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# Assembly on Environmental Occupational and Population Health (EOPH) Newsletter

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## ***EOPH***

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Dear EOPH members,

We hope you all have a Happy St. Patrick's Day! In this March issue of the EOPH newsletter, we share some recent "epub ahead of print" articles and accomplishments from our members. We also share some information about an ATS election and registration for the international 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](mailto:kbailey@unmc.edu) or [tnordgren@unmc.edu](mailto:tnordgren@unmc.edu).

Sincerely,  
Your web committee co-chairs,  
Kristina Bailey and Tara Nordgren



## Recent publications

This section highlights some of our assembly members' great manuscripts 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](mailto:kbailey@unmc.edu).

### Science and Policy

#### [The Trump Administration and the Environment - Heed the Science.](#)

Samet JM, Burke TA, Goldstein BD.  
N Engl J Med. 2017. [Epub ahead of print]. PMID: 28249122

### Air Pollution, Ambient Particulate Matter, Ultrafine Particles, and Nanoparticles

#### [Serum-borne bioactivity caused by pulmonary multiwalled carbon nanotubes induces neuroinflammation via blood-brain barrier impairment.](#)

Aragon MJ, Topper L, Tyler CR, Sanchez B, Zychowski K, Young T, Herbert G, Hall P, Erdely A, Eye T, Bishop L, Saunders SA, Muldoon PP, Ottens AK, Campen MJ.  
Proc Natl Acad Sci U S A. 2017 Feb 21. pii: 201616070.

#### [Ambient Ultrafine Particle Ingestion Alters Gut Microbiota in Association with Increased Atherogenic Lipid Metabolites.](#)

Li R, Yang J, Saffari A, Jacobs J, Baek KI, Hough G, Larauche MH, Ma J, Jen N, Moussaoui N, Zhou B, Kang H, Reddy S, Henning SM, Campen MJ, Pisegna J, Li Z, Fogelman AM, Sioutas C, Navab M, Hsiai TK.  
Sci Rep. 2017 Feb 17;7:42906. doi: 10.1038/srep42906.

#### [Impact of Particulate Matter Exposure and Surrounding "Greenness" on Chronic Absenteeism in Massachusetts Public Schools.](#)

MacNaughton P, Eitland E, Kloog I, Schwartz J, Allen J.  
Int J Environ Res Public Health. 2017 Feb 20;14(2). pii: E207.

#### [An evaluation of the health benefits achieved at the time of an air quality intervention in three Israeli cities.](#)

Yinon L, Thurston G.  
Environ Int. 2017 Feb 22. pii: S0160-4120(16)30366-X.

### Asthma and Allergic Diseases

#### [Airway and Serum Biochemical Correlates of Refractory Neutrophilic Asthma.](#)

Alam R, Good J, Rollins D, Verma M, Chu H, Pham TH, Martin RJ.  
J Allergy Clin Immunol. 2017 Feb 2. pii: S0091-6749(17)30147-1.

#### [Low maternal prenatal 25-hydroxy vitamin D blood levels are associated with childhood atopic dermatitis.](#)

Blomberg M, Rifas-Shiman SL, Camargo CA Jr, Gold DR, Asgari MM, Thyssen JP, Litonjua AA, Gillman MW, Oken E.  
J Invest Dermatol. 2017 Feb 12. pii: S0022-202X(17)30174-4.

[Genome-wide interaction study of dust mite allergen on lung function in children with asthma.](#)

Forno E, Sordillo J, Brehm J, Chen W, Benos T, Yan Q, Avila L, Soto-Quirós M, Cloutier MM, Colón-Semidey A, Alvarez M, Acosta-Pérez E, Weiss ST, Litonjua AA, Canino G, Celedón JC.  
J Allergy Clin Immunol. 2017 Feb 3. pii: S0091-6749(17)30154-9. d

[Antibiotic Use in Early Life, Rural Residence, and Allergic Diseases in Argentinean Children.](#)

Han YY, Forno E, Badellino HA, Celedón JC.  
J Allergy Clin Immunol Pract. 2017 Feb 4. pii: S2213-2198(17)30001-6.

[KIF3A genetic variation is associated with pediatric asthma in the presence of eczema independent of allergic rhinitis.](#)

Johansson E, Biagini Myers JM, Martin LJ, He H, Pilipenko V, Mersha T, Weirauch M, Salomonis N, Ryan P, LeMasters GK, Bernstein DI, Lockey J, Khurana Hershey GK.  
J Allergy Clin Immunol. 2017 Feb 23. pii: S0091-6749(17)30316-0.

[Metabolomic profiling of lung function in Costa-Rican children with asthma.](#)

Kelly RS, Virkud Y, Giorgio R, Celedón JC, Weiss ST, Lasky-Su J.  
Biochim Biophys Acta. 2017 Feb 7. pii: S0925-4439(17)30047-9.

## **Biomass Smoke**

[Early Life Wildfire Smoke Exposure is Associated with Immune Dysregulation and Lung Function Decrements in Adolescence.](#)

Black C, Gerriets JE, Fontaine JH, Harper RW, Kenyon NJ, Tablin F, Schelegle ES, Miller LA.  
Am J Respir Cell Mol Biol. 2017 Feb 16.

[Associations between ambient wood smoke and other particulate pollutants and biomarkers of systemic inflammation, coagulation and thrombosis in cardiac patients.](#)

Croft DP, Cameron SJ, Morrell CN, Lowenstein CJ, Ling F, Zareba W, Hopke PK, Utell MJ, Thurston SW, Thevenet-Morrison K, Evans KA, Chalupa D, Rich DQ.  
Environ Res. 2017 Apr;154:352-361.

## **Cancer**

[Pulmonary adenocarcinoma with epidermal growth factor receptor-mutations in asbestos exposed non-smokers: A case series.](#)

Kradin RL, Iafrate J, Christiani DC.  
Am J Ind Med. 2017 Mar;60(3):306-309.

[Effect of a Scalp Cooling Device on Alopecia in Women Undergoing Chemotherapy for Breast Cancer: The SCALP Randomized Clinical Trial.](#)

Nangia J, Wang T, Osborne C, Niravath P, Otte K, Papish S, Holmes F, Abraham J, Lacouture M, Courtright J, Paxman R, Rude M, Hilsenbeck S, Osborne CK, Rimawi M.  
JAMA. 2017 Feb 14;317(6):596-605.

[Association Between Telomere Length and Risk of Cancer and Non-Neoplastic Diseases: A Mendelian Randomization Study.](#)

Telomeres Mendelian Randomization Collaboration., Haycock PC, Burgess S, et al.  
JAMA Oncol. 2017 Feb 23.

[Association Between Tumor Progression Endpoints and Overall Survival in Patients with Advanced Neuroendocrine Tumors.](#)

Ter-Minassian M, Zhang S, Brooks NV, Brais LK, Chan JA, Christiani DC, Lin X, Gabriel S, Dinet J, Kulke MH.  
Oncologist. 2017 Feb 8. pii: theoncologist.2016-0175.

[Pathway-analysis of published genome-wide association studies of lung cancer: A potential role for the CYP4F3 locus.](#)

Yin J, Liu H, Liu Z, Owzar K, Han Y, Su L, Wei Y, Hung RJ, Brhane Y, McLaughlin J, Brennan P, Bickeboeller H, Rosenberger A, Houlston RS, Caporaso N, Landi MT, Heinrich J, Risch A, Christiani DC, Amos CI, Wei Q.  
Mol Carcinog. 2017 Feb 2.

## Community and Telephone-Based Care

[Shared decision-making in mental health care-A user perspective on decisional needs in community-based services.](#)

Grim K, Rosenberg D, Svedberg P, Schön UK.  
Int J Qual Stud Health Well-being. 2016 Jan;11(1):30563.

[Telephone care co-ordination for tobacco cessation: randomised trials testing proactive versus reactive models.](#)

Sherman SE, Krebs P, York LS, Cummins SE, Kuschner W, Guvenc-Tuncturk S, Zhu SH.  
Tob Control. 2017 Feb 11. pii: tobaccocontrol-2016-053327.

## Cystic Fibrosis

[An Outbreak of Burkholderia cepacia Complex Infections Associated with Contaminated Liquid Docusate.](#)

Marquez L, Jones KN, Whaley EM, Koy TH, Revell PA, Taylor RS, Bernhardt MB, Wagner JL, Dunn JJ, LiPuma JJ, Campbell JR.  
Infect Control Hosp Epidemiol. 2017 Feb 7:1-7.

## Genetics and Cardiopulmonary Diseases

[Genetic Association and Risk Scores in a COPD Meta-Analysis of 16,707 Subjects.](#)

Busch R, Hobbs BD, Zhou J, Castaldi PJ, McGeachie MJ, et al.  
Am J Respir Cell Mol Biol. 2017 Feb 7.

[Exosomal MicroRNA for Detection of Cardiac Sarcoidosis.](#)

Crouser ED, Hamzeh NY, Maier LA, Julian MW, Gillespie M, Rahman M, Baxter D, Wu X, Nana-Sinkam SP, Wang K.  
Am J Respir Crit Care Med. 2017 Feb 28.

[Genetic loci associated with chronic obstructive pulmonary disease overlap with loci for lung function and pulmonary fibrosis.](#)

Hobbs BD, de Jong K, Lamontagne M, Bossé Y, Shrine N, Artigas MS, Wain LV, et al.  
Nat Genet. 2017 Mar;49(3):426-432.

[Gene-based segregation method for identifying rare variants in family-based sequencing studies.](#)

Qiao D, Lange C, Laird NM, Won S, Hersh CP, Morrow J, Hobbs BD, Lutz SM, Ruczinski I, Beaty TH, Silverman EK, Cho MH.  
Genet Epidemiol. 2017 Feb 13.

[Genome-wide association analyses for lung function and chronic obstructive pulmonary disease identify new loci and potential druggable targets.](#)

Wain LV, Shrine N, Artigas MS, Erzurumluoglu AM, Noyvert B, Bossini-Castillo L, et al.  
Nat Genet. 2017 Mar;49(3):416-425.

## Health in Vulnerable Populations

[Adult ADHD: Addressing a unique set of challenges.](#)

Fields SA, Johnson WM, Hassig MB.  
J Fam Pract. 2017 Feb;66(2):68-74. Review.

[Respiratory Health in Migrant Populations: A Crisis Overlooked.](#)

Holguin F, Moughrabieh MA, Ojeda V, Patel SR, Peyrani P, Pinedo M, Celedón JC, Douglas IS, Upson DJ, Roman J.  
Ann Am Thorac Soc. 2017 Feb;14(2):153-159.

[Reduced Forced Vital Capacity in an African Population: Prevalence and Risk Factors.](#)

Obaseki DO, Erhabor GE, Awopeju OF, Adewole OO, Adeniyi BO, Buist AS, Burney PG.  
Ann Am Thorac Soc. 2017 Feb 28.

## Pathology

[Comparison of Carotid Plaque Score and Coronary Artery Calcium Score for Predicting Cardiovascular Disease Events: The Multi-Ethnic Study of Atherosclerosis.](#)

Gepner AD, Young R, Delaney JA, Budoff MJ, Polak JF, Blaha MJ, Post WS, Michos ED, Kaufman J, Stein JH.  
J Am Heart Assoc. 2017 Feb 14;6(2). pii: e005179.

[Microprobe analysis in pulmonary pathology.](#)

Rogli VL.  
Ultrastruct Pathol. 2017 Jan-Feb;41(1):109-110.

[Tuberculous Peritonitis.](#)

Vaid U, Kane GC.  
Microbiol Spectr. 2017 Jan;5(1).

## Statistical Modeling

### [Statistical-thermodynamic model for light scattering from eye lens protein mixtures.](#)

Bell MM, Ross DS, Bautista MP, Shahmohamad H, Langner A, Hamilton JF, Lahnovych CN, Thurston GM. J Chem Phys. 2017 Feb 7;146(5):055101.

## Studies with Sheep and Sheep Farms

### [Cobalt supplementation, alone or in combination with vitamin B and selenium: Effects on lamb performance and mineral status.](#)

Keady TW, Hanrahan JP, Fagan SP. J Anim Sci. 2017 Jan;95(1):379-386.

### [A nationwide survey of anthelmintic treatment failure on sheep farms in Ireland.](#)

Keegan JD, Keane OM, Good B, De Waal T, Denny M, Hanrahan JP, Fitzgerald W, Sheehan M. Ir Vet J. 2017 Feb 9;70:7.

### [Can the amount of digestible undegraded protein offered to ewes in late pregnancy affect the periparturient change in resistance to gastrointestinal nematodes?](#)

Sebastiano RS, Sweeney T, Keady TW, Hanrahan JP, Good B. Vet Parasitol. 2017 Feb 15;235:8-16.

## Tobacco Smoke

### [Case-control study of cumulative cigarette tar exposure and lung and upper aerodigestive tract cancers.](#)

Meyers TJ, Chang SC, Chang PY, Morgenstern H, Tashkin DP, Rao JY, Cozen W, Mack TM, Zhang ZF. Int J Cancer. 2017 Feb 6.

### [Malondialdehyde-acetaldehyde \(MAA\) adducted surfactant protein induced lung inflammation is mediated through scavenger receptor a \(SR-A1\).](#)

Sapkota M, DeVasure JM, Kharbanda KK, Wyatt TA. Respir Res. 2017 Feb 13;18(1):36.

## Transient Receptor Potential Receptors

### [TRPM8 mediates the anti-inflammatory effects of eucalyptol.](#)

Caceres AI, Liu B, Jabba S, Achanta S, Morris JB, Jordt SE. Br J Pharmacol. 2017 Feb 27.

### [Ankyrin-rich membrane spanning protein as a novel modulator of transient receptor potential vanilloid 1-function in nociceptive neurons.](#)

Peter J, Kasper C, Kaufholz M, Buschow R, Isensee J, Hucho T, Herberg FW, Schwede F, Stein C, Jordt SE, Brackmann M, Spahn V. Eur J Pain. 2017 Feb 9.

## Transplants

[OPO Strategies to Prevent Unintended Use of Kidneys Exported for High PRA \(>98% cPRA\) Recipients.](#)

Paramesh AS, Neidlinger N, Salvatore M, Smith A, Friedman A, Payne W, Taber T, Wright C.  
Am J Transplant. 2017 Feb 6.

[Survival following lung transplantation for artificial stone silicosis relative to idiopathic pulmonary fibrosis.](#)

Rosengarten D, Fox BD, Fireman E, Blanc PD, Rusanov V, Fruchter O, Raviv Y, Shtraichman O, Saute M, Kramer MR.  
Am J Ind Med. 2017 Mar;60(3):248-254.

## Things Worth Celebrating!

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](mailto:kbailey@unmc.edu) or [tnordgren@unmc.edu](mailto:tnordgren@unmc.edu).



## ATS 2017 International Conference

Full Registration is OPEN for the ATS 2017 Conference on May 19-24 in Washington, D.C. More information is available at <http://conference.thoracic.org/attendees/registration/index.php>.

## ATS Secretary-Treasurer Election

The Deadline for the 2017 ATS Secretary-Treasurer Election is **Friday, March 24**. The two candidates are [Juan C. Celedón, MD, DrPH](#) (University of Pittsburgh) and [J. Usha Raj, MD](#) (Chicago College of Medicine). Read more about the candidates and cast your vote at

<https://www.thoracic.org/vote/secretary-treasurer/index.php>.

## Interesting Clinical Cases?

The web committee is currently calling for "Quick Hit" clinical cases, which will be posted on the website and highlighted in this newsletter. It is a good, peer-reviewed writing opportunity for trainees. Submit clinical cases to [kbailey@unmc.edu](mailto:kbailey@unmc.edu) or [craig.glazer@utsouthwestern.edu](mailto:craig.glazer@utsouthwestern.edu).