Dear EOPH members,

Welcome to the April 2016 EOPH newsletter. In this issue, we give you a preview of the ATS 2016 EOPH sessions. We will also share some exciting, recent publications and achievements from our membership. We also provide information about ATS research funding and training opportunities, as well as EOPH events at the upcoming ATS Conference.

We would appreciate feedback for future issues. Please contact us with any noteworthy publications, achievements, or suggestions for future issues at kbailey@unmc.edu or craig.glazer@utsouthwestern.edu.

Sincerely,

Kristina Bailey & Claire McCarthy
Here is a list of the sessions sponsored by the EOPH this year. We hope to see you there! Also, don’t forget the **EOPH Assembly Meeting**. Please join us at the EOPH Assembly Meeting at the 2016 ATS Conference in San Francisco on **Monday, May 16** from **5:00-7:00 pm** in **Continental Ballroom 4** – Ballroom Level at the **Hilton San Francisco Union Square**.

### ATS 2016 INTERNATIONAL CONFERENCE
**ASSEMBLY ON ENVIRONMENTAL, OCCUPATIONAL AND POPULATION HEALTH SESSIONS**

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<tr>
<th>Session Code</th>
<th>Session Title</th>
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<tr>
<td><strong>Postgraduate Courses</strong></td>
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<td><strong>Saturday, May 14, 2016</strong></td>
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<td>PG21</td>
<td><strong>EPGENETICS OF LUNG DISEASE</strong></td>
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<td><strong>Scientific Symposium</strong></td>
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<td><strong>Sunday, May 15, 2016</strong></td>
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<tr>
<td>A87</td>
<td><strong>E-CIGARETTE VAPING: PRECLINICAL AND CLINICAL PULMONARY HEALTH EFFECTS</strong></td>
<td>2:15 PM - 4:15 PM</td>
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<tr>
<td>B89</td>
<td><strong>HEALTH EFFECTS OF INHALED TOXINS: FROM THE BENCH TO THE TRENCHES: A GLOBAL PERSPECTIVE</strong></td>
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<td><strong>Monday, May 16, 2016</strong></td>
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<td><strong>Tuesday, May 17, 2016</strong></td>
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<td>C10</td>
<td><strong>ACHIEVING “ENVIRONMENTAL JUSTICE”: A MAJOR STEP TOWARD RESPIRATORY HEALTH EQUALITY</strong></td>
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<td><strong>Wednesday, May 18, 2016</strong></td>
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<td>D87</td>
<td><strong>CLIMATE CHANGES AND RESPIRATORY INFECTIONS</strong></td>
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<td><strong>Jointly-Developed Symposium</strong></td>
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<td><strong>Sunday, May 15, 2016</strong></td>
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<td>A11</td>
<td><strong>GLOBAL LUNG CANCER HEALTH ISSUES</strong></td>
<td>9:00 AM - 11:00 AM</td>
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<td>A91</td>
<td><strong>HOT TOPICS IN DISPARITIES IN PULMONARY, CRITICAL CARE AND SLEEP MEDICINE</strong></td>
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<td><strong>Sunrise Seminars</strong></td>
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<td><strong>Monday, May 16, 2016</strong></td>
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<td>SS113</td>
<td><strong>E-CIGARETTE: EPIDEMIOLOGY AND TOXICITY</strong></td>
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<td><strong>Tuesday, May 17, 2016</strong></td>
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<td>SS211</td>
<td><strong>PHYSIOLOGIC EVALUATION OF PATIENTS WITH OCCUPATIONAL LUNG DISEASE FOR DIAGNOSIS, IMPAIRMENT, AND DISABILITY</strong></td>
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<td>SS311</td>
<td><strong>VITAMIN D AND ASTHMA</strong></td>
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<td><strong>Meet The Professor Seminars</strong></td>
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<td><strong>Monday, May 16, 2016</strong></td>
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<td>MP510 AIR POLLUTION AND LUNG CANCER: ROLE OF AIRWAY EPITHELIAL CELLS</td>
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<td><strong>Tuesday, May 17, 2016</strong></td>
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<td>MP609 AIR POLLUTION DOESN’T RECOGNIZE THE BORDER: GLOBAL</td>
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<td><strong>Mini-Symposium</strong></td>
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<td>B15 HEALTH EFFECTS OF INDOOR/OUTDOOR POLLUTION IN CHILDHOOD</td>
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<td>C97 COPD: EPIDEMIOLOGY, RISK FACTORS, AND BIOMARKERS</td>
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<td>D17 &quot;OMICS&quot; OF ENVIRONMENTAL LUNG DISEASE</td>
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<td><strong>Poster Discussion Sessions</strong></td>
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<td>A106 EPIDEMIOLOGY AND RISK FACTORS OF ASTHMA: FROM THE CRIB TO</td>
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<td>B105 COPD: EPIDEMIOLOGY AND GENETICS</td>
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<td><strong>Monday, May 16, 2016</strong></td>
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<td>B24 OCCUPATIONAL MEDICINE</td>
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<td>D106 BIOMASS SMOKE, VOG, AND POLLUTANTS</td>
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<td><strong>Thematic Poster Sessions</strong></td>
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<td>A59 TOBACCO, NICOTINE, AND MARIJUANA USE</td>
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<td>A60 ILD, IPF, SARCOIDOSIS, AND DIFFUSE LUNG DISEASE</td>
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**Recent publications**

This section highlights some of our members’ ground-breaking work in the month of March. These are the best articles from our assembly that became available as “epubs ahead of print” in March. It is possible that our search may miss your best work, so please send your recent publications to: kbailey@unmc.edu.

**Air Pollution – Aerosol Characterization and Geography**

*Characteristics of atmospheric single particles during haze periods in a typical urban area of Beijing: A case study in October, 2014.*

*Association of Geography and Ambient Air Pollution with Urine Metal Concentrations in Six US Cities: The Multi-Ethnic Study of Atherosclerosis.*

*Use of mobile and passive badge air monitoring data for NO$_X$ and ozone air pollution spatial exposure prediction models.*

**Air Pollution – Cardiovascular, Metabolic, and Respiratory**

*Satellite-Based NO$_2$ and Model Validation in a National Prediction Model Based on Universal Kriging and Land-Use Regression.*
**Effects**

*Increases in Ambient Particulate Matter Air Pollution, Acute Changes in Platelet Function, and Effect Modification by Aspirin and Omega-3 Fatty Acids: A Panel Study.*

*Quantile Regression Analysis of the Distributional Effects of Air Pollution on Blood Pressure, Heart Rate Variability, Blood Lipids, and Biomarkers of Inflammation in Elderly American Men: The Normative Aging Study.*

*Prenatal Air Pollution Exposure and Early Cardiovascular Phenotypes in Young Adults.*

*Metabolomic changes in murine serum following inhalation exposure to gasoline and diesel engine emissions.*

*Lung function in woodsmoke-exposed Guatemalan children following a chimney stove intervention.*

*Ambient particulate matter and microRNAs in extracellular vesicles: a pilot study of older individuals.*

*Subacute inhalation exposure to ozone induces systemic inflammation but not insulin resistance in a diabetic mouse model.*

*Acute increase in blood pressure during inhalation of coarse particulate matter air pollution from an urban location.*

*Ozone-Induced Type 2 Immunity in Nasal Airways. Development and Lymphoid Cell Dependence in Mice.*

**Air Pollution – Impacts on Older Populations and Secondary Target Organs**

*Long-Term Exposure to Ambient Fine Particulate Matter and Renal Function in Older Men: The VA Normative Aging Study.*

*Air pollution and emergency department visits for conjunctivitis: A case-crossover study.*

*Exposure to Traffic-Related Air Pollution in Relation to Progression in Physical Disability among Older Adults.*
Weuve J, Kaufman JD, Szpiro AA, Curl C, Puett RC, Beck T, Evans DA, Mendes de Leon CF. Environ Health
**Asthma**

*Areas with High Rates of Police-Reported Violent Crime Have Higher Rates of Childhood Asthma Morbidity.*

*Wooden hutch space allowance influences male Holstein calf health, performance, daily lying time, and respiratory immunity.*

*Longitudinal study of maternal body mass index, gestational weight gain, and offspring asthma.*

*The cardiomyocyte protein αT-catenin contributes to asthma through regulating pulmonary vein inflammation.*

*Amish and Hutterite Environmental Farm Products Have Opposite Effects on Experimental Models of Asthma.*

*Noninvasive Analysis of the Sputum Transcriptome Discriminates Clinical Phenotypes of Asthma.*

*DNA Methylation Changes in Nasal Epithelia Are Associated with Allergic Asthma in the Inner City.*

**Brain-Lung Connection**

*Muscimol microinjected in the arcuate nucleus affects metabolism, body temperature & ventilation.*

*Molecular analyses of circadian gene variants reveal sex-dependent links between depression and clocks.*

**Cardiovascular Disease**

*Associations of Circulating Oxidized LDL and Conventional Biomarkers of Cardiovascular Disease in a Cross-Sectional Study of the Navajo Population.*

*Sex-related differences in age-associated downregulation of human ventricular myocardial β1-adrenergic receptors.*
Propensity Matched Analysis of del Nido Cardioplegia in Adult Coronary Artery Bypass Grafting: Initial Experience With 100 Consecutive Patients.

Career Development for Medical Trainees

Recommended Reading from Winthrop-University Hospital Fellows.

Important Skills for Internship and the Fourth-Year Medical School Courses to Acquire Them: A National Survey of Internal Medicine Residents.

Characterizing the Operative Experience of Cardiac Surgical Trainees: What Are Residents Really Doing in the Operating Room?

Education and Training in Global Health

Diversity in Clinical and Biomedical Research: A Promise Yet to Be Fulfilled.


Global Health Education in Pulmonary and Critical Care Medicine Fellowships.

Epidemiological Studies and GWAS

Residential mobility impacts exposure assessment and community socioeconomic characteristics in longitudinal epidemiology studies.

Upper extremity musculoskeletal pain among office workers in three Spanish-speaking countries: findings from the CUPID study.

Medical Mondays: ED Utilization for Medicaid Recipients Depends on the Day of the Week, Season, and Holidays.


Recovery Curves for Pediatric Burn Survivors: Advances in Patient-Oriented Outcomes.

Cohort profile: the Spanish WORKing life Social Security (WORKss) cohort study.

Long-term outcomes of the bronchial artery embolization are diagnosis dependent.

Fibrotic Lung Diseases

Pneumoconiosis Redux. Coal Workers’ Pneumoconiosis and Silicosis Are Still a Problem.

Giant cell interstitial pneumonia in patients without hard metal exposure: analysis of 3 cases and review of the literature.

Clinical Practice Guidelines From the Cystic Fibrosis Foundation for Preschoolers With Cystic Fibrosis.

Fiber analysis vignettes: Electron microscopy to the rescue!

Lung Cancer and Radiation

Serum phosphatidylethanolamine levels distinguish benign from malignant solitary pulmonary nodules and represent a potential diagnostic biomarker for lung cancer.

The use of isodose levels to interpret radiation induced lung injury: a quantitative analysis of computed tomography changes.

Metals and Metal Particles

Metal mixtures in urban and rural populations in the US: The Multi-Ethnic Study of Atherosclerosis and the Strong Heart Study.
Aerosolized Silver Nanoparticles in the Rat Lung and Pulmonary Responses over Time.

A hard (metal) case: Value of analytical scanning electron microscopy.

Are the Associations of Cardiac Acceleration and Deceleration Capacities With Fine Metal Particulate in Welders Mediated by Inflammation?

Long-Term Metal PM2.5 Exposures Decrease Cardiac Acceleration and Deceleration Capacities in Welders.

Obstructive Lung Diseases and Tobacco Smoke

A Multidimensional Risk Score to Predict All-Cause Hospitalization in Community-Dwelling Older Individuals With Obstructive Lung Disease.

Effect of long-term vitamin E and selenium supplementation on urine F<sub>2</sub>-isoprostanes, a biomarker of oxidative stress.

Development of a spirometry T-score in the general population.

Understanding the impact of second-hand smoke exposure on clinical outcomes in participants with COPD in the SPIROMICS cohort.

Respiratory Infections

Progressive Multifocal Leukoencephalopathy in a Lung Transplant Recipient: Isolation of John Cunningham (JC) Virus from Bronchoalveolar Lavage.

Epidemiology of nontuberculous mycobacteria isolations among central North Carolina residents, 2006-2010.
OPPORTUNITIES

ATS Foundation Research Program

The 2016-2017 ATS Foundation Research Program letters of intent period opens in early April. This program supports young investigators, underfunded areas of research, and studies that reduce the global burden of lung diseases. For more details, please contact Erin Marie Nebel, senior manager of the ATS Foundation Research Program.

Clinical Cases:

The web committee is currently calling for “Quick Hit” clinical cases with an EOPH focus. These cases will be posted on the website and highlighted in this newsletter. It is a good, peer-reviewed writing opportunity for trainees. For examples, please see the January 2016 newsletter and http://www.thoracic.org/professionals/clinical-resources/environmental-and-occupational/clinical-cases/pages/instructions.php. Submit clinical cases to kbailey@unmc.edu or craig.glazer@utsouthwestern.edu.

Training and Development Opportunities

Early Career Professionals Group: This group will have a brief meeting at the ATS conference. If you are interested in joining the working group, email Kerri Johannson at kerri.johannson@ahs.ca.

Agricultural Health and Safety for Healthcare and Safety professionals.

The University of Nebraska Medical Center will host a conference focused on Agricultural health and safety July 12-13 and 14-15 in Omaha, Nebraska.

Topics include: Agricultural respiratory diseases, Migrant and immigrant health, Zoonotic diseases, Health effects of pesticides, Agricultural trauma, General environmental hazards in agriculture, Personal protective equipment in agriculture, and a farm tour with hazard recognition and noise dosimetry.

Register by May 31st for a discount.

For more information, or to register, go to: www.unmc.edu/cce/agmed

or contact Ellen Duysen at 402-552-3394 ellen.duysen@unmc.edu