



We help the world breathe®
PULMONARY • CRITICAL CARE • SLEEP

Volume 1 | Issue 2
December 2015

EOPH Newsletter

EOPH web editorial committee

Craig Glazer

Kristina Bailey

Nirupama Putcha

Leonard Go

Tara Nordgren

Claire McCarthy

Dear EOPH members,

Welcome to our December newsletter. We wish you happy holidays. This newsletter highlights the best publications from our membership in November. Please send us any of your “Things worth celebrating”, and your best work. We are especially interested in highlighting the best work of trainees and junior faculty members. Our goal for the new year is to collect your most interesting clinical cases for the newsletter and the website. We would welcome any input into what else you would like to see in the newsletter. Please contact us at kbailey@unmc.edu or Craig.Glazer@UTSouthwestern.edu with any noteworthy publications, achievements, or suggestions for future issues.

Your web committee co-chairs,



Kristina Bailey and Craig Glazer

Recent publications

This section highlights some of our member's best work in the month of November. This month's list is especially long because it includes both published and "epub ahead of print" articles. The January 2016 edition will include only the "epub ahead of print". This will allow us to shift to an easier search method and make you aware of your colleagues most recent work.

Air Pollution

[Hydraulic Fracturing \(Fracking\) and the Clean Air Act.](#)

Evans RB, Prezant D, Huang YC; Occupational and Environmental Health Network of CHEST. Chest. 2015 Aug;148(2):298-300.

[Lifetime Exposure to Ambient Pollution and Lung Function in Children.](#)

Rice MB, Rifas-Shiman SL Mph, Litonjua AA, Oken E, Gillman MW Md Sm, Kloog I Ph D, Luttmann-Gibson H, Zanobetti A, Coull BA, Schwartz J, Koutrakis P, Mittleman MA, Gold DR. Am J Respir Crit Care Med. 2015 Nov 17.

[Commuting mode and pulmonary function in Shanghai, China.](#)

E Gaffney AW, Hang JQ, Lee MS, Su L, Zhang FY, Christiani DC. Eur Respir J. 2015 Nov 5. pii:ERJ-00637-2015

[Residential Proximity to Major Roadways Is Associated With Increased Levels of AC133+ Circulating Angiogenic Cells.](#)

DeJarnett N, Yeager R, Conklin DJ, Lee J, O'Toole TE, McCracken J, Abplanalp W, Srivastava S, Riggs DW, Hamzeh I, Wagner S, Chugh A, DeFilippis A, Ciszewski T, Wyatt B, Becher C, Higdon D, Ramos KS, Tollerud DJ, Myers JA, Rai SN, Shah J, Zafar N, Krishnasamy SS, Prabhu SD, Bhatnagar A. Arterioscler Thromb Vasc Biol. 2015 Nov;35(11):2468-77

Ozone

[Ozone-induced Nasal Type 2 Immunity in Mice is Dependent on Innate Lymphoid Cells.](#)

Kumagai K, Lewandowski R, Jackson-Humbles DN, Li N, Van Dyken SJ, Wagner JG, Harkema JR. Am J Respir Cell Mol Biol. 2015 Nov 11.

[Resistin deficiency in mice has no effect on pulmonary responses induced by acute ozone exposure.](#)

Razvi SS, Richards JB, Malik F, Cromar KR, Price RE, Bell CS, Weng T, Atkins CL, Spencer CY, Cockerill KJ, Alexander AL, Blackburn MR, Alcorn JL, Haque IU, Johnston RA. Am J Physiol Lung Cell Mol Physiol. 2015 Nov

Particulate matter

[Dietary Supplementation with Olive Oil or Fish Oil and Vascular Effects of Concentrated Ambient Particulate Matter Exposure in Human Volunteers.](#)

Tong H, Rappold AG, Caughey M, Hinderliter AL, Bassett M, Montilla T, Case MW, Berntsen J, Bromberg PA, Cascio WE, Diaz-Sanchez D, Devlin RB, Samet JM. Environ Health Perspect. 2015 Nov;123(11):1173-9.

[Particulate Air Pollution and Clinical Cardiovascular Disease Risk Factors.](#)

Shanley RP, Hayes RB, Cromar KR, Ito K, Gordon T, Ahn J. Epidemiology. 2015 Nov 24

[Association between Particulate Air Pollution and QT Interval Duration in an Elderly Cohort.](#)

Mordukhovich I, Kloog I, Coull B, Koutrakis P, Vokonas P, Schwartz J. Epidemiology. 2015 Nov 24

[The Impact of Multi-pollutant Clusters on the Association between Fine Particulate Air Pollution and Microvascular Function.](#)

Ljungman PL, Wilker EH, Rice MB, Austin E, Schwartz J, Gold DR, Koutrakis P, Benjamin EJ, Vita JA, Mitchell GF, Vasan RS, Hamburg NM, Mittleman MA. Epidemiology. 2015 Nov 11.

[Exposure to sub-chronic and long-term particulate air pollution and heart rate variability in an elderly cohort: the Normative Aging Study.](#)

Mordukhovich I, Coull B, Kloog I, Koutrakis P, Vokonas P, Schwartz J. Environ Health. 2015 Nov 6;14(1):87.

[Wood Smoke Particle Sequesters Cell Iron to Impact a Biological Effect.](#)

Chem Res Ghio AJ, Soukup JM, Dailey LA, Tong H, Kesic MJ, Budinger GR, Mutlu GM. Toxicol. 2015 Nov 16;28(11):2104-11.

[Prenatal Particulate Air Pollution and Asthma Onset in Urban Children. Identifying Sensitive Windows and Sex Differences.](#)

Leon Hsu HH, Mathilda Chiu YH, Coull BA, Kloog I, Schwartz J, Lee A, Wright RO, Wright RJ. Am J Respir Crit Care Med. 2015 Nov 1;192(9):1052-9.

Diesel exhaust

[Neighborhood-Scale Spatial Models of Diesel Exhaust Concentration Profile Using 1-Nitropyrene and Other Nitroarenes](#)

Schulte JK, Fox JR, Oron AP, Larson TV, Simpson CD, Paulsen M, Beaudet ,Kaufman JD, Magzamen S. Environ Sci Technol. 2015 Nov 17;49(22):13422-30.

[Pretreatment with Antioxidants Augments the Acute Arterial Vasoconstriction Caused by Diesel Exhaust Inhalation.](#)

Sack CS, Jansen KL, Cosselman KE, Trenga CA, Stapleton PL, Allen J, Peretz A,Olives C, Kaufman JD. Am J Respir Crit Care Med. 2015 Nov 24

Nanoparticles

[Amine modification of nonporous silica nanoparticles reduces inflammatory response following intratracheal instillation in murine lungs.](#)

Morris AS, Adamcakova-Dodd A, Lehman SE, Wongrakpanich A, Thorne PS, Larsen SC, Salem AK. Toxicol Lett. 2015 Nov 10.

[Single-Cell Mechanics Provides an Effective Means To Probe in Vivo Interactions between Alveolar Macrophages and Silver Nanoparticles.](#)

Liu YX, Karsai A, Anderson DS, Silva RM, Uyeminami DL, Van Winkle LS, Pinkerton KE, Liu GY. JPhys Chem B. 2015 Nov 25.

[Occupational exposure to nanoparticles at commercial photocopy centers.](#)

Martin J, Bello D, Bunker K, Shafer M, Christiani D, Woskie S, Demokritou P. J Hazard Mater. 2015 Nov 15;298:351-60.

Asthma

[Effects of omalizumab on T lymphocyte function in inner-city children with asthma.](#)

Gruchalla RS, Sampson HA, Liu AH, Shreffler W, Wallace PK, Togias A, David G, Calatroni A, LeBeau P; Inner-city Asthma Consortium. Pediatr Allergy Immunol. 2015 Nov 17.

[Alterations in DNA methylation and airway hyperreactivity in response to in utero exposure to environmental tobacco smoke](#)

Lee JW, Jaffar Z, Pinkerton KE, Porter V, Postma B, Ferrini M, Holian A, Roberts K, Cho YH. Inhal Toxicol. 2015Nov;27(13):724-30.

[Isocyanates and work-related asthma: Findings from California, Massachusetts, Michigan, and New Jersey, 1993-2008.](#)

Lefkowitz D, Pechter E, Fitzsimmons K, Lumia M, Stephens AC, Davis L, Flattery J, Weinberg J, Harrison RJ, Reilly MJ, Filios MS, White GE, Rosenman KD. Am J Ind Med. 2015 Nov;58(11):1138-49.

[Folate Deficiency, Atopy and Severe Asthma Exacerbations in Puerto Rican Children.](#)

Blatter J, Brehm JM, Sordillo J, Forno E, Boutaoui N, Acosta-Pérez E, Alvarez M, Colón-Semidey A, Weiss ST, Litonjua AA, Canino G, Celedón JC. AnnAm Thorac Soc. 2015 Nov 12.

[School Endotoxin Exposure and Asthma Morbidity in Inner-city Children.](#)

Lai PS, Sheehan WJ, Gaffin JM, Petty CR, Coull BA, Gold DR, Phipatanakul W. Chest. 2015 Nov 1;148(5):1251-8.

[Depression, Asthma, and Bronchodilator Response in a Nationwide Study of US Adults.](#)

Han YY, Forno E, Marsland AL, Miller GE, Celedón JC. J Allergy Clin Immunol Pract. 2015 Nov 7. pii: S2213-2198(15)00568-1.

[Novel albuterol multidose dry powder inhaler in patients with exercise-induced bronchoconstriction: A single-dose, double-blind, randomized, 2-way crossover study.](#)

Ostrom NK, Taveras H, Iverson H, Pearlman DS. Respir Med. 2015 Nov;109(11):1410-5.

[Cleaning products and short-term respiratory effects among female cleaners with asthma.](#)

Vízcaya D, Mirabelli MC, Gimeno D, Antó JM, Delclos GL, Rivera M, Orriols R, Arjona L, Burgos F, Zock JP. Occup Environ Med. 2015 Nov;72(11):757-63.

COPD

[Daily Exposure to Biomass Fuel Smoke Both Contribute to Chronic Bronchitis Risk in a Population with Low Prevalence of Daily Tobacco Smoking.](#)

Miele CH, Jaganath D, Miranda JJ, Bernabe-Ortiz A, Gilman RH, Johnson CM, Diette GB, Wise RA, Checkley W; CRONICAS Cohort Study Group. Urbanization and COPD. 2015 Nov 9:1-10.

[Undiagnosed Obstructive Lung Disease in the U.S.: Associated Factors and Long-term Mortality.](#)

Martinez CH, Mannino DM, Jaimes FA, Curtis JL, Han MK, Hansel NN, Diaz AA. Ann Am Thorac Soc. 2015 Nov 2

[COPD \(confusion over proper diagnosis\) in the zone of maximum uncertainty.](#)

Quanjer PH, Ruppel G, Brusasco V, Pérez-Padilla R, Fragoso CA, Culver BH, Swanney MP, Miller MR, Thompson B, Morgan M, Hughes M, Graham BL, Pellegrino R, Enright P, Buist AS, Burney P. Eur Respir J. 2015 Nov;46(5):1523-4.

[The safety of anticholinergic bronchodilators for the treatment of chronic obstructive pulmonary disease.](#)

Tashkin DP. Expert Opin Drug Saf. 2015 Nov;14(11):1759-72.

Smoking

[Socioeconomic disparities in secondhand smoke exposure among US never-smoking adults: the National Health and Nutrition Examination Survey 1988-2010.](#)

Gan WQ, Mannino DM, Jemal A. Tob Control. 2015 Nov;24(6):568-73

Marijuana

[Implications of Marijuana Decriminalization on the Practice of Pulmonary, Critical Care, and Sleep Medicine. A Report of the American Thoracic Society Marijuana Workgroup.](#)

Douglas IS, Albertson TE, Folan P, Hanania NA, Tashkin DP, Upson DJ, Leone FT. Ann Am Thorac Soc. 2015 Nov;12(11):1700-10.

[How beneficial is vaping cannabis to respiratory health compared to smoking?](#)

Tashkin DP. Addiction. 2015 Nov;110(11):1706-7.

Interstitial lung disease

[The role of inducible nitric oxide synthase for interstitial remodeling of alveolar septa in surfactant protein D-deficient mice.](#)

Knudsen L, Atochina-Vasserman EN, Massa CB, Birkelbach B, Guo CJ, Scott P, Haenni B, Beers MF, Ochs M, Gow AJ. Am J Physiol Lung Cell Mol Physiol. 2015 Nov 1;309(9):L959-69.

Climate Change

[Projections of temperature-attributable premature deaths in 209 U.S. cities using a cluster-based Poisson approach.](#)

Schwartz JD, Lee M, Kinney PL, Yang S, Mills D, Sarofim MC, Jones R, Streeter R, Juliana AS, Peers J, Horton RM. Environ Health. 2015 Nov 4;14(1):85.

[Saharan dust, climate variability, and asthma in Grenada, the Caribbean.](#)

Akpınar-Elci M, Martin FE, Behr JG, Diaz R. Int J Biometeorol. 2015 Nov;59(11):1667-71.

Pulmonary inflammation

[Inhalation exposure to ethylene induces eosinophilic rhinitis and nasal epithelial remodeling in Fischer 344 rats.](#)

Brandenberger C, Hotchkiss JA, Krieger SM, Pottenger LH, Harkema JR. Chem Biol Interact. 2015 Nov 5;241:66-75.

[Interferon- \$\gamma\$ enhances both the anti-bacterial and the pro-inflammatory response of human mast cells to Staphylococcus aureus.](#)

Swindle EJ, Brown JM, Rådinger M, DeLeo FR, Metcalfe DD. Immunology. 2015 Nov;146(3):470-85.

[Association of Nrf2 with airway pathogenesis: lessons learned from genetic mouse models.](#)

Cho HY, Kleeberger SR. Arch Toxicol. 2015 Nov;89(11):1931-57.

[Functional polymorphisms in Nrf2: implications for human disease.](#)

Cho HY, Marzec J, Kleeberger SR. Free Radic Biol Med. 2015 Nov;88(Pt B):362-72.

[Airway epithelial dual oxidase 1 mediates allergen-induced IL-33 secretion and activation of type 2 immune responses.](#)

Hristova M, Habibovic A, Veith C, Janssen-Heininger YM, Dixon AE, Geiszt M, van der Vliet A. J Allergy Clin Immunol. 2015

Lung Cancer

[Fine-mapping of chromosome 5p15.33 based on a targeted deep sequencing and high density genotyping identifies novel lung cancersusceptibility loci.](#)

Kachuri L, Amos CI, McKay JD, Johansson M, Vineis P, Bueno-de-Mesquita HB, Boutron-Ruault MC, Johansson M, Quirós JR, Sieri S, Travis RC, Weiderpass E, LeMarchand L, Henderson BE, Wilkens L, Goodman G, Chen C, Doherty JA, Christiani DC, Wei Y, Su L, Tworoger S, Zhang X, Kraft P, Zaridze D, Field JK, Marcus MW, Davies MP, Hyde R, Caporaso NE, Landi MT, Severi G, Giles GG, Liu G, McLaughlin JR, Li Y, Xiao X, Fehringer G, Zong X, Denroche RE, Zuzarte PC, McPherson JD, Brennan P, Hung RJ. Carcinogenesis. 2015 Nov 20

[Differential N-Glycosylation Patterns in Lung Adenocarcinoma Tissue.](#)

Ruhaak LR, Taylor SL, Stroble C, Nguyen UT, Parker EA, Song T, Lebrilla CB, Rom WN, Pass H, Kim K, Kelly K, Miyamoto S. J Proteome Res. 2015 Nov 6;14(11):4538-49

[Cross Cancer Genomic Investigation of Inflammation Pathway for Five Common Cancers: Lung, Ovary, Prostate, Breast, and Colorectal Cancer Hung](#)

RJ, Ulrich CM, Goode EL, Brhane Y, Muir K, Chan AT, Marchand LL, Schildkraut J, Witte JS, Eeles R, Boffetta P, Spitz MR, Poirier JG, Rider DN, Fridley BL, Chen Z, Haiman C, Schumacher F, Easton DF, Landi MT, Brennan P, Houlston R, Christiani DC, Field JK, Bickeböller H, Risch A, Kote-Jarai Z, Wiklund F, Grönberg H, Chanock S, Berndt SI, Kraft P, Lindström S, Al Olama AA, Song H, Phelan C, Wentzensen N, Peters U, Slattery ML, GECCO, Sellers TA, FOCI, Casey G, Gruber SB; CORECT, Hunter DJ; DRIVE, Amos CI, Henderson B; GAME-ON Network. J Natl Cancer Inst. 2015 Aug 29;107(11).

[CT Screening for Lung Cancer:Nonsolid Nodules in Baseline and Annual Repeat Rounds.](#)

Yankelevitz DF, Yip R, Smith JP, Liang M, Liu Y, Xu DM, Salvatore MM, Wolf AS, Flores RM, Henschke CI; As the Writing Committee for The International Early Lung Cancer Action Program Investigators Group. Radiology. 2015 Nov;277(2):555-64.

Environmental and Occupational Health

[Cross-Sectional Study of Respiratory Symptoms, Spirometry, and Immunologic Sensitivity in Epoxy Resin Workers](#)

Hines SE, Barker EA, Robinson M, Knight V, Gaitens J, Sills M, Duvall K, Rose CS. Clin Transl Sci. 2015 Nov 10.

[Occupational Medicine Model and Asthma Military Recruitment.](#)

Brooks SM. Mil Med. 2015 Nov;180(11):1140-6.

[Measuring multimorbidity in a working population: the effect on incident sickness absence.](#)

Ubalde-Lopez M, Delclos GL, Benavides FG, Calvo-Bonacho E, Gimeno D. Int Arch Occup Environ Health. 2015 Nov 28.

[Styrene-associated health outcomes at a windblade manufacturing plant.](#)

McCague AB, Cox-Ganser JM, Harney JM, Alwis KU, Blount BC, Cummings KJ, Edwards N, Kreiss K. Am J Ind Med. 2015 Nov;58(11):1150-9.

Hospital Workers

[Psychosocial work factors in new or recurrent injuries among hospital workers: a prospective study.](#)

Lee SJ, You D, Gillen M, Blanc PD. Int Arch Occup Environ Health. 2015 Nov;88(8):1141-8.

[Sleep interruption associated with house staff work schedules alters circadian gene expression.](#)

Fang MZ, Ohman-Strickland P, Kelly-McNeil K, Kipen H, Crabtree BF, Lew JP, Zarbl H. Sleep Med. 2015 Nov;16(11):1388-94.

Silicosis

[From silicosis to silica hazards: An experiment in medicine, history, and the social sciences.](#)

Rosental PA, Rosner D, Blanc PD. Am J Ind Med. 2015 Nov;58 Suppl 1:3-5.

["Acute" silicosis at the 1930 Johannesburg Conference on silicosis and in its aftermath: Controversies over a distinct entity later recognized as silicoproteinosis.](#)

Blanc PD. Am J Ind Med. 2015 Nov;58 Suppl 1:39-47.

Agriculture

[Farmworker Housing in the United States and Its Impact on Health.](#)

Quandt SA, Brooke C, Fagan K, Howe A, Thornburg TK, McCurdy SA. New Solut. 2015 Nov;25(3):263-86.

[Pesticide exposure and end-stage renal disease risk among wives of pesticide applicators in the Agricultural Health Study.](#)

Lebov JF, Engel LS, Richardson D, Hogan SL, Sandler DP, Hoppin JA. Environ Res. 2015 Nov;143(Pt A):198-210.

Ambient Ammonia Exposures in an Agricultural Community and Pediatric Asthma Morbidity.

Loftus C, Yost M, Sampson P, Torres E, Arias G, Breckwich Vasquez V, Hartin K, Armstrong J, Tchong-French M, Vedal S, Bhatti P, Karr C. Epidemiology. 2015 Nov;26(6):794-801.

Reviews

Alcohol, Aldehydes, Adducts and Airways.

Sapkota M, Wyatt TA. Biomolecules. 2015 Nov 5;5(4):2987-3008.

Environmental factors in cardiovascular disease.

Cosselman KE, Navas-Acien A, Kaufman JD. Nat Rev Cardiol. 2015 Nov;12(11):627-42.

Things worth celebrating

I know that there are many good things that have happened to the talented people in our assembly this month. Unfortunately, no one sent us any information about their accomplishments. Please send your “things worth celebrating” to kbailey@unmc.edu.



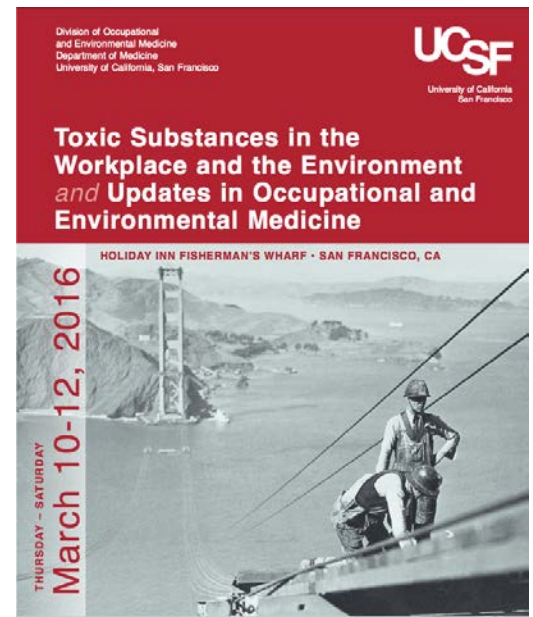
Educational Opportunities

Toxic Substances in the Workplace and the Environment and Updates in Occupational and Environmental Medicine

March 10-12, 2016 in San Francisco, CA

Course Chairs: Paul D. Blanc, MD, MSPH; Robert Kosnik, MD, DIH; Timur Durrani, MD, MPH, MBA

This course is designed to provide occupational and environmental health professionals and persons from other health-related disciplines with a review and update of current topics in occupational and environmental medicine. The first day of the curriculum will focus on toxic substances in the workplace and the environment. A poster session the evening before will supplement the Toxic Substances course content. The second day and final half-day of the course will cover a multi-topic theme: Updates in Occupational and Environmental Health. [Click here for more information.](#)



Send us your interesting cases

The web committee is currently soliciting interesting pulmonary cases with an EOPH focus. These cases will be posted on the website and highlighted in this newsletter. They will be peer reviewed prior to acceptance, so this is a good opportunity for your trainees.

kbailey@unmc.edu or craig.glazer@utsouthwestern.edu.

Funding Opportunities

RFA 15-1: Walter A. Rosenblith New Investigator Award

This award supports creative junior investigators, at Assistant Professor or equivalent level, with outstanding promise who are interested in the health effects of air pollution. Request for Applications 15-1 provides up to 3 years of funding for a project relevant to HEI's research interests, as outlined in the HEI Strategic Plan 2015-2020. [More Information](#)

RFPA 15-2: Health Effects of Air Pollution

Request for Preliminary Applications 15-2 provides an application mechanism for investigators whose area of interest falls outside of the topics targeted in other requests for applications from HEI. Of greatest interest is research that is relevant to HEI's current priorities, as outlined in the HEI Strategic Plan 2015-2020. RFPA 15-2 provides funding for two studies of up to 2 years or 2.5 years in duration, with a funding cap of \$400,000 per study. [More information](#)