Dear EOPH members,

We hope you all had an educational and exciting time at ATS 2017! In this May-June combined issue of the EOPH newsletter, we share some of our members’ recent “epub ahead of print” articles and accomplishments, as well as information about ATS Research Foundation Grants and the 100-year anniversary of AJRCCM. In addition, Claire McCarthy, one of our Assembly's own abstract scholarship awardees, has taken the time to talk with the other 2017 EOPH awardees about their research, and how attending ATS 2017 with the EOPH has impacted their training experience. Finally, we have included some pictures from the 2017 EOPH Assembly meeting, and the ATS 2017 Lab coats for Lung Rally. We hope you will enjoy these features!

Please let us know about your recent publications, awards, and achievements. Also, we would appreciate suggestions or feedback for future issues at kbailey@unmc.edu or tnordgren@unmc.edu.

Sincerely,

Your web committee co-chairs,

Kristina Bailey and Tara Nordgren
Recent publications

This section highlights some of our assembly members’ exciting research that became available as “epubs ahead of print” in April. It is possible that our search may miss your best work, so please send your recent publications to: kbailey@unmc.edu.

**Occupational Exposures and Health**


**Environmental Exposures**


Long-Term Exposure to Ambient Air Pollution and Subclinical Cerebrovascular Disease in NOMAS (the Northern Manhattan Study). Kulick ER, Wellenius GA, Kaufman JD, DeRosa JT, Kinney PL, Cheung YK, Wright CB, Sacco RL, Elkind MS. Stroke. 2017 Apr 28. PMID: 28455324

**Chemicals, Metals, and Other Toxicants**

**Pulmonary Fibrosis**

**Asthma**


**Population Health**


**Alcohol**


**Diagnostics, Clinical Assessments, and Interventions**

Duplex Ultrasound Versus Clinical Surveillance in the Prediction of TIPS Malfunction Placed


Genetics and Epigenetics


Epigenomic study identifies a novel mesenchyme homeobox2-GLI1 transcription axis.


Pathogens


Cancer


Biomarkers

Public Health, Health Policy, and Healthcare Outcomes

Nutrition

Techniques and Methodology


Tobacco Products


ATS Research Foundation Grants

There is currently a call for ATS Research Foundation Grant applications from junior investigators. The deadline for a letter of intent is June 6, 2017. More information is available at http://www.thoracic.org/professionals/research/research-program-portfolio/index.php.

One Hundred Years of AJRCCM

This is the 100-year anniversary of the American Journal of Respiratory and Critical Care Medicine. To find out more about the history of the Blue Journal, check out the ATS video with the AJRCCM Editor-in-Chief Jadwiga Wedzicha, MD at https://www.youtube.com/watch?v=3XN3nLrQec&feature=youtu.be.

The ATS EOPH Assembly Encourages the Research and Career Development of Trainees

By 2017 EOPH Abstract Scholarship Awardee Claire McCarthy, MS

As a trainee, I am grateful for the support that I have received from the ATS EOPH Assembly. The EOPH mentorship program has allowed me to meet and learn from experts in environmental respiratory research. The assembly, especially Kris Bailey, also gave me the chance to get involved with an ATS committee as a graduate student. I had previously thought that only established investigators and clinicians could be a member of an ATS group, and am grateful that I can be a member of the EOPH Web Editorial Team. Being a part of the group has helped me improve my communications skills and network with other researchers. The EOPH Assembly has also allowed me to present my experimental findings related to household air pollution at EOPH sessions during the ATS conference. However, I am not the only one who has received training and encouragement from the EOPH Assembly.

Each year, the EOPH Assembly gives Abstract Scholarship Awards to trainees. These awards help students, post-docs, and clinicians attend the ATS conference, where they can share their exciting results with the ATS community. This year’s EOPH Abstract Award winners were able to communicate important findings on the role of metabolites during environmental lung diseases, impact of early life exposures on lung
function later in life, toxicological effects of household pollutants from cookstoves, identification of individuals with lung diseases using insurance claims data, impact of occupational exposures on lung inflammation, relationship between weight and lung diseases, and biological mechanisms of outdoor air pollutants, including diesel exhaust, that cause pulmonary diseases. Additionally, the EOPH Assembly helped them build their professional network and receive guidance from other respiratory researchers.

Nuria Camiña, a PhD student at King’s College London, was able to present her work examining particle oxidative potential in urban particulate matter collected from different sites in London. She found that the metal content of particulates largely determines their oxidative potential, but ozone and photochemistry can also play a role. This relates to associations between fine particulate matter exposure and respiratory hospital admissions, which are influenced by the oxidative potential of particles. Additionally, Nuria attended the EOPH Assembly Meeting where she was able to meet and collaborate with other EOPH members.

Another individual who was supported with an ATS EOPH Abstract Scholarship is Lauren Kepple, an ASPPH/CDC Public Health Fellow. She shared her findings identifying beneficiaries likely to have silicosis in a health insurance claims database. She was able to determine suitable definitions for silicosis cases that allowed her to calculate the prevalence of silicosis in that population. She is also currently examining the incidence of silicosis and comorbidities associated with silicosis in the health insurance claims database. Also, the opportunity to present her research at an EOPH session allowed Lauren to receive valuable feedback from ATS conference attendees.

George Crowley, a trainee at New York University, discussed his research of metabolites related to lung injury in firefighters exposed to World Trade Center particulate matter. He identified a metabolic profile that differentiated exposed firefighters with reduced lung function and firefighters’ resistant to World Trade Center-related lung injury. He found that the World Trade Center-lung injury resistant group displayed increased expression of several omega-3 fatty acids (that act as anti-inflammatory mediators) and branched chain amino acids (that contribute to the synthesis of complex metabolites). Along with communicating his research, the 2017 ATS EOPH Awards Dinner gave George the chance to network with EOPH assembly members, as well as helped him gain new perspectives on the implications of his research.

Similarly, EOPH trainee Sophia Kwon, DO, MPH at Hackensack University Medical Center, investigates the health effects of exposure to World Trade Center particulate matter in rescue and recovery workers. She has identified biomarkers of metabolic syndrome and vascular disease that predict the development of World Trade Center-lung injury in symptomatic individuals. Currently, she is examining these metabolically active biomarkers in the entire cohort of the Fire Department of New York City (FDNY). Sophia’s research aims to define a biomarker profile that will identify pathways involved in World Trade Center particulate matter-associated lung diseases. In addition to supporting her research, the EOPH Assembly provided an encouraging environment where she could present her work and allowed her to connect with established experts in the field of environmental and occupational health. The EOPH assembly provided guidance for her research and training.

An EOPH trainee in genetic and molecular epidemiology at Brigham and Women’s Hospital Harvard Medical School, Rachel Kelly, MPH, PhD, studies how environmental exposures lead to diseases, specifically asthma, preeclampsia, and
idiopathic pulmonary fibrosis. She uses integrative “omics” data (including genetic, transcriptomic, epigenetic and metabolomic information) to determine the mechanisms of disease pathogenesis, identify novel biomarkers to diagnose and monitor the development of diseases, and identify potential therapeutic targets. Furthermore, ATS EOPH Abstract Scholarship awards have allowed her to attend ATS conferences. “The benefits of such meetings for an early career investigator in terms of constructive feedback, networking, and learning about all the newest developments in the field are immeasurable.”

These are just a few examples of the trainee research and career development supported by the ATS EOPH from three of the 2017 ATS EOPH Abstract Awardees. Congratulations to all of the 2017 ATS Abstract Awardees (see the list below), and thank you ATS EOPH Assembly members for supporting trainee scientists and clinicians!

2017 ATS Abstract Award Winners

James Allinson, MRCP, BM, BCH, BA – Imperial College London
Nuria Camiña, MSc – MRC-PHE Centre for Environment and Health and King’s College London
Daniel Croft, MD, MPH – University of Rochester Medical Center
George Crowley – NYU Medical Center
Graham S. Flitz, MS, BS – University of California, Berkeley
Andrew Freeman, MD - University of Utah School of Medicine
Matthew Grigsby, MSPH - Johns Hopkins University, School of Medicine
Stephanie M. Holm, MD - UCSF
Rachel S. Kelly, MPH, PhD - Brigham and Women's Hospital Harvard Medical School
Lauren Kepple, MPH - ASPPH/CDC, National Institute for Occupational Safety and Health
Sophia Kwon, DO, MPH - Hackensack University Medical Center
Chris C. Lim, MS – NYU School of Medicine
Sithembile L. Mabila, MSci – University of Illinois at Chicago
Claire E. McCarthy, MS - University of Rochester School of Medicine and Dentistry
Tara M. Nordgren, PhD – University of Nebraska Medical Center
Geneviève Racine, Bmed - Hopital du Sacre-Coeur de Montreal
Christopher F. Rider, BSc, PhD - University of British Columbia
Min Hyung Ryu, MSc – University of British Columbia

Things Worth Celebrating!
We would like to congratulate all of the ATS 2017 EOPH Assembly Award Winners!

We know that many of you have successes to share with us. Please help us expand this section by emailing us your good news: kbailey@unmc.edu or tnordgren@unmc.edu.
Photos from the 2017 ATS EOPH Assembly and Lab coats for Lungs Rally!