

2016

TWELFTH ANNUAL
Respiratory Disease
Young Investigators' Forum

Outcomes Summary Report

Live Educational Activity Series:

October 13-16, 2016

Grant 71125

Jointly provided by ARC and National Jewish Health

Program Title

71125

12th Annual Respiratory Disease Young Investigators' Forum

Educational Objectives

- Identifying new areas of respiratory research that offer new inroads to effective therapies
- Identifying the key components to be included in respiratory basic science and clinical research
- Discussing research study designs that may improve on current approaches to respiratory research
- Identifying strengths and weaknesses of the research presented and receiving constructive input on the studies presented by the presenting faculty
- Gaining a better understanding of “what it takes” to become an expert researcher in respiratory disease and to develop a career in academic medicine
- Gaining a clear understanding of the grant application and implementation process and obtaining uninterrupted time for research and financial support to carry out research

Intended Audience

Physicians in a respiratory disease training fellowship who see patients with diseases like asthma, COPD, and allergies.

Anticipated Reach

Anticipated: 30
Actual: 30 junior faculty/fellows; 9 expert faculty

**Modality/
Activities**

3-day meeting consisting of junior faculty/fellow presentations, expert faculty panel, and structured feedback

Program Information

Location: Warwick Allerton Hotel
701 N Michigan Avenue
Chicago, Illinois 60611

Date: October 13-16, 2016

Relevant Links: N/A

Outcomes Planning

Level 1; Level 2;
Level 3; Level 4

Pre-test, post-test, evaluation

Additional Information

The 12th 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 13-16, 2016, with participants reporting that the activity will not only help improve their practice but that they intend to change their practice as a result of the activity.

Executive Summary: Background

Background: ARCoalition LLC (ARC), in collaboration with National Jewish Health, developed an educational initiative targeted at pulmonary, allergy, and immunology junior faculty/fellows beginning careers in research. In its 12th year, the Annual Respiratory Disease Young Investigators' Forum was designed to enable young investigators 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.



Executive Summary: Program Design & Activity Details

Program Design: The live conference took place over three days and consisted of clinical and scientific junior faculty presentations, an expert faculty panel, and Q&A. It provided live feedback on research presentations and valuable tips on career growth as well as the opportunity for networking with leaders and up-and-coming respiratory researchers in a small setting.

The collaborative setting provided a platform for the exchange of ideas and cross collaborations, and has proven to lead to new ideas that further respiratory research and advancement in a young investigator's career. This conference is one of its kind as it provides “meet-the-professor” sessions that lead to one-on-one mentorship with the young investigator, which they value and find unique.

Accreditation: NJH is accredited with commendation 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 designates this activity for **10 AMA PRA Category 1 Credits™**.

Target Audience: The target audience for this educational initiative was pulmonary, allergy, and immunology junior faculty.

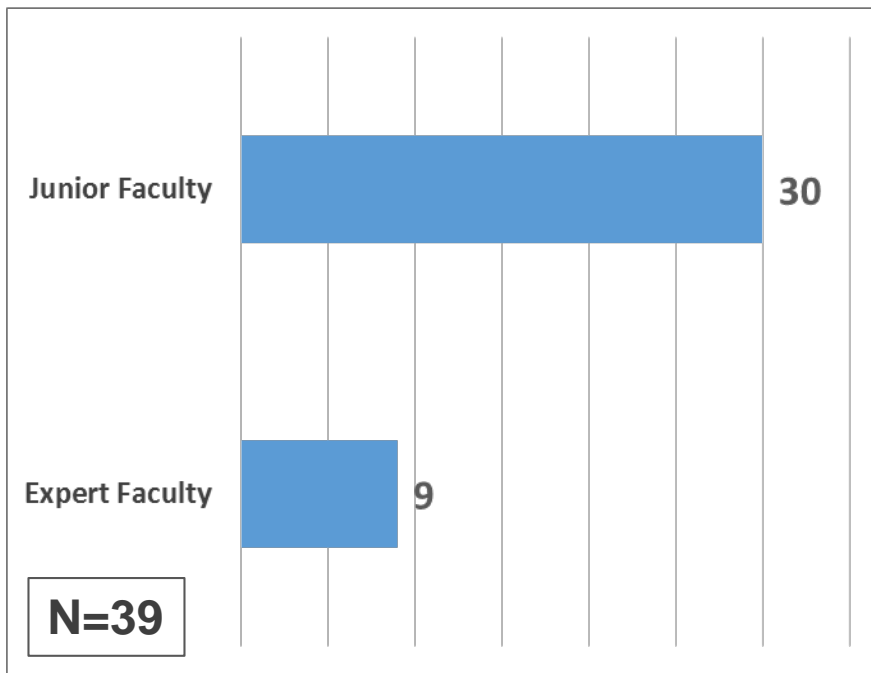
Executive Summary: Learning Objectives

Upon completion of this activity, participants will be able to:

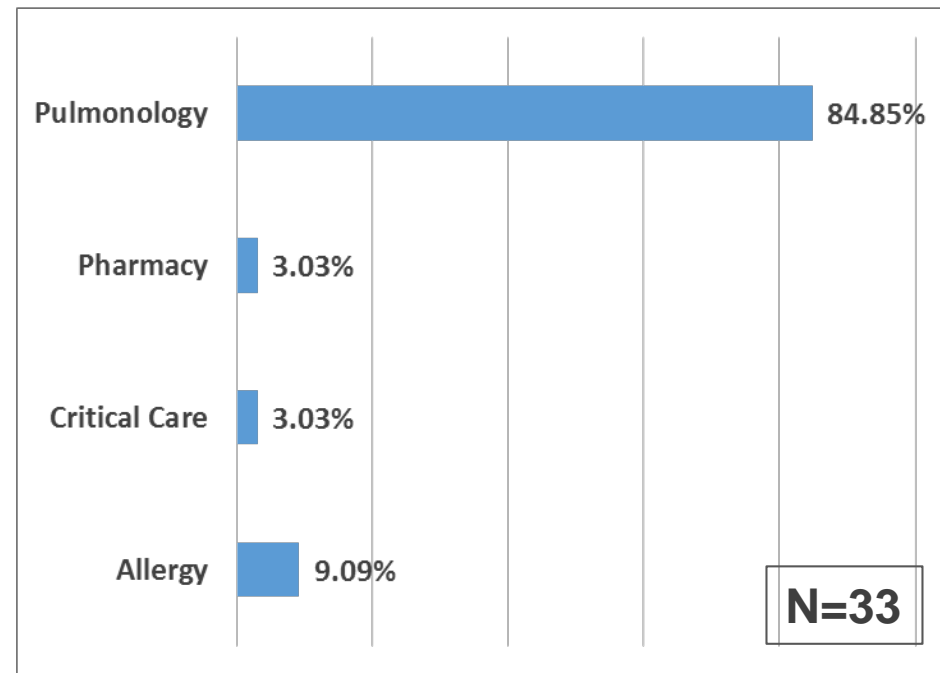
- Identify new areas of respiratory research that offer new inroads to effective therapies
- Identify the key components to be included in respiratory basic science and clinical research
- Discuss research study designs that may improve on current approaches to respiratory research
- Identify strengths and weaknesses of the research presented and receive constructive input on the studies presented by the presenting faculty
- Gain a better understanding of “what it takes” to become an expert researcher in respiratory disease and to develop a career in academic medicine
- Gain a clear understanding of the grant application and implementation process and obtain uninterrupted time for research and financial support to carry out research

Level 1 Outcomes: Participation

Attendee Breakdown

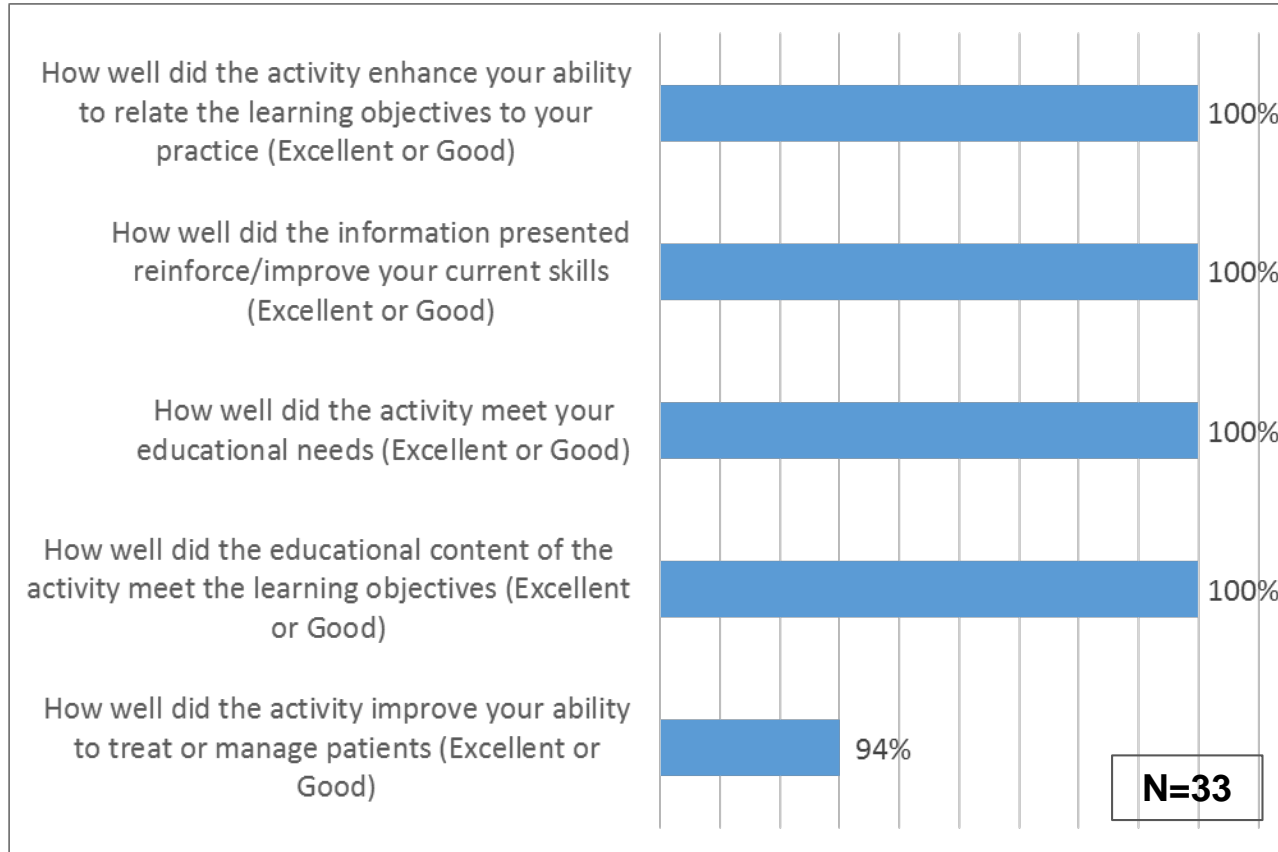


Specialty Breakdown



Level 2 & 3 Outcomes: Satisfaction & Learning

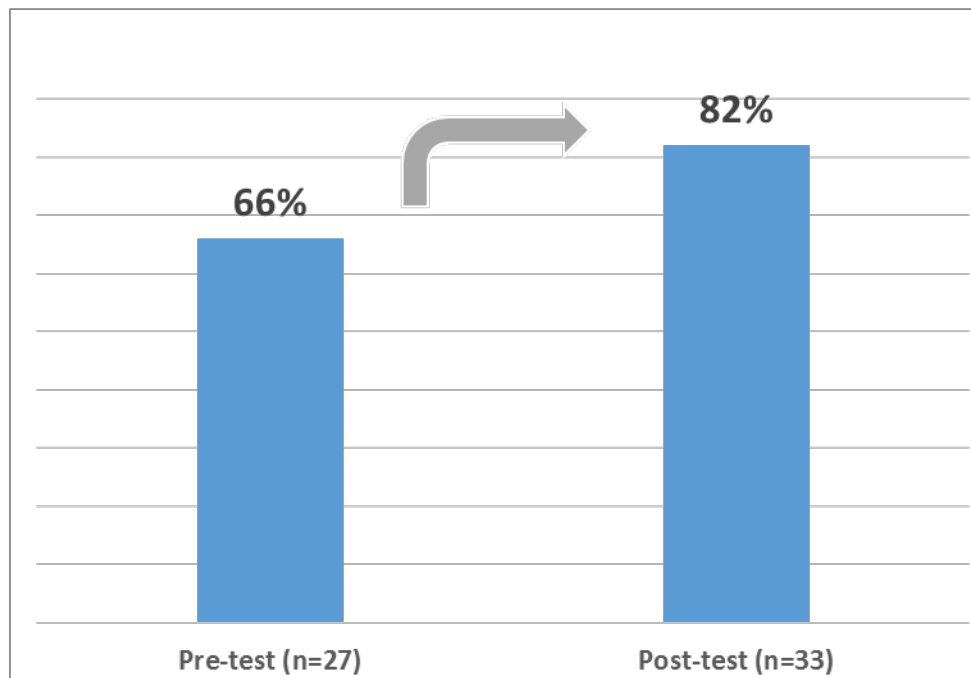
Analysis of Participants' Responses Related to Educational Needs



Level 3 & 4 Outcomes: Knowledge and Competence

Level 3 and 4 outcomes were measured by comparing participants' pre- and post-test answers. The attendees' responses to these questions demonstrated that **participants gained knowledge as a result of the activity.**

Overall, participants demonstrated an average **24% increase in declarative and procedural knowledge and competence** as a result of this activity.



Overall increase in knowledge: **24% from baseline to post-test.**

Pre/Post Test Comparison: Example Question

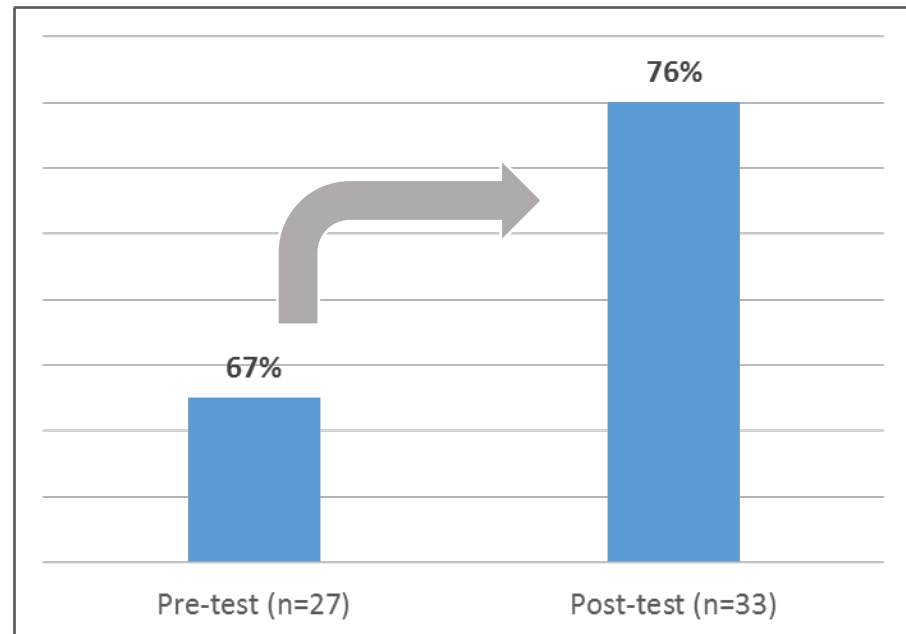
Question: Identification of small airway dysfunction in asthma is important for disease management. Which test may offer an alternate to methacholine challenge measurements?

Answer Choices:

- A. Total lung capacity CT
- B. Impulse oscillometry (IOS)***
- C. Alpha-tocopherol plasma concentrations
- D. Sputum neutrophil counts

***Best Answer: B (Impulse Oscillometry)**

**Increase in knowledge:
13% increase** from
baseline to post-test.



Pre/Post Test Comparison: Example Question

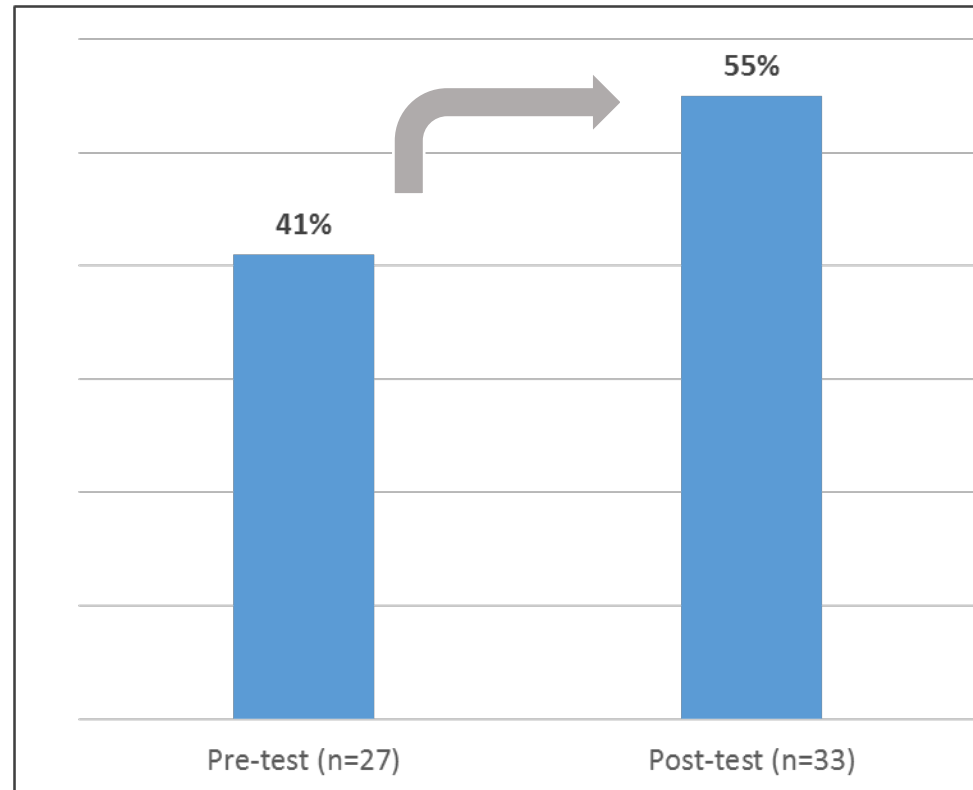
Question: Which one of the following statements regarding alveolar macrophages is NOT true?

Answer Choices:

- A. Resident and recruited alveolar macrophages are found in inflamed lungs
- B. Resident alveolar macrophages self-renew throughout life
- C. Recruited alveolar macrophages arise during embryogenesis***
- D. The roles of resident and recruited macrophages in lung repair are unknown

***Best Answer: C (Recruited alveolar macrophages arise during embryogenesis)**

**Increase in knowledge:
34% increase from
baseline to post-test.**

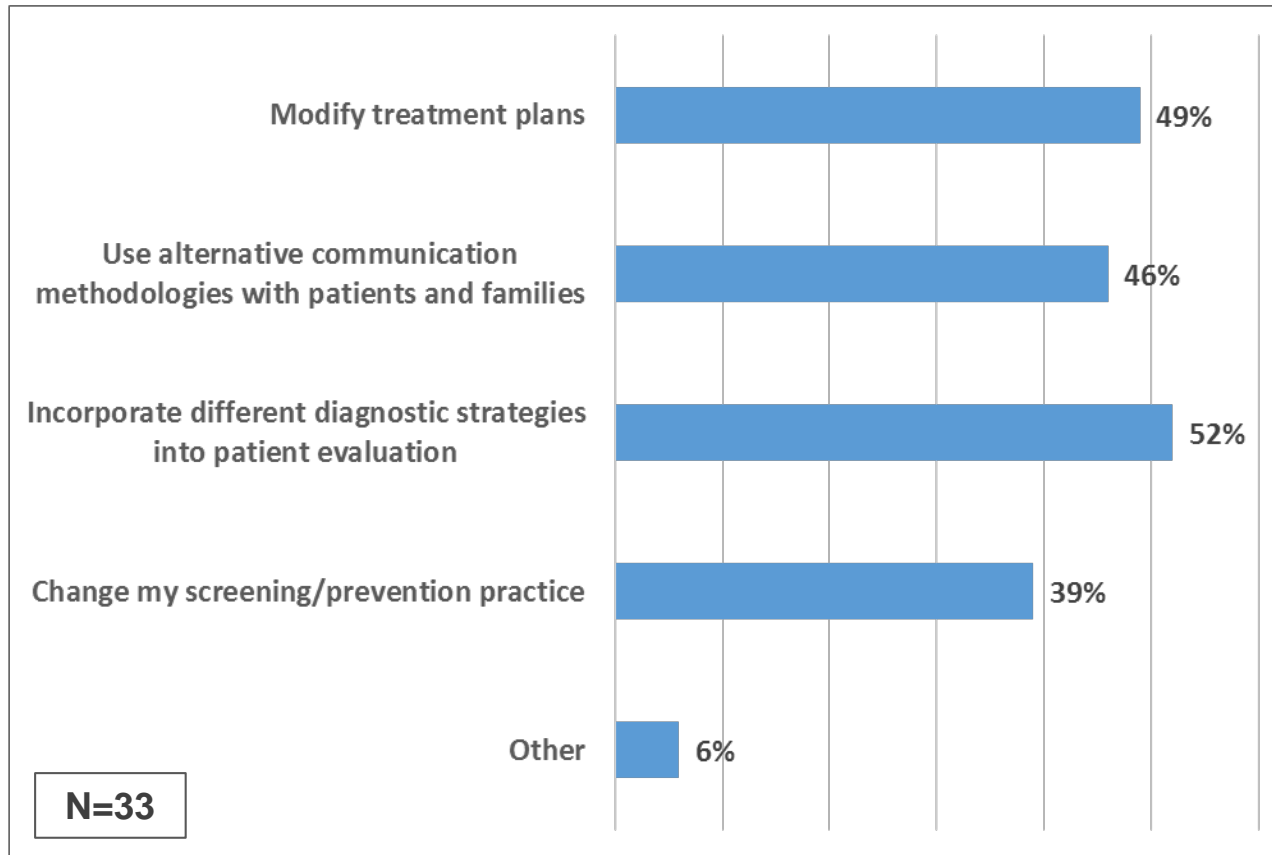


Evaluation Results

Attendee's responses (n=33) to evaluation questions demonstrated the following:

- 100%** are somewhat or extremely likely to make a **change to their practice**
- 94%** report that the activity provided information or **strategies for improving patient care**
- 100%** report that the material was presented in an **objective manner and free of commercial bias**
- 100%** report that the content presented was **evidence-based and clinically relevant**
- 100%** report that they would **recommend this program** to their colleagues

Changes that attendees plan to incorporate into practice as a result of the knowledge acquired during this activity:



Other: Improve health care practitioner communication; more cross-institution research collaboration

Key Learning Points

Attendee responses to the most important take-away from the activity:

- The approach and timing to establishing a research career
- Meeting other people to hear about ongoing research and networking across institutions
- Funding and research opportunities and need for career development plan
- Career advice from faculty panel
- The well laid out career development info, and the opportunity to meet people that are well positioned in the field
- Great opportunity for academic engagement with peers at the same stage of training
- Clarity on what it takes to be a successful physician scientist

Feedback from attendees regarding the value of the expert faculty panel:

- Excellent questions and commentary
- Excellent program with high value
- Excellent panel
- The panel was extremely helpful in getting feedback on the science presented as well as insight into the transition from fellow to junior faculty and establishing a research career
- Great faculty panel, really engaged with the presenters, did a great job with targeted and relevant questions/comments
- Excellent faculty presentations about a variety of topic important to developing a successful career as a physician scientist

Attendees expressed an interest in the following future presentation topics:

- Difficult-to-treat asthma and COPD
- How to publish in high impact journals
- A topic on transition from fellow to faculty
- Clinical educator track navigation

Based on the educational content delivered at The 12th Annual Respiratory Disease Young Investigators' Forum, participants report that they are not only likely to make a change to their practice but that the activity provided strategies for improving patient care. In addition, participants demonstrated that they gained declarative and procedural knowledge and competence as a result of this activity.

The 2017 meeting should take into account participants' requests for additional education in the topics of asthma and COPD, transitioning from fellow to faculty, publishing in high impact journals, and clinical education.