EDUCATION







Love for the 2017 Resident Boot Camp

The Resident Boot Camp was truly an amazing experience. The instructors were phenomenal. You can tell that the fellows and attendings who ran the sessions were very passionate about teaching and about their topic. Being taught by true experts in their field is the best way to 'level up' in that area. I feel truly honored to have been selected to be part of this resident Boot Camp. I hope that one day I am able to contribute to make this a phenomenal experience for other incoming fellows.

Overall, I thought the Boot Camp was really good and am amazed at all the work that goes into making this happen, from getting funding/sponsors, convincing amazing faculty/speakers to devote time to this, and the amount of coordination it takes to herd 160 people through such an array of sessions.

I think the Boot Camp was well organized and I really appreciate all of the effort that went into organizing and teaching. All of the faculty were good natured, engaging, and organized. I'm sure more people wish they could have this opportunity.

I think that I will be a more confident clinician on my first day of fellowship. The end-of-life care issue session was very interesting and very useful, and it gave practical tools for us to address the dying patient. I think that the session was perhaps the most useful for immediate application.

Quick Facts

- 160 incoming fellows attended the 2017 Boot Camp, all of whom had matched into a pulmonary, critical care or sleep fellowship program beginning July 1, 2017 (128 adult / 32 pediatrics)
- 160 attendees received a travel stipend from ATS to help cover the cost of travel to the Boot Camp
- Over 130 faculty teachers who volunteered their expertise, love and energy

Program Details

Background

Fellowship training in pulmonary and critical care medicine is a demanding endeavor. Depending on the training program, fellows may have as little as 18 clinical months in which to learn inpatient pulmonary, outpatient pulmonary, as well as critical care medicine. To meet this need, in 2014 the American Thoracic Society (ATS) Resident Boot Camp (RBC) was created by Laura Crotty Alexander, MD, and members of the ATS Training Committee. The course was created to better equip pulmonary and critical care incoming fellows with the information and skills needed to flourish during day one of fellowship.

Curriculum Design

The RBC course includes didactic presentation, small breakout session, and hands-on skill-base workshops. To facilitate near-peer learning, as well as to train the next generation of educators, most breakout and hands-on sessions are taught by senior and junior faculty known to be experts in the field, and paired with fellows serving as apprentice educators. The fellows led these sessions with assistance and direction provided by the faculty co-teacher. In 2015, the RBC was expanded to include a pediatric curriculum.

Course Objectives

The goal of the RBC course is to reduce the early training burden on individual fellowship programs by providing incoming fellows with the key clinical and procedural skills needed to begin their clinical training with confidence. The course provided hands-on training of skills that they can use day-one of fellowship with an emphasis on:

- Airway management including endotracheal intubation
- Fiberoptic bronchoscopy and accompanying procedures
- · Noninvasive and invasive ventilator management
- Thoracentesis
- · Calibration and operation of hemodynamic recording systems
- Supervision of the technical aspects of pulmonary function testing
- Insertion and management of chest tubes
- · Proficiency in use of ultrasound



Planning Group

- Brendan Clark, MD, MS, Course Chair (Adult Track)
- Edith Zemanick, MD, Course Chair (Pediatric Track)
- Geoffrey Connors, MD
- Laura Crotty Alexander, MD
- Patricia A. Kritek, MD, EdM
- Kristin Burkart, MD, MsC
- Jennifer Ingram, PhD
- Samir Makani, MD

Lectures & Small Groups



Small Groups

PFT Interpretation

Rebecca Keith, MD Ni-Cheng Liang, MD Tristan Huie, MD Maryl Kreider, MD Roozbeh Sharif, MD David Chu, MD

Critical Care Hemodynamic Waveforms

Trish Kritek, MD, EdM Nirav Shah, MD Mark Kearns, MD Barb LeVarge, MD

Practical End of Life Care

Geoff Connors, MD Kristin Burkart, MD, MSc Carolyn D'Ambrosio, MD Jared Chiarchiaro, MD Michelle Sharp, MD Shari Brosnahan, MD

Pragmatics of Pulmonary Medicine

Jennifer Possick, MD Isabel Pedraza, MD Matt Miles, MD Susan Mathai, MD Bilal Jalil, MD Rishi Mehta, MD

Lectures

Pulmonary Physiology Courtney Broaddus, MD

Top Pulmonary Consults Jennifer McCallister, MD

The Chest CT:

What Pulmonary Fellow **Needs to Know**

Jonathan Chung, MD

A Primer for the **Pulmonary Clinic** James Beck, MD

Inpatient Emergencies / How to Run a Code

Tisha Wang, MD

Top ICU Emergencies Andrew Luks, MD

Hands on Workshop Bronchoscopy 101 & Bronchoscopy for Hotshots

I feel more empowered to use ultrasound on my patients and feel more comfortable with the bronchoscope.



Bronchoscopy 101 Faculty

Samir Makani, MD
Oleg Epelbaum, MD
Christine Campbell Reardon, MD
Neil Aggarwal, MD
Emily Brigham, MD
Jeremy Richards, MD
Stella Hines, MD
Jessica Wang Memoli, MD
Luke Seaburg, MD
Mani Latifi, MD

Bronchoscopy for Hotshots Faculty

Samir Makani, MD Rosemary Adamson, MD Ali Musani, MD James Knepler, MD Javier Diaz-Mendoza, MD David Hsia, MD Ganesh Krishna, MD Gaetane Michaud, MD Meghan Ramsey, MD Eric Seeley, MD

Hands on Workshop

Airway 101 & Difficult Airway Management

When the Difficult Airway station was really great because never before have I had the opportunity to attempt all the different ways of securing an airway in a no-stakes situation. But after today, I feel that if I have such a situation on my first day of fellowship I can approach it with more confidence and with actual tools to handle the situation (especially loved the critical airway card).



Airway 101 Faculty

Dan Jamieson, MD Matt Drake, MD Alison Clay, MD Scott Wolf, MD Meshell Johnson, MD Susan Wilcox, MD Abigail Lara, MD Geneva Tatem, MD Zafia Anklesaria, MD Carleen Risaliti, MD

Difficult Airway Management Faculty

Dan Jamieson, MD Matt Drake, MD Shazia Jamil, MD Joshua Sill, MD Uma Munnur, MD Kathyrn Robinette, MD Graham Carlos, MD Rebecca Krochmal, MD Laura Hinkle, MD Bridget Graney, MD

Hands on Workshop Mechanical Ventilation & Pleural Procedures

The Boot Camp did a great job of teaching fellows how to begin our approach to both routine pulmonary consults and ICU emergencies. It provided me with the confidence to show up on day one and assume the role of fellow.



Mechanical Ventilation Faculty

Ren Ashton, MD
Neal Chaisson, MD
Nitin Seam, MD
Tyler Albert, MD
Dan Crouch, MD
Talal Dahhan, MD
Andy Goodwin, MD
Lekshmi Santhosh, MD
Morgan Soffler, MD

Pleaural Procedures Faculty

Amit Parulekar, MD Ken Lyn-Kew, MD Bill Beninati, MD Phillip Lamberty, MD Shalinee Chawla, MD Nicholas Stollenwork, MD Sunita Kumar, MD Oleksandr Pistun, MD Anna Brady, MD Cameron Baston, MD

Hands on Workshop Cardiac Ultrasound & Lung and Pleural Ultrasound

I feel a base level of competence in ultrasound assessment and it put me in touch with other people going through the same transition as I am in.



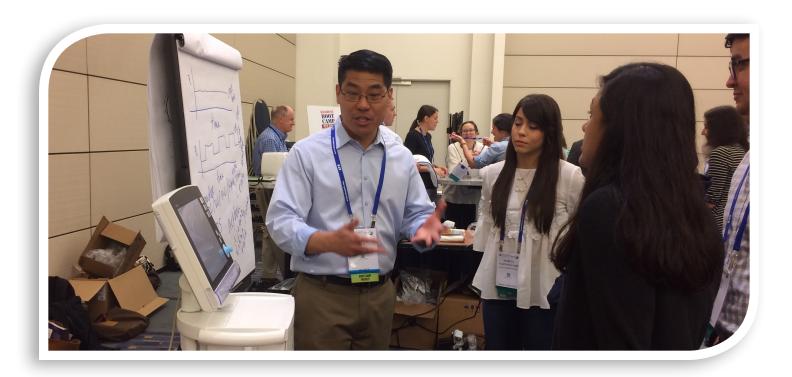
Cardiac Ultrasound Faculty

Lydia Chang, MD
Antonio Gomez, MD
Jakob McSparron, MD
Paul Mohabir, MD
Krittika Teerapuncharoen, MD
Frank Schembri, MD
Elizabeth Awerbuch, MD
Ashley Menne, MD
Briana Short, MD
Brenda Marsh, MD

Lung and Pleural Ultrasound Faculty

Laura Crotty Alexander, MD Danai Khemasuwan, MD Daniel Sweeney, MD Pierre Kory, MD Molly Hayes, MD Ajeet Vinayak, MD Subani Chandra, MD Houssein Youness, MD Stephanie Maximous, MD Joe Moore, MD

Lectures & Small Group Teaching



Small Groups

Approach to Acute and Chronic Respiratory Failure

Ben Nelson, MD Lauren Camarda, MD

Keys to Success Stephanie Davis, MD Ben Nelson, MD Deb Liptzin, MD Case Studies in Sleep Medicine Ignatio Tapia, MD Stephen Hawkins, MD

Pulmonary Physiology Case Studies Mai Elmallah, MD Deb Liptzin, MD Beth Allen, MD

Lectures

Pulmonary Physiology in Infants and Children Jordan Rittig, MD

Cystic Fibrosis Edith Zemanick, MD

Top 5 Pediatric Pulmonary Consults

Dan Lesser, MD

Pediatric Chest Imaging Don Hayes, MD

Top 5 Pediatric Pulmonary EmergenciesBarbara Chini, MD

Mechanical Ventilation and Cardiopulmonary Interactions Christopher Baker, MD

Hands on Workshop Airway 101 & Bronchoscopy 101

The Boot Camp gave me more confidence in ultrasound and airway management, which are crucial in situations where I may not be able to wait for backup in an emergency. It was nice to see the proficiency levels of other residents from other programs to know what my relative strengths and weaknesses are compared to my peers. It was also nice to handle a bronchoscope and the advanced airway equipment before I would be using them on a patient.



Airway 101 Faculty

Matt Alder, MD Ryan Good, MD

Broncoscopy 101 Faculty

Dan Benscoter, MD Emily DeBoer, MD John Brewington, MD

Non Invasive Position Pressure Ventilation (NIPPV) and PFTs

I feel so much more confident about starting fellowship. These topics were awesome, the faculty were great teachers. I had a lot of fun and was glad to see people I had met on the interview trail.



NIPPV Faculty

Ignatio Tapia, MD Stephen Hawkins, MD Nick Friedman, MD

PFTs Faculty

Stephanie Davis, MD Margaret Rosenfeld, MD

Hands on Workshop Line Placement & ECMO

All of my friends going into other specialties expressed the same thought, "I wish I had something like that. This is why PCCM is the best, an epmphasis on learning and innovation."



Line Placement Faculty

Ryan Good, MD

ECMO Faculty

Nathan Dean, MD Matt Alder, MD Erin Powell, MD

Hands on Workshop Mechanical Ventilation and Airway Clearance

This was one of the best sessions ATS has to offer. Please continue this Resident Boot Camp.



MV Faculty

Eric Zee, MD Jordan Rittig, MD

Airway Clearance Faculty

Sharon McGrath-Morrow, MD Lindsay Caverly, MD Nick Friedman, MD

Thank You to our Supporters

The 2017 ATS Resident Boot Camp was supported by in-kind grants from:

Ambu, BD, Cook Medical, ERBE USA, Inc.,
FUJIFILM Sonosite, Inc., Getinge, Hill-Rom,
Micro Direct, Inc., Monaghan Medical Corporation,
Olympus Corporation of the Americas,
Philips Respironics, ResMed,
Smiths Medical, Teleflex, Verathon, Vyaire



Congratulations to the 2017 Boot Camp Class!



ATS 2018 Resident Boot Camp



If you or a colleague would like to attend the 2018 ATS Resident Boot Camp, which is scheduled for Friday, May 18 and Saturday, May 19, 2018, in San Diego, please send an email to Lauren Lynch, ATS Staff the Resident Boot Camp, at **Ilynch@thoracic.org**

Registration will open in December 2017.

If you are interested in teaching at the 2018 ATS Resident Boot Camp course, please send an email to Geoffrey Connors, MD, course chair at: bootcamp@thoracic.org



