's institution for distribution to the recipient according to policies. The young investigator with the highest evaluation scores from her peers was also recognized with an award. To recognize the achievement of the attending fellows, all 28 were presented with an award certificate indicating participation at the Forum. A CME certificate will also be provided by NJH.

Awards in Basic Science Research

First Place – **Raghu Chivukula, MD**

Second Place – **Pavan Bhatraju, MD**

Third Place Tie – **Wassim Labaki, MD and Anita Oh, MD (pictured)**

Awards in Clinical Research

First Place – **William Bain, MD**

Second Place – **Jeremy Katzen, MD**

Third Place Tie – **Tristan Kooistra, MD and Luisa Morales-Nebreda, MD**

Peer Award

Raghu Chivukula, MD



Pictured (left to right): Program Chair Jay Kolls, MD, 3rd Place in Basic Science winners Anita Oh, MD, and Wassim Labaki, MD, MS, and Co-Chair Janet Lee, MD

Dashboard: Activity Impact

Level 1 and 2 Outcomes

15th Annual

RESPIRATORY DISEASE Young Investigators' Forum



Abstracts Received	51
Abstracts Accepted	30
Attendees*	28

*2 attendees were unable to attend due to family emergency

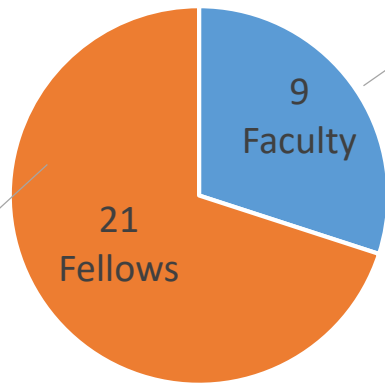
Expert Faculty	9
Research Advisors	3

“Thank you! It was really delightful to be part of a bespoke event tailored exclusively for young investigators. It was great to have so much face time with expert faculty, and even better to bond with peers at other institutions over our shared experiences. The overall effect is one of invigoration and renewed love and excitement for the work of discovery in the field of lung health. I am honored and grateful to have been a part of this event!”

-Young Investigator, 2019

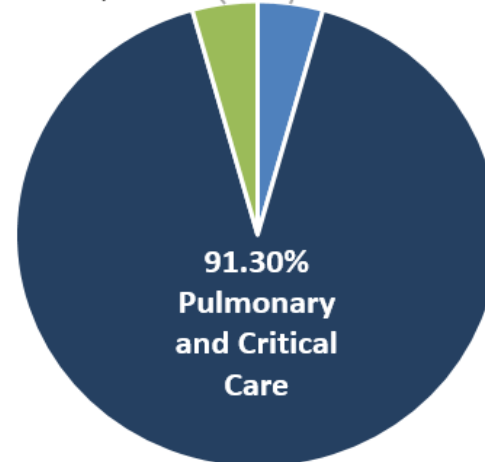
Accepted Investigators

- 4 – 1st year
- 7 – 2nd year
- 6 – 3rd year
- 3 – 4th year
- 1 – PGY5



All junior faculty were in their 1st year in an academic role

4.35% Pulmonary Only



Specialty

100% would recommend program to colleagues

Satisfaction

95% activity positively influenced interest

...in pursuing a career as a physician-scientist

Expert Faculty



Top: (Back Row from Left to Right) Dr. Barry Make, Dr. Reynold Panettieri, Dr. Enid Neptune, Dr. Leila Gozal, Dr. Neil Aggarwal (Front Row from Left to Right) Dr. Jay Kolls, Dr. Janet Lee, Dr. Lisa Young.

Not Pictured: Dr. Rafeul Alam

Right: 2019 Program Chairs, Dr. Janet Lee and Dr. Jay Kolls



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Jay Kolls, MD (Program Chair)

Professor of Medicine and Pediatrics
John W Deming Endowed Chair
in Internal Medicine
Director, Center for Translational
Research in Infection and Inflammation
Tulane School of Medicine

NEW ORLEANS, LA



Janet Lee, MD (Program Co-Chair)

Professor of Medicine
University of Pittsburgh School of Medicine
PITTSBURGH, PA

EXPERT FACULTY



Neil Aggarwal, MD

Chief, Lung Biology and Disease Branch,
Division of Lung Diseases,
National Heart, Lung, and Blood Institute, NIH

BETHESDA, MD



Enid Rose Neptune, MD

Associate Professor of Medicine
Johns Hopkins Medicine

BALTIMORE, MD



Rafeul Alam, MD, PhD

Chief, Division of Allergy & Clinical Immunology
Professor of Medicine
Veda H. and Chauncey H. Ritter Chair in Immunology
National Jewish Health

DENVER, CO



Reynold A. Panettieri, Jr, MD

Professor of Medicine,
Robert Wood Johnson Medical School
Vice Chancellor, Clinical & Translational Science
Director, Rutgers Institute for
Translational Medicine and Science
Emeritus Professor of Medicine,
University of Pennsylvania

NEW BRUNSWICK, NJ



Leila Kheirandish-Gozal, MD, MSc.

Professor and Director of Child Health
Research Institute
Department of Child Health
University of Missouri School of Medicine

COLUMBIA, MO



Lisa R. Young, MD

Associate Professor of Pediatrics, Medicine, and
Cell and Developmental Biology
Jamie Robinson and John Moore Lee
Endowed Chairholder
Director, Center for Childhood Lung Research
Director, Rare Lung Diseases Program
Division of Pediatric Pulmonary Medicine and Division
of Allergy, Pulmonary and Critical Care Medicine
Vanderbilt University Medical Center

NASHVILLE, TN



Barry J. Make, MD

Professor of Medicine
Division of Pulmonary,
Critical Care and Sleep Medicine
Co-Director, COPD Program
Director, Pulmonary Rehabilitation and Respiratory
Care National Jewish Health

DENVER, CO

Research Advisors

RESEARCH ADVISORS



James F. Chmiel, MD, MPH

Professor of Pediatrics
Chief, Division of Pediatric Pulmonology,
Allergy and Sleep Medicine
Indiana University School of Medicine
Riley Hospital for Children at Indiana
University Health

INDIANAPOLIS, IN



Tuchar Desai, MD

Associate Professor of Medicine, PCCM
Institute for Stem Cell Biology
Woods Family Endowed Faculty Scholar
Stanford Child Health Research Institute
Stanford University

STANFORD, CA



Mihaela Teodorescu, MD, MS

Associate Professor
Director, James B. Skatrud Pulmonary/
Sleep Research Laboratory
William S. Middleton Memorial Veteran's Hospital
Division of Allergy,
Pulmonary & Critical Care Medicine
Center for Sleep Medicine and Sleep
Research/Wisconsin Sleep
University of Wisconsin School of Medicine
& Public Health

MADISON, WI

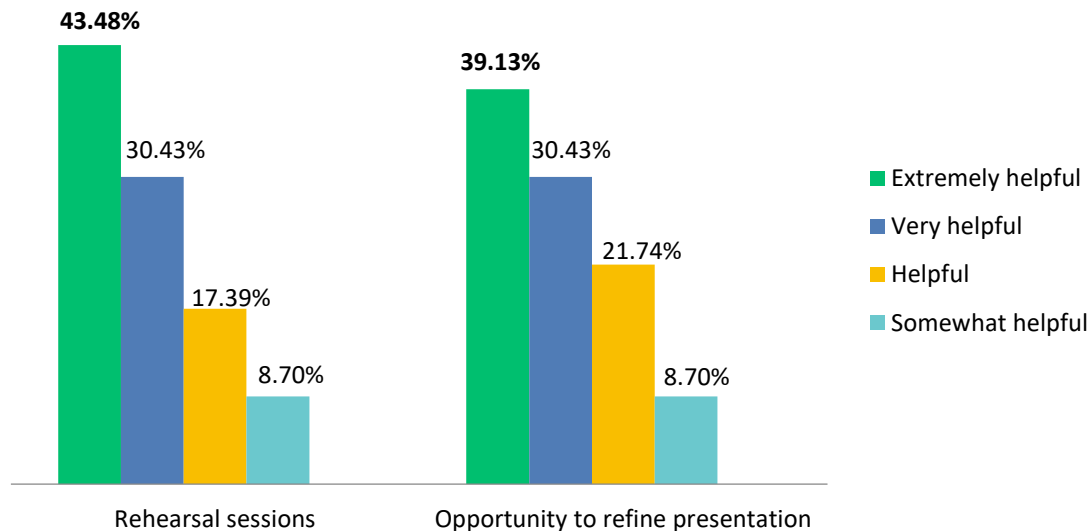
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RESPIRATORY DISEASE Young Investigators' Forum



“The rehearsal session with the faculty was extremely valuable and very unique to this conference. I appreciated having diverse faculty who could provide insight throughout the conference. This has been one of the best conferences I have attended.” -Young Investigator, 2019

Rehearsal Sessions/Mentoring Prior to Forum



>90% of attendees felt that the rehearsal session was helpful

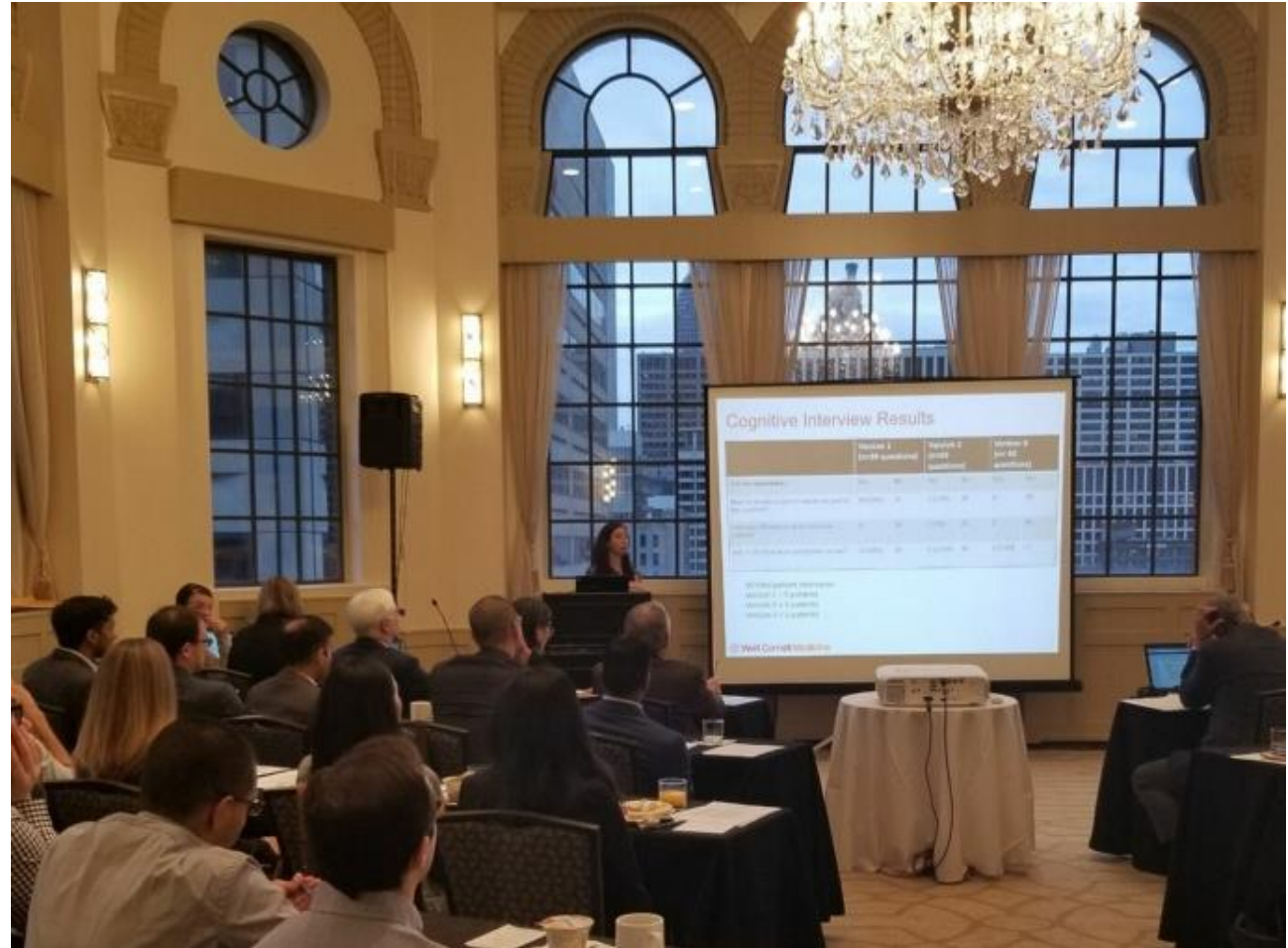
>90% of attendees felt that it was helpful to have an opportunity to refine their presentations from research advisors feedback

Learning Objectives

- Discuss new and emerging areas of respiratory research that offer new inroads to effective therapies and treatment
- Identify best practices for designing a research study and multidisciplinary research team that may improve on current approaches to respiratory research
- Evaluate the strengths and weaknesses of peer research presentations
- Incorporate peer/expert faculty feedback effectively to enhance research presentations
- Discuss key strategies for career development as a physician scientist
- Describe comprehensive process for securing grant support for research

15th Annual

RESPIRATORY DISEASE Young Investigators' Forum



Pictured: Young Investigator Presentation by Anita Oh, MD

List of Young Investigators

Michael Alexander, MD, Northwestern University

Comparative Multi-omic Analysis of Bronchoalveolar Lavage Immune Cells in Sarcoidosis

Kerri Aronson, MD, Weill Cornell Medical College

Development of a Disease-Specific Health Related Quality of Life Instrument for Patients with Chronic Hypersensitivity Pneumonitis

William Bain, MD, University of Pittsburgh

Increased alternative complement pathway function is associated with reduced mortality in critically ill patients with acute respiratory failure

Pavan K. Bhatraju, MD, MSc, University of Washington

Adults with cystic fibrosis and R117H-CFTR mutations exhibit higher angiotensin-1 plasma concentrations, a marker of endothelial stability, after short-term ivacaftor treatment

Christine M. Bojanowski, MD, Tulane University

Aberrant Immunity in Cystic Fibrosis as a Potential Therapy Target: Increased levels of IL22RA2 in Chronic Sinopulmonary Infection with Staphylococcus Aureus

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Raghu R. Chivukula, MD, PhD, Massachusetts General Hospital

Inactivating mutations in NEK10 cause a human short cilia Syndrome

Chinedu Ejike, MD, MPH, Johns Hopkins University

The contribution of individual and neighborhood factors to racial differences in COPD-related health outcomes in SPIROMICS

Anthony Esposito, MD, Brigham and Women's Hospital, Harvard Medical School

PAD4 Expression in Fibroblasts Promotes the Development of Pulmonary Fibrosis

Andrew Gangemi, MD, Temple University

Feasibility of Bedside Ultrasound to Determine Efficacy of Lung Volume Reduction by Endobronchial Valve Therapy

Chao He, MD, PhD, University of Alabama at Birmingham

Lactate Mediates Macrophage Metabolic Reprogramming in Pulmonary Fibrosis

Benjamin Henkle, MD, MPH, University of Minnesota

The presence of emphysema on chest imaging and mid-life cognition

Arun Jose, MD, University of Cincinnati

Anticoagulation in Pulmonary Arterial Hypertension: A Decision Analysis

List of Young Investigators

Or Kalchiem-Dekel, MD, National Institutes of Health
Apolipoprotein E Activates a TLR4/TAK1/I κ K β /NF- κ B/TPL2/JNK Signaling Pathway that Induces CXCL5 Secretion by Human Asthmatic Airway Epithelial Cells

Jeremy Katzen, MD, University of Pennsylvania School of Medicine
Murine Modeling of Distinct Surfactant Protein-C (SFTPC) Mutation Classes Reveal Convergent Pathways from Alveolar Type 2 Cell Quality Control Dysfunction to Lung Fibrosis

Tristan Kooistra, MD, Massachusetts General Hospital
Airway basal stem cell Notch signaling coordinates immune cell localization

Wassim W. Labaki, MD, MS, University of Michigan
Health status impact on mortality and lung function decline in smokers with and without airflow obstruction: an analysis of the COPDGene cohort

Stephanie LaBedz, MD, University of Illinois at Chicago
Feasibility of Screening Electronic Health Records to Identify Participants for a Multi-center Clinical Effectiveness Trial in COPD Author Block

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Kristina Montemayor, MD, MHS, Johns Hopkins University
Sex Differences in Treatment and Outcomes in CF Exacerbations

Luisa Morales-Nebreda, MD, Northwestern University
Age Determines the Tissue Protective Function of Regulatory T cells during Influenza A Virus-induced Lung Injury

Anita Oh, MD, University of California San Francisco
Relationship Between Smoking History and CT Measures of Occult Lung Disease in Smokers With Preserved Spirometry in SPIROMICS

Shravani Pasupneti, MD, Stanford University Medical Center
Endothelial HIF-2 α as a key endogenous mediator preventing emphysema

Lauren Roland, MD, University of California San Francisco
Diagnostic and Treatment Practices of Aspirin Exacerbated Respiratory Disease: A Longitudinal National Insurance Claims Database Analysis

Jason Sanders, MD, Brigham and Women's Hospital
The association of aging biomarkers, interstitial lung abnormalities, and mortality

List of Young Investigators

Aartik Sarma, MD, *University of California San Francisco*

Metatranscriptomic next generation sequencing identifies distinct subgroups of acute COPD exacerbations

Mark Snyder, MD, *University of Pittsburgh*

CD103+ lung tissue resident memory T cells represent an airway centered, clonally expanded subset of TRM with increased expression of transcription factors IRF4 and Blimp1

Robert Stretch, MD, *University of California Los Angeles*

Use of Machine Learning to Predict Non-Diagnostic Home Sleep Apnea Tests

Eleanor Valenzi, MD, *University of Pittsburgh*

Single-cell analysis reveals fibroblast heterogeneity and myofibroblasts in systemic-sclerosis-associated interstitial lung disease

Richard Wang, MD *University of California San Francisco*

In Malawian patients with suspected sepsis, lung ultrasound findings change with fluid resuscitation and predict impending hypoxemia

15th Annual

**RESPIRATORY DISEASE
Young Investigators' Forum**



Pictured at the Meet the Professor Lunch: Anthony Esposito, MD, Expert Faculty Neil Aggarwal, MD and Richard Wang, MD

Pre to Post Activity Evaluation

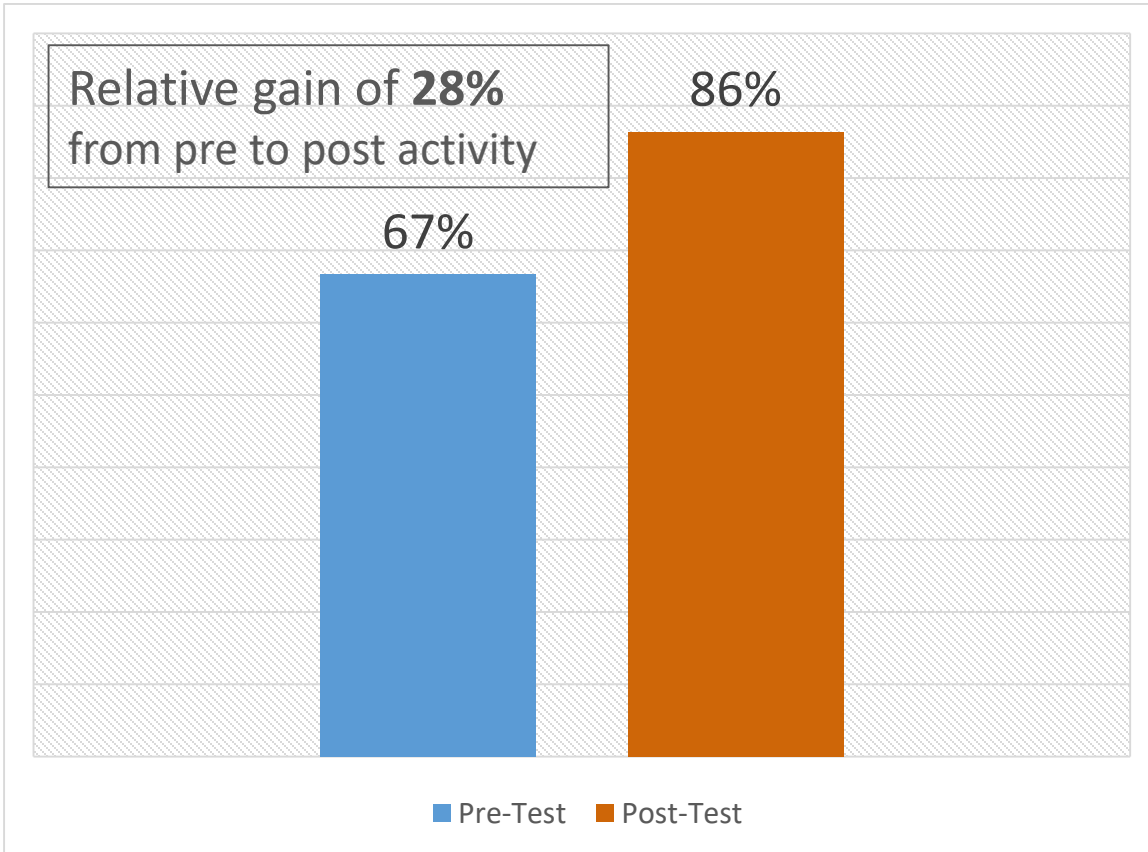
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Young Investigators' Forum



Young Investigators report being “Comfortable” or “Very Comfortable” with:

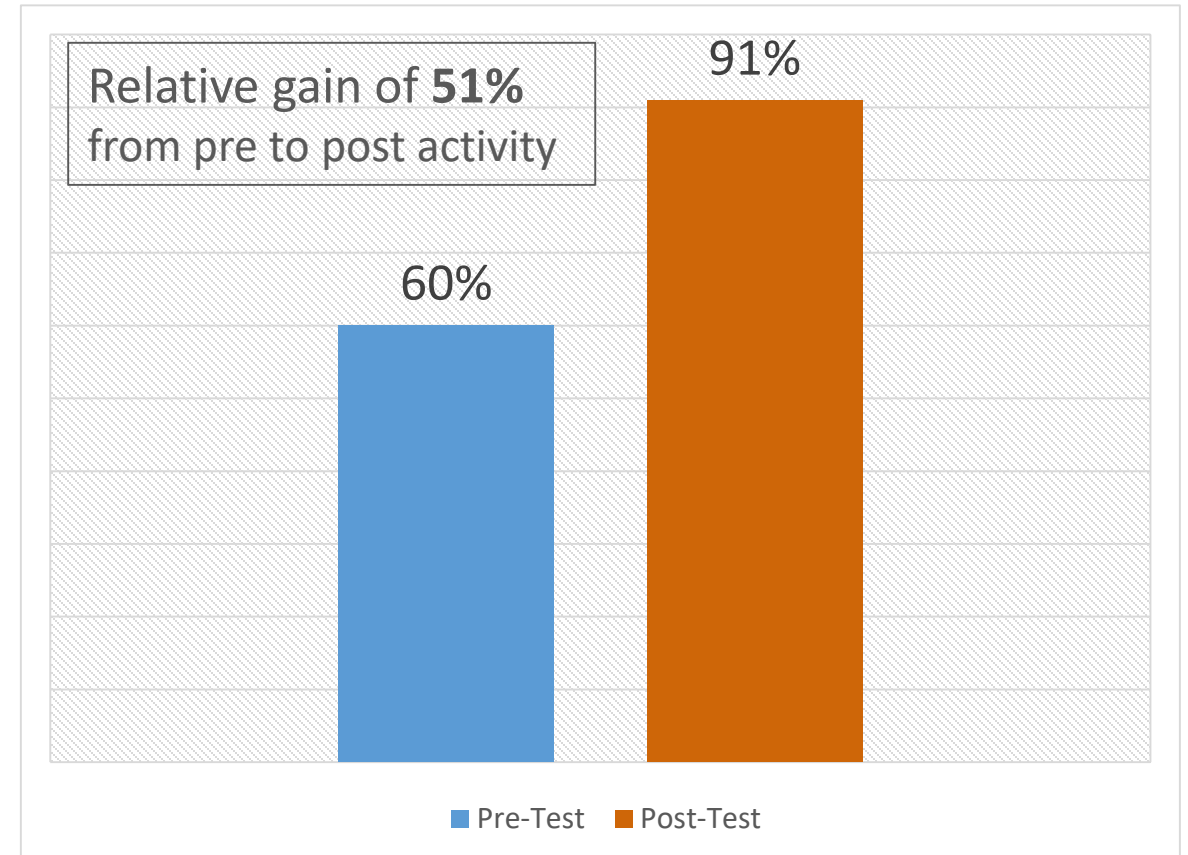
Presenting scientific research to expert faculty



Pre-test N=15

Post-test N=22

Confidently articulating strengths/weaknesses of my research



Pre to Post Activity Evaluation

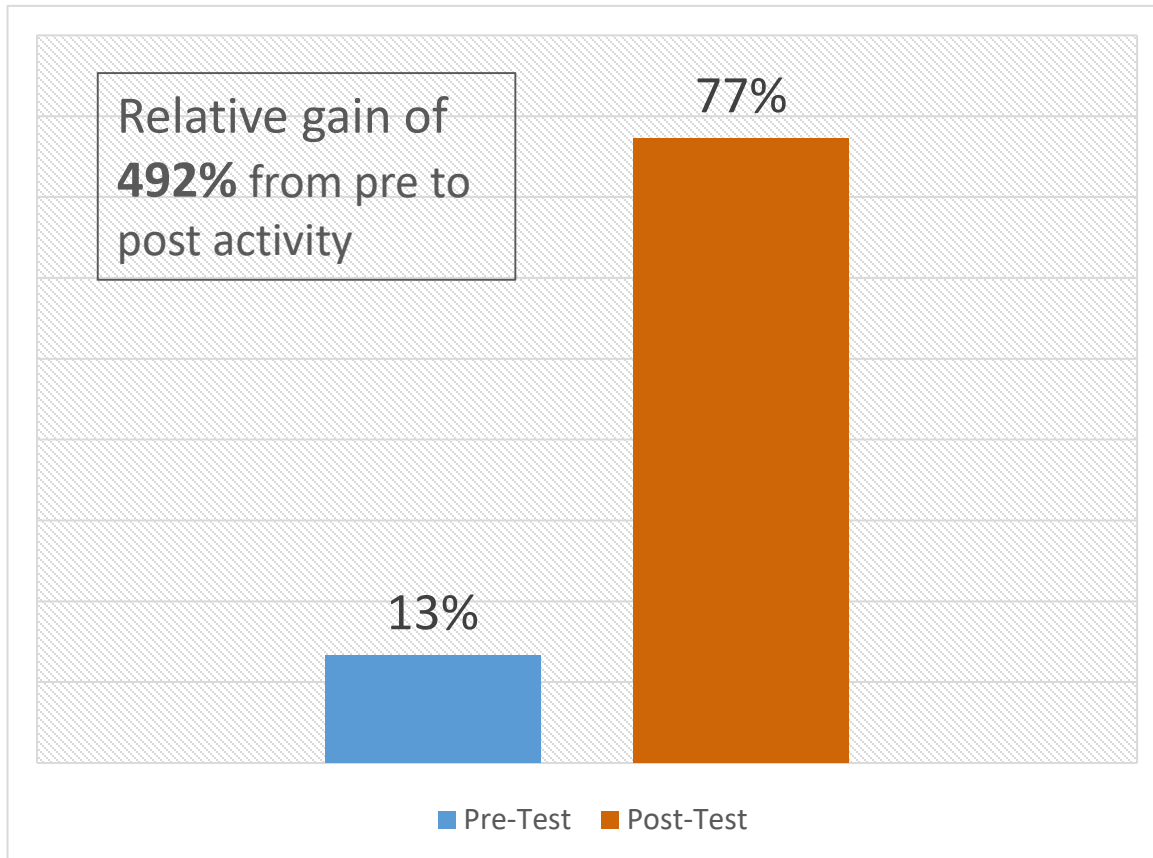
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Young Investigators' Forum



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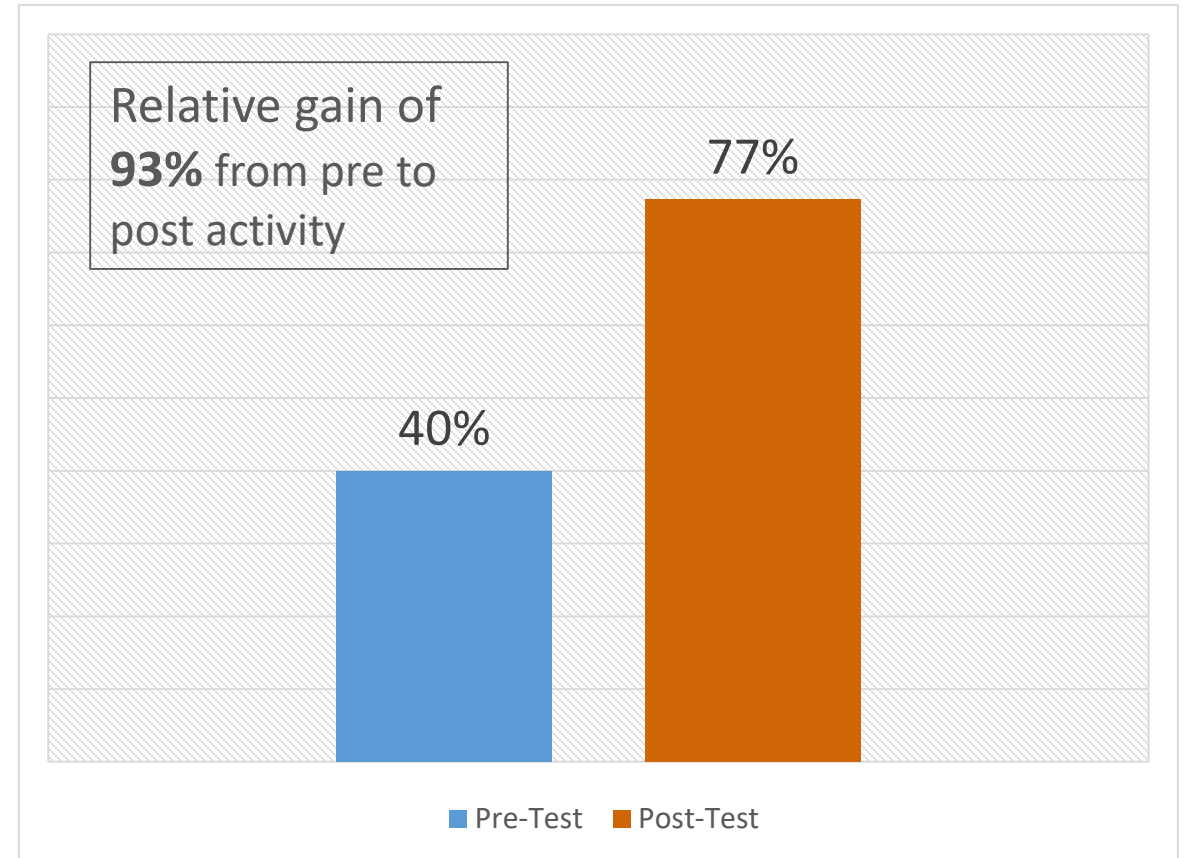
Networking with Peer Researchers



Pre-test N=15

Post-test N=22

Seeking input/advice from senior scientists in the field



Pre to Post Activity Evaluation

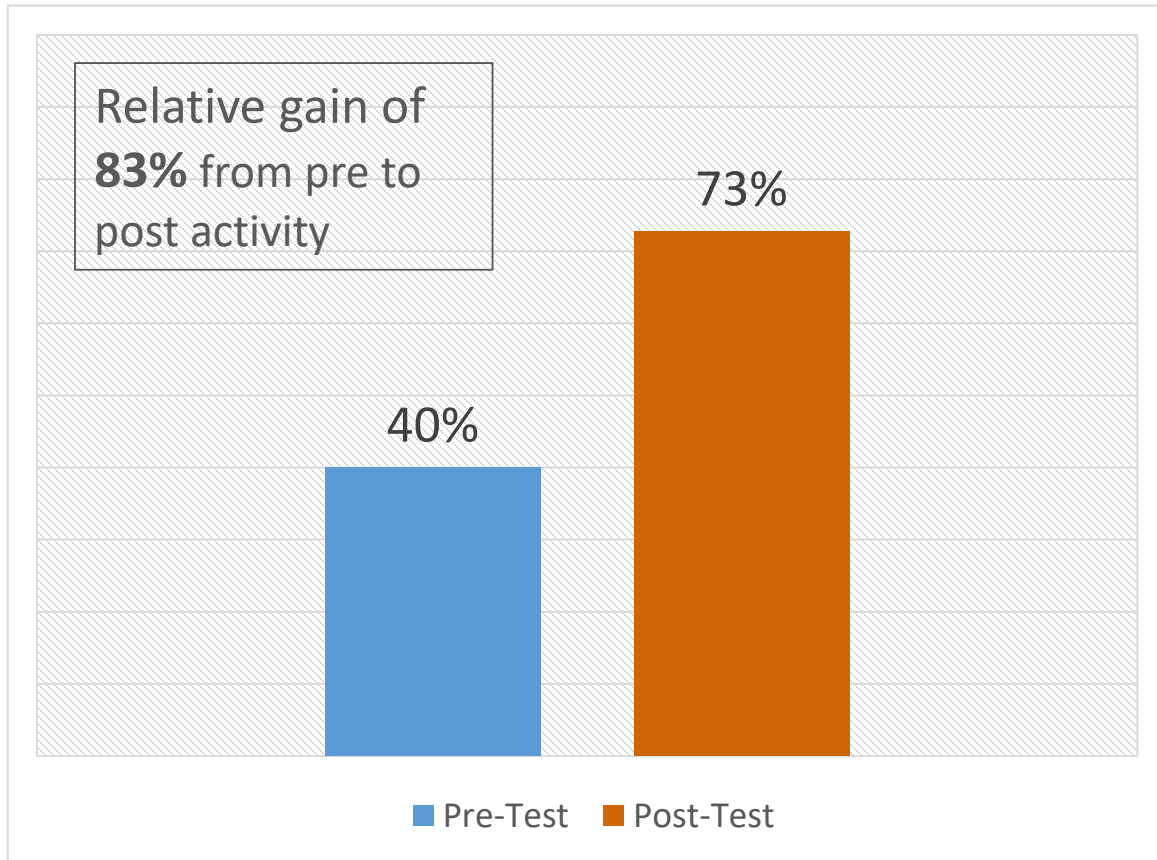
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Young Investigators' Forum



Young Investigators report being “Comfortable” or “Very Comfortable” with:

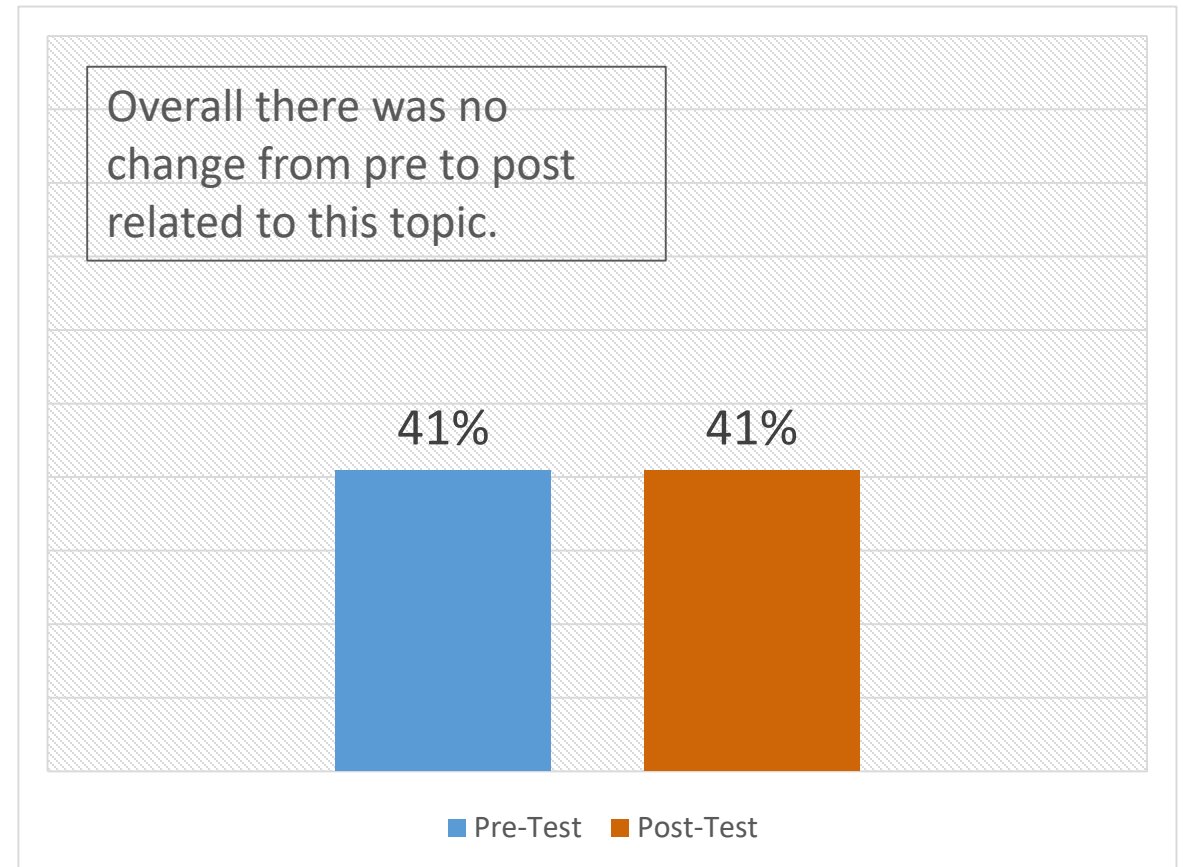
Conducting effective respiratory research to pursue a career in academic medicine



Pre-test N=15

Post-test N=22

Preparing, submitting and revising k-award grant applications



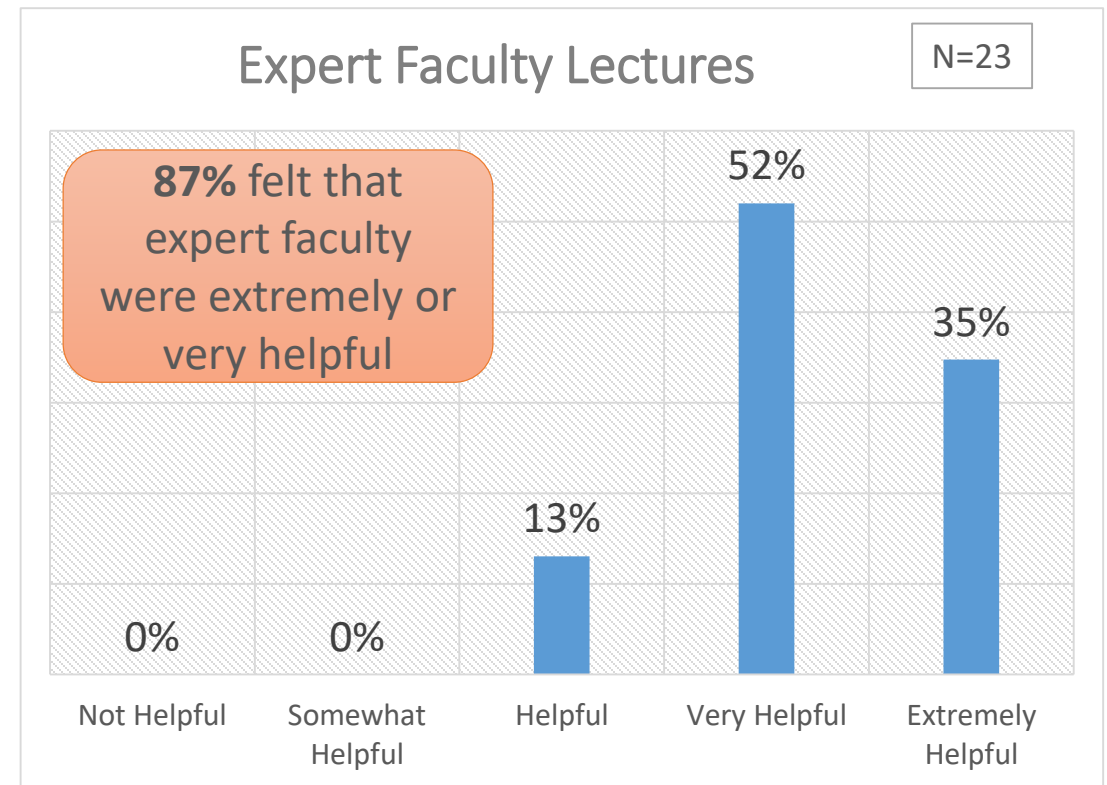
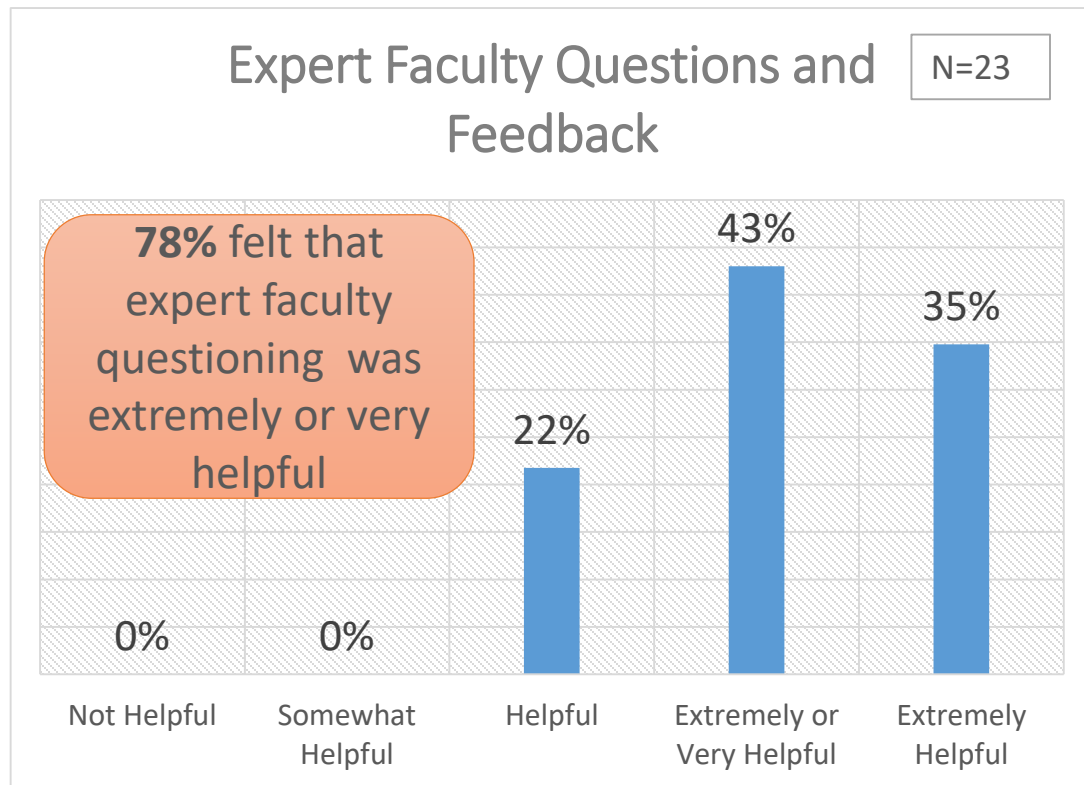
Evaluation - Expectations

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RESPIRATORY DISEASE
Young Investigators' Forum



Young investigators indicate the extent that the following components helped meet their expectations:



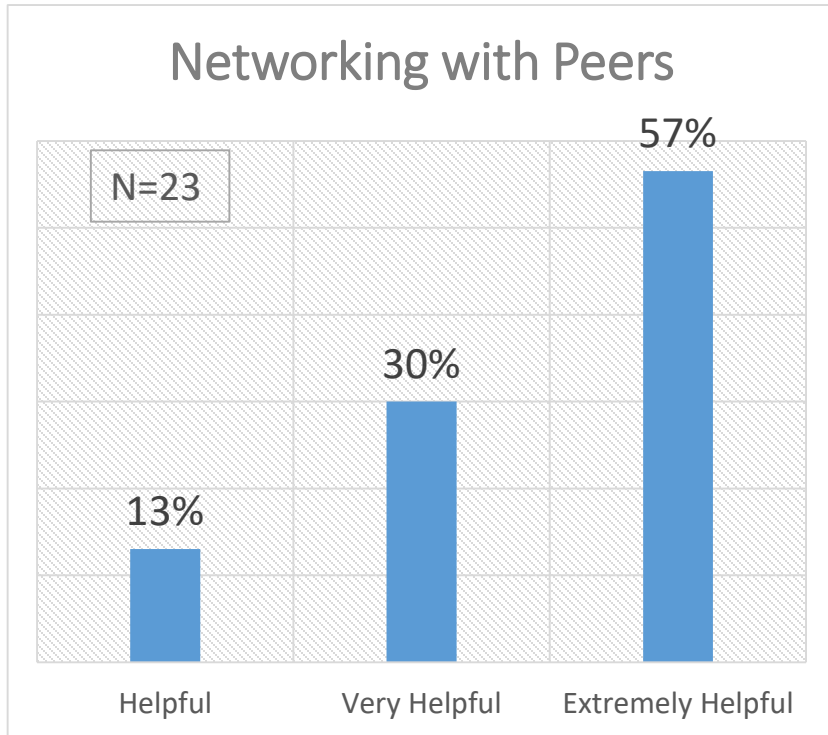
Evaluation - Expectations

15th Annual

RESPIRATORY DISEASE
Young Investigators' Forum



Young investigators indicate the extent that the following components helped meet their expectations:



“This activity has enhanced and strengthened my motivation to continue my pursuit of science! Also, I plan to keep in touch with many peers, of whom some of us are already planning to connect again at national conferences.”

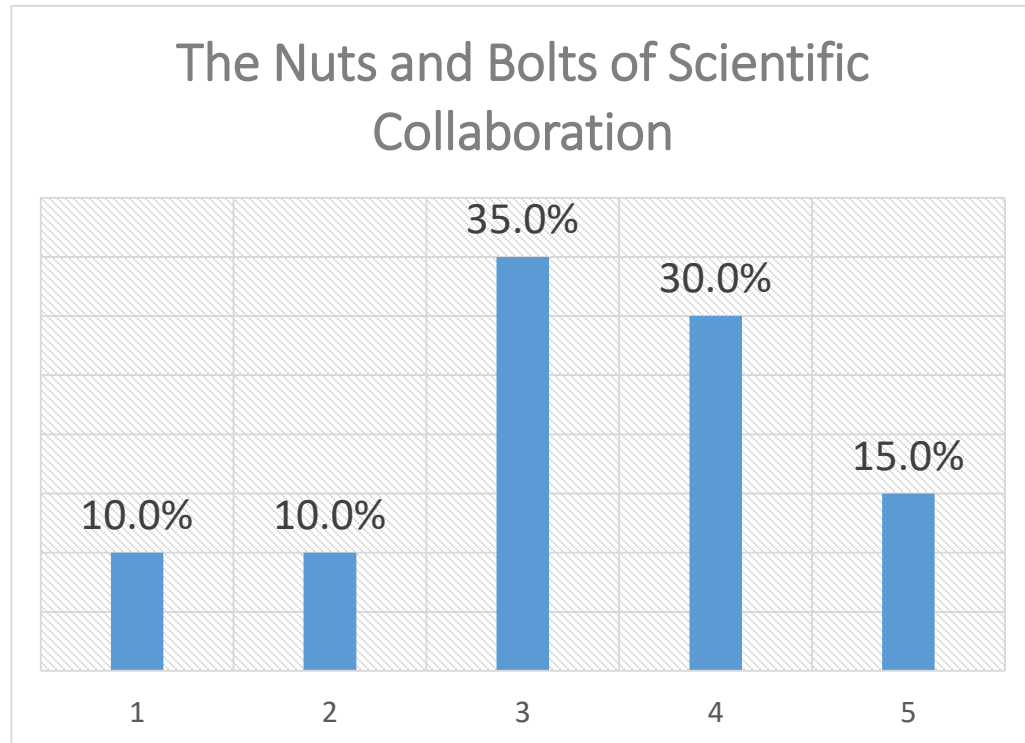
Evaluation – Expert Lectures

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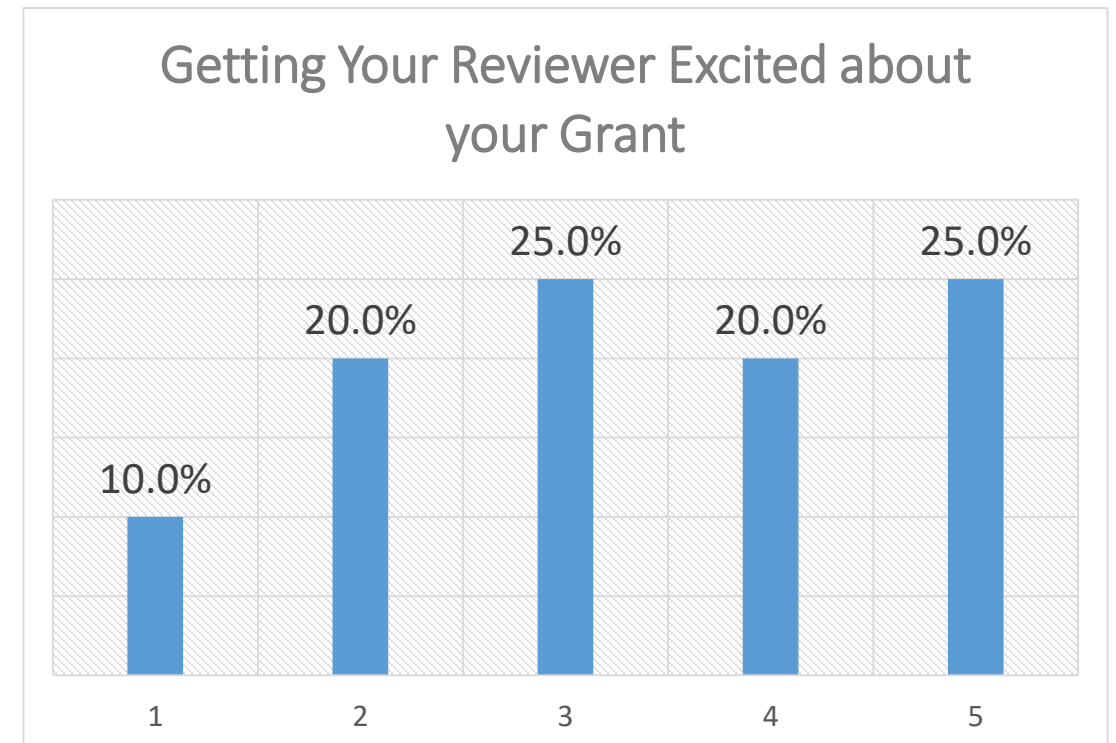
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Young Investigators rank expert faculty topics from most helpful (1) to least helpful (5)



N=22



N=22

Evaluation – Expert Lectures

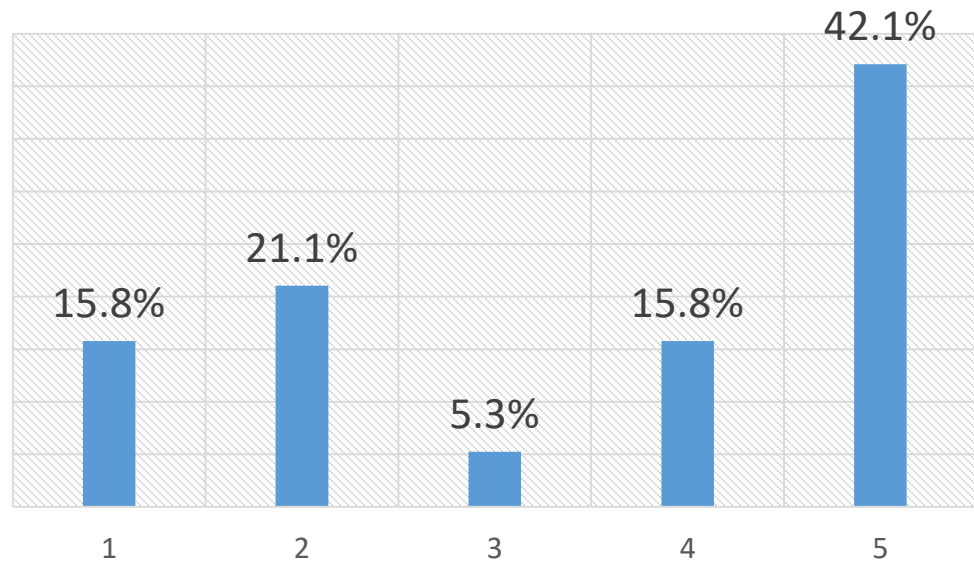
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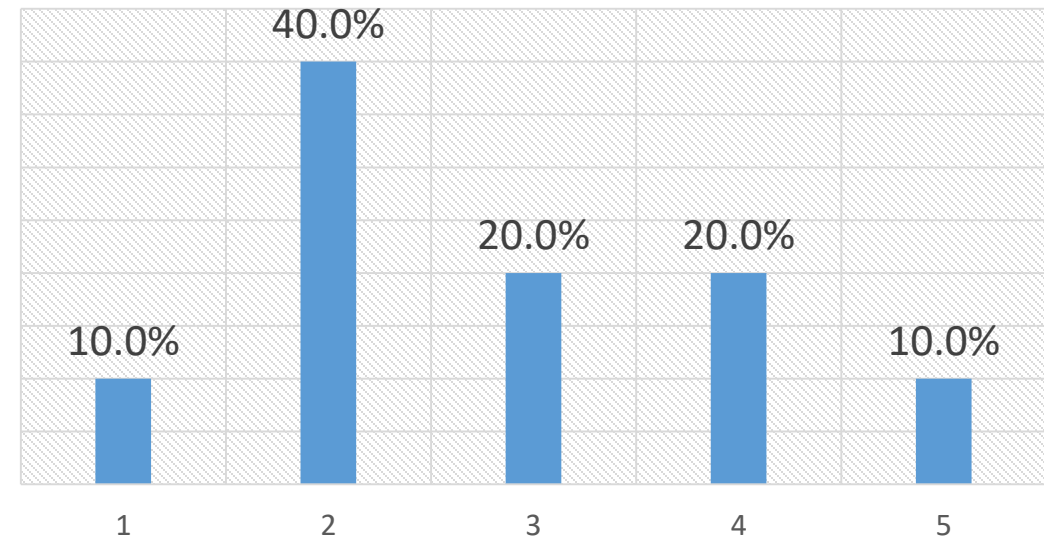
Young Investigators rank expert faculty topics from most helpful (1) to least helpful (5)

Negotiating, Work Life Balance and other Challenges along the way



N=22

Navigating National Level Engagement



N=22

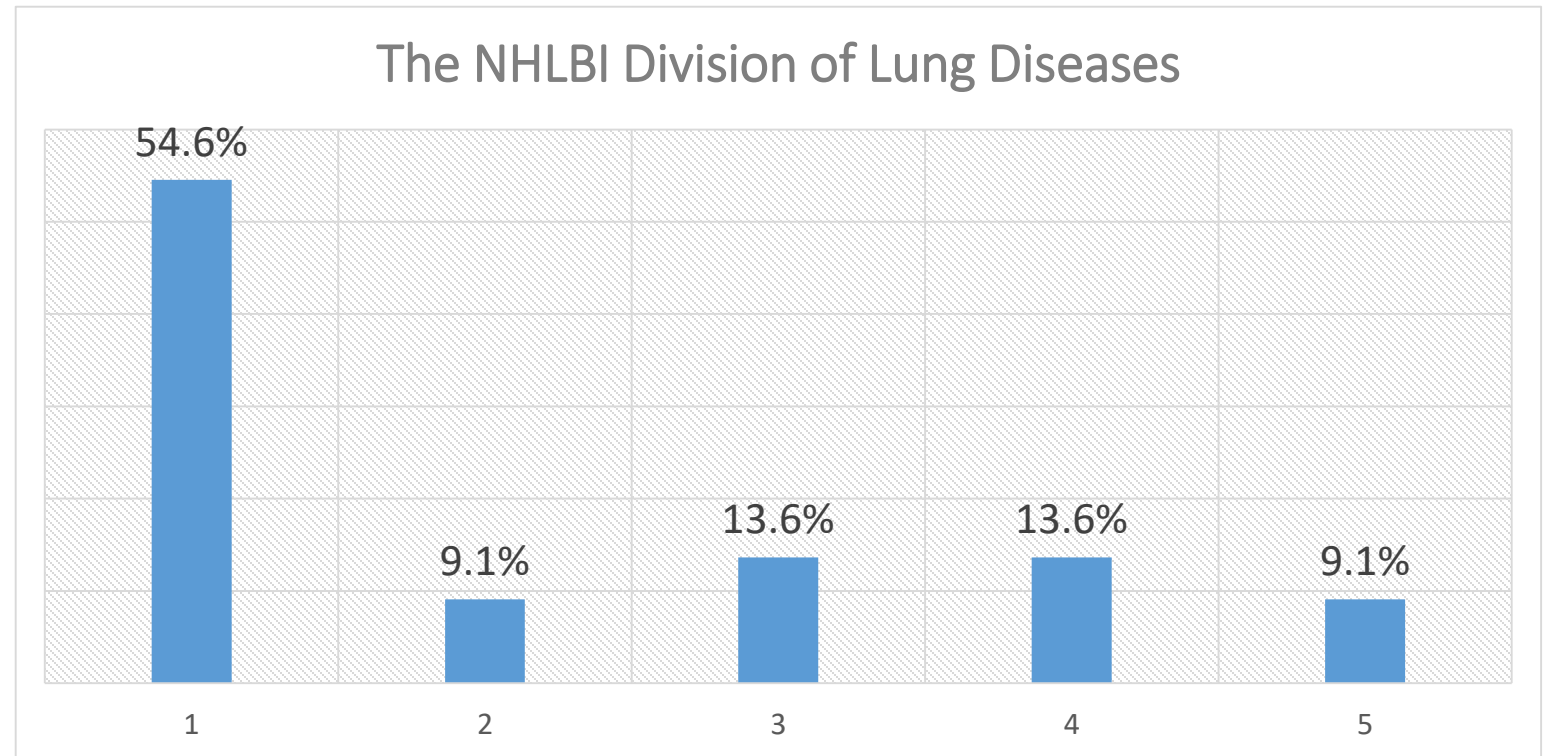
Evaluation – Expert Lectures

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Young Investigators rank expert faculty topics from most helpful (1) to least helpful (5)



This presentation was rated the highest among the expert faculty presentations.

N=22

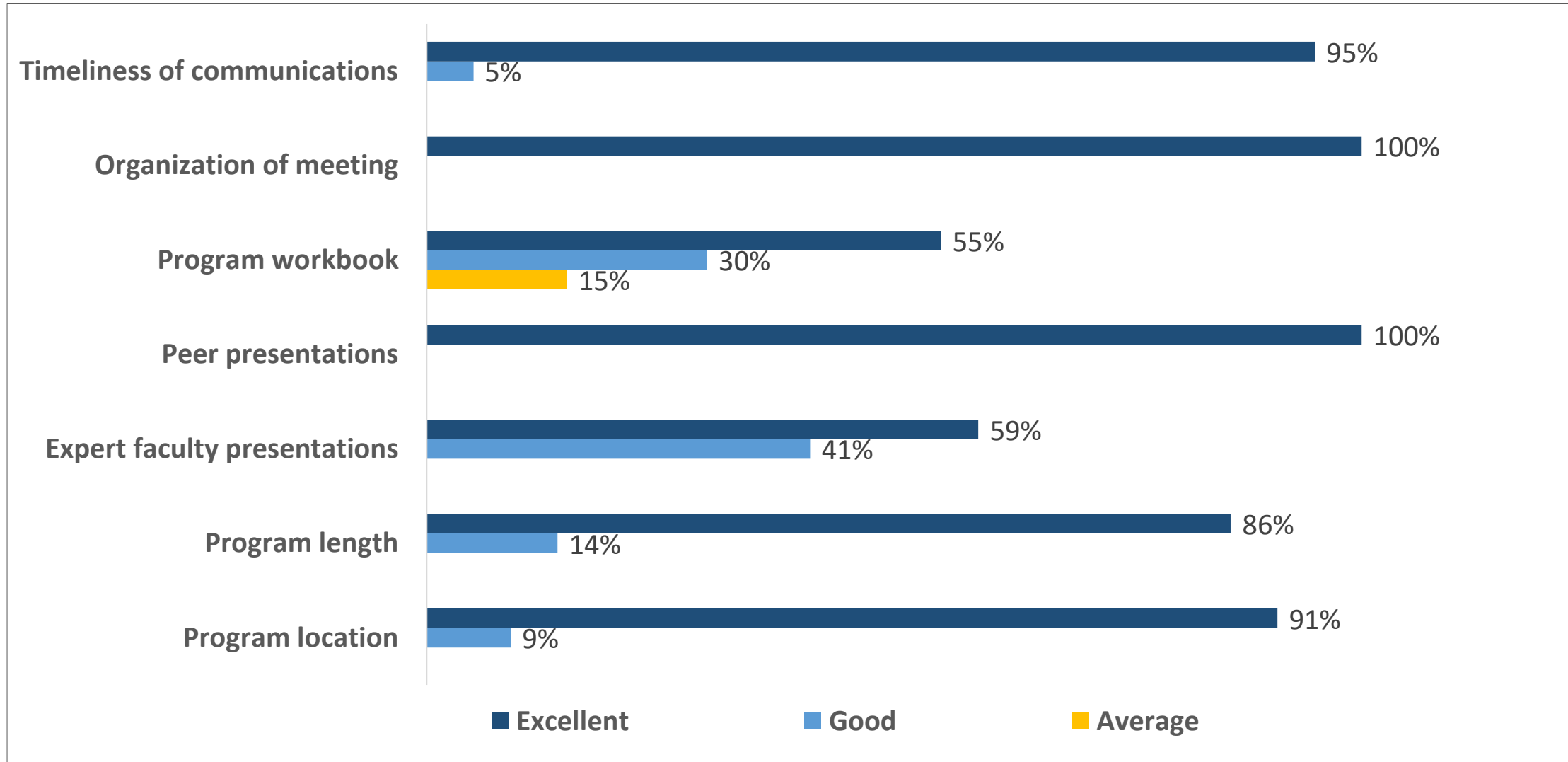
Evaluation – Overall Program

15th Annual

RESPIRATORY DISEASE Young Investigators' Forum



How would you rate:



N=22

Evaluation – Overall Program

15th Annual

RESPIRATORY DISEASE
Young Investigators' Forum



- **100%** reported the material was **presented in an objective manner and free of commercial bias**
- **100%** reported that the **educational content met the learning objectives**
- **100%** reported that the **expectations for this forum were met or exceeded**
- **95.66%** reported that the **activity positively influenced interest in pursuing a career as a physician scientist**
- **91.31%** reported that, in comparison to other professional development activities attended, **this activity was as helpful or more helpful toward meeting professional goals**
- **80.95%** reported they would **modify other abstract submissions based on feedback received during this activity**

“I am co-chairing a session next week at CHEST in which I will present a portion of my findings and will be able to add information based on feedback I received.”

- 2019 Young Investigator

N=23

Participant Take Aways

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RESPIRATORY DISEASE
Young Investigators' Forum



Young Investigators report key take-aways from this educational activity

“The rehearsal session with the faculty was extremely valuable and very unique to this conference. I appreciated having diverse faculty who could provide insight throughout the conference. This has been one of the best conferences I have attended.”

“Really impressed by both the faculty and presenters at this meeting.”

“Learning the opportunities to work with industry. Hearing from successful faculty of their tips to be successful but also balancing work and outside of work life. Getting to meet peers and hearing the work they are doing.”



Pictured: Expert Faculty Leila Kheirandish-Gozal, MD, Expert Faculty Enid Neptune, MD, Luisa Morales-Nebreda, MD and Or Kalchiem-Dekel, MD

Educational Needs:

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

“Apply for an LRP grant, improve my aims page.”

“Have a much better idea of what needs to be accomplished to advance career in the next year.”

“More confidence to pursue a career as a physician scientist, submitting K-award.”

“This activity has enhanced and strengthened my motivation to continue my pursuit of science! Also, I plan to keep in touch with many peers, of whom some of us are already planning to connect again at national conferences.”

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Pictured: Young Investigator Presentation by Arun Jose, MD

Educational Needs:

Young Investigators report a change or changes they may make in clinical practice:

“Anticoagulation management in patients with pulmonary hypertension.”

“I will be more attentive to concerns about quality of life when caring for my patients with chronic HP.”

“Increase utilization of lung ultrasound.”

“Will think more about aligning my clinical work with my research.”

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RESPIRATORY DISEASE Young Investigators' Forum



Pictured: Young Investigators at Awards Dinner (left to right) Shravani Pasupneti, MD, Andrew Gangemi, MD, Wassim Labaki, MD, Jason Sanders, MD, Raghu Chivukula, MD, PhD, Tristan Kooistra, MD, Eleanor Valenzi, MD and Kerri Aronson, MD



Accreditation

NJH is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The NJH Office of Professional Education produced and accredited this program and adhered to the updated ACCME guidelines.

NJH designated this activity for **11 AMA PRA Category 1 Credits™**.

