New Fellows for 2015 - 2016
A new class of fellows will be joining the division on July 1. Join us in welcoming them to the division! The new fellows are:

Jonathan Casey, MD
Pulmonary/CCM Fellow
Med School: Louisville
Residency: Brigham & Women’s

Michael Derrick, MD
Allergy Fellow
Med School: ETSU
Residency: Vanderbilt

Sarah Garon, MD
Allergy Fellow
Med School: Sackler
Residency: Jacobi Medical Center

Steve Halliday, MD
Pulmonary/CCM Fellow
Med School: UT, San Antonio
Residency: Vanderbilt

Eric Kerchberger, MD
Pulmonary/CCM Fellow
Med School: Emory
Residency: NY Presbyterian (Columbia Campus)

Christopher Merrick, MD
Pulmonary/CCM Fellow
Med School: Univ. of Arkansas
Residency: Duke

Christina Ortiz, MD
Allergy Fellow
Med School: E. Virginia
Residency: Univ. of Virginia
(Will begin January 1)

Congratulations to the Graduating Fellows!
Parties to honor the fellowship class will be held on Jun 23 (Pulmonary, 5:30 at The Bound’ry) and Jun 26 (Allergy, 5:00, Maggiano’s). Join us in congratulating:

Benjamin Ferrell, MD
will be joining The Nashville Medical Group at St Thomas Midtown

Kali Gerace, MD will be joining Allergy Partners in Lexington, KY

Raj Keriwala, MD, MPH
will be joining Pulmonary and Critical Care Consultants of Austin, in Austin TX

Yasmin Khan, MD will join the Pediatric Allergy faculty at Vanderbilt as an Asstistant Professor

Jon Kropski, MD will join the division faculty as an Asstistant Professor. Jon is the recipient of multiple grants, too numerous to list here.

Ciara Shaver, MD, PhD
will join the division faculty as an Instructor in Medicine. Ciara is a recipient of the Vanderbilt Faculty Research Scholar Award.

ATS Highlights
The Division was very well represented at this year’s ATS meeting. Some highlights and accomplishments:

Josh Fessel, MD, PhD is the winner of the first ATS BEAR (Building Education to Advance Research) Cage competition for his research proposal for “A Novel System to Detect and Prevent Impending Aspiration—AspirGard IT-NGT.”

Tim Blackwell, MD was the annual Parker B. Francis lecturer. This is awarded to former PBF Fellows who are internationally recognized for their outstanding contributions to scientific research and teaching.

Lorraine Ware, MD received the Recognition Award for Scientific Accomplishments, which is given to ATS members for outstanding scientific contributions in basic or clinical research to the understanding, prevention and treatment of acute or chronic lung diseases.

Carla Sevin, MD and Jim Jackson, PsyD chaired a symposium on ICU survivor clinics. Pictured here with Dr. Sevin are Millie and Woody Camp. Millie was a patient speaker for the Symposium.

The Sepsis Definitions Task Force with representatives from the ATS, SCCM, ESICM and Chest have been working together for the past year and met for the last time at the SCCM national meeting in Phoenix. Gordon Bernard, MD is serving on this task force with Jean Louis Vincent, Mitch Levy, Derek Angus, Djalli Annane, Gordon Rubenfeld, John Marshall and others. The committee is working on revising sepsis definitions and a final paper detailing the work, which all will find very interesting, will be out soon.

Eric Austin, MD, MSCI (Pediatric Pulmonary) received the Robert B. Mellins, M.D. Outstanding Achievement Award, which is given to a junior faculty member for their contributions in child lung health.

Thomas Atwater, MD (Medicine Resident) had his poster featured in the 4 best abstracts of the Thoracic Oncology assembly.

Abstract Travel Scholarship Recipients

Taufik Assad, MD from Pulmonary Circulation Assembly

Jon Kropski, MD from Respiratory Cell & Molecular Biology Assembly

Matt Semler, MD from Critical Care Assembly

Dru Claar, MD from Respiratory Cell & Molecular Biology Assembly

Brett Norman, MD from Critical Care Assembly

Ciara Shaver, MD, PhD from the Respiratory Structure & Function Assembly

Ben Ferrell, MD from Critical Care Assembly

Bradley Richmond, MD from the National Emphysema Foundation

Chelsi Short (RA, Young lab) from Respiratory Cell & Molecular Biology As-
Fatty acid metabolism in pulmonary arterial hypertension: role in right ventricular dysfunction and hypoxia

Megha Talati, Anna Hennes

Abstract: Pulmonary arterial hypertension (PAH) is a complex, multifactorial disease in which an increase in pulmonary vascular resistance leads to increased afterload on the right ventricle (RV), causing right heart failure and death. Our understanding of the pathophysiology of RV dysfunction in PAH is limited but is considered important for improving outcomes. Current evidence suggests that in PAH RV dysfunction is associated with various components of metabolic syndrome, such as insulin resistance, hypoxemia, and dyslipidemia. The relationship between RV dysfunction and fatty acid metabolism is complex, and in PAH it is characterized by a shift in substrates of energy towards increased glycerol utilization and reduced fatty acid consumption. RV dysfunction may be caused by maladaptive fatty acid metabolism resulting from an increase in intramyocellular lipid (IMCL) and an increased utilization of glycerol and fatty acid oxidation in mitochondria. This leads to lipid accumulation in the form of triglycerides, diacylglycerols, and ceramides in the cytoplasm, klotho-dependent fat accumulation, and fibrosis, leading to right ventricular hypertrophy and dysfunction. Right ventricular dysfunction is also associated with decreased fatigue and shortness of breath. In a recent study by An, et al., a deeper understanding of the mechanisms contributing to the remodeling of the RV will be the development of targeted therapies for RV failure in PAH.

Keywords: pulmonary arterial hypertension, metabolic syndrome, fatty acids, glycerol oxidation, right ventricular, fatty acid oxidation, mitochondrial dysfunction, RV failure, diabetes, cardiomyopathy.

Preclinical Evaluation of 4-[18F]Fluoroglutamine PET to Assess ASC2 Expression in Lung Cancer

Mohamed Hassanaini,1,2 Matthew R. Hight,1,2 Jason R. Duck,2,3 Mohammad N. Tantawy,2,3 Michael L. Nickels,4 Megan D. Hoeksma,1,3 Bradford K. Harris,1,5 Kelli Boyd,1,2 Pierre P. Massion,1,2,6,7 Charles Manning,1,2,6,7 Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN, 37232, USA

Abstract: Preclinical evaluation of 4-[18F]fluoroglutamine (4-FGlu) PET imaging of ASC2 expression in murine adenocarcinoma and human lung cancer cell lines and xenografts confirms the promise of 4-FGlu PET imaging to assess ASC2 expression in human lung cancer.

Fibrosing mediastinitis complicating prior histoplasmosis is associated with human leukocyte antigen DQB1*04:02 – a case control study

Stephen B. Beck,1 Silvana Gauden,2 Simon Malia,1 Chang Yu,1 Daphne Mitchell,2 Joy Cogan,1 Wendi Marcon,1 Deborah Cross1 and James E. Loy3

Abstract: Background: Fibrosing mediastinitis (FM) is an idiopathic reaction to infection with Histoplasma capsulatum with a prevalence of 1–3/100,000 people infected in the U.S. Treated or untreated pulmonary histoplasmosis (PHM) in areas where H. capsulatum is endemic suggests that an abnormal immunological host response may be responsible for the development of FM. Our purpose is to report an association between subjects with PHM and human leukocyte antigen (HLA)-DQB1*04:02. We sought to confirm or extend those findings with application of high-resolution HLA typing in a cohort of subjects with PHM.

Methods: High-resolution HLA typing was performed on DNA samples from a new cohort 34 patients with PHM. Control cohorts included 707 subjects from the ‘European American’ subset of the National Marrow Donor Program.

Clinical Communications

Varying penicillin allergy testing practices in the United States: A time for consensus

Kali Svoronos Gencer, MD, Eric Kerin, MD, Elizabeth McPherson, MD, and Elizabeth Phillips, MD

Clinical Implications

- Based on the survey results of American Academy of Allergy, a survey and analysis by the Penicillin Allergy Alliance showed there is significant variability in penicillin and allergy testing and reporting of results that could have a direct impact on effectiveness. This suggests the need for standardization of penicillin allergy practice parameters.

Penicillin and β-lactam allergies are the most common drug-related allergies in the United States, with 8% of the population reporting penicillin or β-lactam allergies. There is significant variability in penicillin and allergy testing and reporting of results that could have a direct impact on effectiveness. This suggests the need for standardization of penicillin allergy practice parameters.

References

1. American Academy of Allergy, Asthma & Immunology (AAAAI) members and the American College of Allergy, Asthma & Immunology (ACAAI) members. Allergy practice and care: addressing the needs of patients with penicillin allergy. Ann Allergy Asthma Immunol 2003;90:1-20.