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Assembly on Environmental, Occupation and Population Health Newsletter

EOPH

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Dear EOPH members,

We hope you all had a happy holidays and a great new year! In this January issue of the EOPH newsletter, we share some of our members' recent "epub ahead of print" articles. We also include information about assembly elections which are going on now and close February 1. Also, be sure to listen to the BreatheEasy podcast episode where EOPH Assembly member Dr. Kent Pinkerton discusses the California wildfires and lung health impacts.

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 tara.nordgren@medsch.ucr.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 was recently 'e-published.' It is possible that our search may miss your best work, so please send your recent publications to kbailey@unmc.edu or tara.nordgren@medsch.ucr.edu.

Air pollution

[Pregnancy exposure to air pollution and early childhood respiratory health in the Norwegian Mother and Child Cohort Study \(MoBa\).](#)

Madsen C, Haberg SE, Magnus MC, Aamodt G, Stigum H, London SJ, Nystad W, Nafstad P.

BMJ Open. 2017 Dec 26;7(12):e015796. doi: 10.1136/bmjopen-2016-015796.

[Association of Short-term Exposure to Air Pollution With Mortality in Older Adults.](#)

Di Q, Dai L, Wang Y, Zanobetti A, Choirat C, Schwartz JD, Dominici F.

JAMA. 2017 Dec 26;318(24):2446-2456. doi: 10.1001/jama.2017.17923.

[Prenatal particulate matter exposure and mitochondrial dysfunction at the maternal-fetal interface: Effect modification by maternal lifetime trauma and child sex.](#)

Brunst KJ, Sanchez-Guerra M, Chiu YM, Wilson A, Coull BA, Kloog I, Schwartz J, Brennan KJ, Bosquet Enlow M, Wright RO, Baccarelli AA, Wright RJ.

Environ Int. 2017 Dec 14;112:49-58. doi: 10.1016/j.envint.2017.12.020. [Epub ahead of print]

[Chemokine \(C-C Motif\) Receptor-Like 2 is not essential for lung injury, lung inflammation, or airway hyperresponsiveness induced by acute exposure to ozone.](#)

Malik F, Cromar KR, Atkins CL, Price RE, Jackson WT, Siddiqui SR, Spencer CY, Mitchell NC, Haque IU, Johnston RA.

Physiol Rep. 2017 Dec;5(24). pii: e13545. doi: 10.14814/phy2.13545.

[Walking to a pathway for cardiovascular effects of air pollution.](#)

Thurston GD, Newman JD.

Lancet. 2017 Dec 5. pii: S0140-6736(17)33078-7. doi: 10.1016/S0140-6736(17)33078-7. [Epub ahead of print] No abstract available.

[Respiratory Responses to Ozone Exposure: The Multicenter Ozone Study in oldEr Subjects \(MOSES\).](#)

Arjomandi M, Balmes JR, Frampton MW, Bromberg P, Stark P, Alexis NE, Rich DQ, Costantini M, Hollenbeck-Pringle D, Dagincourt N, Hazucha MJ.

Am J Respir Crit Care Med. 2017 Dec 12. doi: 10.1164/rccm.201708-1613OC. [Epub ahead of print]

[Exposure to traffic-related air pollution and the composition of the gut microbiota in overweight and obese adolescents.](#)

Alderete TL, Jones RB, Chen Z, Kim JS, Habre R, Lurmann F, Gilliland FD, Goran MI.

Environ Res. 2018 Feb;161:472-478. doi: 10.1016/j.envres.2017.11.046.

[Airborne PCBs and OH-PCBs Inside and Outside Urban and Rural U.S. Schools.](#)

Marek RF, Thorne PS, Herkert NJ, Awad AM, Hornbuckle KC.

Environ Sci Technol. 2017 Jul 18;51(14):7853-7860. doi: 10.1021/acs.est.7b01910. Epub 2017 Jun 28.

[Short-Term Air Pollution and Incident Pneumonia: A Case-Crossover Study.](#)

Pirozzi CS, Jones BE, VanDerslice JA, Zhang Y, Paine R 3rd, Dean NC.

Ann Am Thorac Soc. 2017 Dec 28. doi: 10.1513/AnnalsATS.201706-495OC. [Epub ahead of print]

[Exposure to ambient air pollution and calcification of the mitral annulus and aortic valve: the multi-ethnic study of atherosclerosis \(MESA\).](#)

Tibuakuu M, Jones MR, Navas-Acien A, Zhao D, Guallar E, Gassett AJ, Sheppard L, Budoff MJ, Kaufman JD, Michos ED.

Environ Health. 2017 Dec 21;16(1):133. doi: 10.1186/s12940-017-0346-x.

[Design of an Air Pollution Monitoring Campaign in Beijing for Application to Cohort Health Studies.](#)

Vedal S, Han B, Xu J, Szpiro A, Bai Z.

Int J Environ Res Public Health. 2017 Dec 15;14(12). pii: E1580. doi: 10.3390/ijerph14121580. Review.

PMID: 29244738 [PubMed - in process] **Free Article**

[Air pollution and subclinical interstitial lung disease: the Multi-Ethnic Study of Atherosclerosis \(MESA\) air-lung study.](#)

Sack C, Vedal S, Sheppard L, Raghu G, Barr RG, Podolanczuk A, Doney B, Hoffman EA, Gassett A, Hinckley-Stukovsky K, Williams K, Kawut S, Lederer DJ, Kaufman JD.

Eur Respir J. 2017 Dec 7;50(6). pii: 1700559. doi: 10.1183/13993003.00559-2017. Print 2017 Dec.

Asthma

[Diet, Lung Function, and Asthma Exacerbations in Puerto Rican Children.](#)

Han YY, Forno E, Alvarez M, Colón-Semidey A, Acosta-Perez E, Canino G, Celedón JC.

Pediatr Allergy Immunol Pulmonol. 2017 Dec 1;30(4):202-209. doi: 10.1089/ped.2017.0803.

Wright LS, Rifas-Shiman SL, Oken E, Litonjua AA, Gold DR.

[Allergic sensitization in American children of Middle Eastern ethnicity at age 2.](#)

Havstad S, Sitarik AR, Johnson CC, Zoratti EM, Ownby DR, Levin AM, Wegienka G.

[Prenatal Nitrate Exposure and Childhood Asthma. Influence of Maternal Prenatal Stress and Fetal Sex.](#)

Bose S, Chiu YM, Hsu HL, Di Q, Rosa MJ, Lee A, Kloog I, Wilson A, Schwartz J, Wright RO, Cohen S, Coull BA, Wright RJ.

[Incidence of Occupational Asthma and Exposure to Toluene Diisocyanate in the United States Toluene Diisocyanate Production Industry.](#)

Collins JJ, Anteau S, Conner PR, Cassidy LD, Doney B, Wang ML, Kurth L, Carson M, Molenaar D, Redlich CA, Storey E.

[Medical Monitoring for Occupational Asthma Among Toluene Diisocyanate Production Workers in the United States.](#)

Cassidy LD, Doney B, Wang ML, Kurth L, Conner PR, Collins JJ, Carson M, Molenaar D, Redlich CA, Storey E.

J Occup Environ Med. 2017 Dec;59 Suppl 12:S13-S21. doi: 10.1097/JOM.0000000000001197.

Agricultural Exposures

[A role for B cells in organic dust induced lung inflammation.](#)

Poole JA, Mikuls TR, Duryee MJ, Warren KJ, Wyatt TA, Nelson AJ, Romberger DJ, West WW, Thiele GM.

Respir Res. 2017 Dec 22;18(1):214. doi: 10.1186/s12931-017-0703-x.

[Paraquat and MPTP alter microRNA expression profiles, and downregulated expression of miR-17-5p contributes to PQ-induced dopaminergic neurodegeneration.](#)

Wang Q, Zhan Y, Ren N, Wang Z, Zhang Q, Wu S, Li H.

J Appl Toxicol. 2017 Dec 18. doi: 10.1002/jat.3571. [Epub ahead of print]

[A task-based analysis of black carbon exposure in Iowa farmers during harvest.](#)

Stapleton EM, O'Shaughnessy PT, Locke SJ, Altmaier RW, Hofmann JN, Beane Freeman LE, Thorne PS, Jones RR, Friesen MC.

J Occup Environ Hyg. 2017 Dec 29;0. doi: 10.1080/15459624.2017.1422870. [Epub ahead of print]

[Environmental Effects of Intensive Livestock Farming.](#)

Sigsgaard T, Balmes J.

Am J Respir Crit Care Med. 2017 Nov 1;196(9):1092-1093. doi: 10.1164/rccm.201706-1075ED. No abstract available.

COPD/Smoking cessation

[Effect of budesonide/formoterol pressurized metered-dose inhaler on exacerbations versus formoterol in chronic obstructive pulmonary disease: The 6-month, randomized RISE \(Revealing the Impact of Symbicort in reducing Exacerbations in COPD\) study.](#)

Ferguson GT, Tashkin DP, Skärby T, Jorup C, Sandin K, Greenwood M, Pemberton K, Trudo F.
Respir Med. 2017 Nov;132:31-41. doi: 10.1016/j.rmed.2017.09.002. Epub 2017 Sep 5.

[HIV Infection, Pulmonary Tuberculosis, and COPD in Rural Uganda: A Cross-Sectional Study.](#)

North CM, Allen JG, Okello S, Sentongo R, Kakuhikire B, Ryan ET, Tsai AC, Christiani DC, Siedner MJ.
Lung. 2017 Dec 19. doi: 10.1007/s00408-017-0080-8. [Epub ahead of print]

[Effectiveness of Pharmaceutical Smoking Cessation Aids in a Nationally Representative Cohort of American Smokers.](#)

Leas EC, Pierce JP, Benmarhnia T, White MM, Noble ML, Trinidad DR, Strong DR.
J Natl Cancer Inst. 2017 Dec 21. doi: 10.1093/jnci/djx240. [Epub ahead of print]

Cancer

[Development and Validation of Nomograms Predictive of Overall and Progression-Free Survival in Patients With Oropharyngeal Cancer.](#)

Fakhry C, Zhang Q, Nguyen-Tân PF, Rosenthal DI, Weber RS, Lambert L, Trotti AM 3rd, Barrett WL, Thorstad WL, Jones CU, Yom SS, Wong SJ, Ridge JA, Rao SSD, Bonner JA, Vigneault E, Raben D, Kudrimoti MR, Harris J, Le QT, Gillison ML.
J Clin Oncol. 2017 Dec 20;35(36):4057-4065. doi: 10.1200/JCO.2016.72.0748. Epub 2017 Aug 4.

[Physical Activity Decreases Kidney Cancer Mortality.](#)

Liss M, Natarajan L, Hasan A, Noguchi JL, White M, Parsons JK.
Curr Urol. 2017 Nov;10(4):193-198. doi: 10.1159/000447180. Epub 2017 Oct 22.

[Toll-like receptor expression in human non-small cell lung carcinoma: potential prognostic indicators of disease.](#)

Bauer AK, Upham BL, Rondini EA, Tennis MA, Velmuragan K, Wiese D.
Oncotarget. 2017 Jul 22;8(54):91860-91875. doi: 10.18632/oncotarget.19463. eCollection 2017 Nov 3.

[A Longitudinal Cohort Study of Aspirin Use and Progression of Emphysema-like Lung on CT: The MESA Lung Study.](#)

Aaron CP, Schwartz JE, Hoffman EA, Angelini E, Austin JHM, Cushman M, Jacobs DR Jr, Kaufman JD, Laine A, Smith LJ, Yang J, Watson KE, Tracy RP, Barr RG.
Chest. 2017 Dec 12. pii: S0012-3692(17)33210-5. doi: 10.1016/j.chest.2017.11.031. [Epub ahead of print]

Interstitial lung disease

[Towards a global initiative for fibrosis treatment \(GIFT\).](#)

Molina-Molina M, Agusti A, Crestani B, Schwartz DA, Königshoff M, Chambers RC, Maher TM, Faner R, Mora AL, Rojas M, Antoniou KM, Sellares J.
ERJ Open Res. 2017 Dec 1;3(4). pii: 00106-2017. doi: 10.1183/23120541.00106-2017. eCollection 2017 Oct.

[Deep Proteome Profiling Reveals Common Prevalence of MZB1-Positive Plasma B Cells in Human Lung and Skin Fibrosis.](#)

Schiller HB, Mayr CH, Leuschner G, Strunz M, Staab-Weijnitz C, Preisendörfer S, Eckes B, Moinszadeh P, Krieg T, Schwartz DA, Hatz RA, Behr J, Mann M, Eickelberg O.
Am J Respir Crit Care Med. 2017 Nov 15;196(10):1298-1310. doi: 10.1164/rccm.201611-2263OC.

[Rare Genetic Variants in PARN Are Associated with Pulmonary Fibrosis in Families.](#)

Kropski JA, Reiss S, Markin C, Brown KK, Schwartz DA, Schwarz MI, Loyd JE, Phillips JA 3rd, Blackwell TS, Cogan JD.
Am J Respir Crit Care Med. 2017 Dec 1;196(11):1481-1484. doi: 10.1164/rccm.201703-0635LE. No abstract available.

Allergy

[Effect of inhaled allergens and air pollutants on childhood rhinitis development.](#)

Zhou H, Li XI, Kim JH, Salam MT, Kim HB, McConnell RS, Habre R, Bastain T, Farzan SF, Johnston J, Gilliland FD. *Ann Allergy Asthma Immunol.* 2017 Dec 5. pii: S1081-1206(17)31257-7. doi: 10.1016/j.anai.2017.10.036. [Epub ahead of print] No abstract available.

[Bedroom allergen exposures in US households.](#)

Salo PM, Wilkerson J, Rose KM, Cohn RD, Calatroni A, Mitchell HE, Sever ML, Gergen PJ, Thorne PS, Zeldin DC. *J Allergy Clin Immunol.* 2017 Nov 23. pii: S0091-6749(17)31590-7. doi: 10.1016/j.jaci.2017.08.033. [Epub ahead of print]

Radiology

[The "Complex Restrictive" Pulmonary Function Pattern: Clinical and Radiologic Analysis of a Common but Previously Undescribed Restrictive Pattern.](#)

Clay RD, Iyer VN, Reddy DR, Siontis B, Scanlon PD. *Chest.* 2017 Dec;152(6):1258-1265. doi: 10.1016/j.chest.2017.07.009. Epub 2017 Jul 17.

[The chest radiologist's role in invasive breast cancer detection.](#)

Margolies LR, Salvatore M, Yip R, Tam K, Bertolini A, Henschke C, Yankelevitz D.

[The Role of Chest Computed Tomography in the Evaluation and Management of the Patient with Chronic Obstructive Pulmonary Disease.](#)

Labaki WW, Martinez CH, Martinez FJ, Galbán CJ, Ross BD, Washko GR, Barr RG, Regan EA, Coxson HO, Hoffman EA, Newell JD Jr, Curran-Everett D, Hogg JC, Crapo JD, Lynch DA, Kazerooni EA, Han MK. *Am J Respir Crit Care Med.* 2017 Dec 1;196(11):1372-1379. doi: 10.1164/rccm.201703-0451PP. Review.

[Comparison of digital and film chest radiography for detection and medical surveillance of silicosis in a setting with a high burden of tuberculosis.](#)

Franzblau A, teWaterNaude J, Sen A, d'Arcy H, Smilg JS, Mashao KS, Meyer CA, Lockey JE, Ehrlich RI. *Am J Ind Med.* 2017 Dec 6. doi: 10.1002/ajim.22803. [Epub ahead of print]

Animal models

[Nonhuman Primate Models of Respiratory Disease: Past, Present, and Future.](#)

Miller LA, Royer CM, Pinkerton KE, Schelegle ES. *ILAR J.* 2017 Dec 5:1-12. doi: 10.1093/ilar/ilx030. [Epub ahead of print]

Global Health

[Sustained Malaria Control Over an 8-Year Period in Papua New Guinea: The Challenge of Low-Density Asymptomatic Plasmodium Infections.](#)

Koepfli C, Ome-Kaius M, Jally S, Malau E, Maripal S, Ginny J, Timinao L, Kattenberg JH, Obadia T, White M, Rarau P, Senn N, Barry AE, Kazura JW, Mueller I, Robinson LJ. *J Infect Dis.* 2017 Dec 12;216(11):1434-1443. doi: 10.1093/infdis/jix507.

[Big Data Knowledge in Global Health Education.](#)

Olayinka O, Kekeh M, Sheth-Chandra M, Akpinar-Elci M.

Ann Glob Health. 2017 May - Aug;83(3-4):676-681. doi: 10.1016/j.aogh.2017.09.005. Epub 2017 Nov 6.

Aging

[Aging-related limit of exercise efficacy on motor decline.](#)

Arnold JC, Cantu MA, Kasanga EA, Nejtek VA, Papa EV, Bugnariu N, Salvatore MF.

PLoS One. 2017 Nov 27;12(11):e0188538. doi: 10.1371/journal.pone.0188538. eCollection 2017.

[Effects of continuation electroconvulsive therapy on quality of life in elderly depressed patients: A randomized clinical trial.](#)

McCall WV, Lisanby SH, Rosenquist PB, Dooley M, Husain MM, Knapp RG, Petrides G, Rudorfer MV, Young RC, McClintock SM, Mueller M, Prudic J, Greenberg RM, Weiner RD, Bailine SH, Youssef NA, McCloud L, Kellner CH; CORE/PRIDE Work Group.

J Psychiatr Res. 2018 Feb;97:65-69. doi: 10.1016/j.jpsychires.2017.11.001. Epub 2017 Nov 16.

Opioid crisis

[The Untold Toll of the Opioid Crisis on Intensive Care Units in the United States.](#)

Mehta AB, Weinstein Z, Walkey AJ.

Ann Am Thorac Soc. 2017 Dec;14(12):1763-1765. doi: 10.1513/AnnalsATS.201708-662ED. No abstract available.

Cystic Fibrosis

[Nasospheroids permit measurements of CFTR-dependent fluid transport.](#)

Guimbellot JS, Leach JM, Chaudhry IG, Quinney NL, Boyles SE, Chua M, Aban I, Jaspers I, Gentzsch M.

JCI Insight. 2017 Nov 16;2(22). pii: 95734. doi: 10.1172/jci.insight.95734. [Epub ahead of print]

ATS

[Recommendations for a Standardized Pulmonary Function Report. An Official American Thoracic Society Technical Statement.](#)

Culver BH, Graham BL, Coates AL, Wanger J, Berry CE, Clarke PK, Hallstrand TS, Hankinson JL, Kaminsky DA, MacIntyre NR, McCormack MC, Rosenfeld M, Stanojevic S, Weiner DJ; ATS Committee on Proficiency Standards for Pulmonary Function Laboratories.

Am J Respir Crit Care Med. 2017 Dec 1;196(11):1463-1472. doi: 10.1164/rccm.201710-1981ST.

[How Do We "Help the World Breathe"?](#)

Gordon SB, Buist AS, Hopewell P, Pinkerton K, Sly P, West TE, Moschovis P, Accinelli RA, Cruz AA, Adhikari NKJ; International Health Committee of the American Thoracic Society.

Am J Respir Crit Care Med. 2017 Nov 1;196(9):1100-1102. doi: 10.1164/rccm.201706-1174ED. No abstract available.

Climate/Weather

[Accounting for adaptation and intensity in projecting heat wave-related mortality.](#)

Wang Y, Nordio F, Nairn J, Zanobetti A, Schwartz JD.

Environ Res. 2018 Feb;161:464-471. doi: 10.1016/j.envres.2017.11.049.

[Endotoxin predictors and associated respiratory outcomes differ with climate regions in the U.S.](#)

Mendy A, Wilkerson J, Salo PM, Cohn RD, Zeldin DC, Thorne PS.

Environ Int. 2017 Dec 22;112:218-226. doi: 10.1016/j.envint.2017.12.003. [Epub ahead of print]

Environmental and Occupational Exposures

[Transition and post-transition metals in exhaled breath condensate.](#)

Ghio A, Madden MC, Esther CR.

J Breath Res. 2017 Dec 15. doi: 10.1088/1752-7163/aaa214. [Epub ahead of print]

[Prenatal arsenic exposure, child marriage, and pregnancy weight gain: Associations with preterm birth in Bangladesh.](#)

Rahman ML, Kile ML, Rodrigues EG, Valeri L, Raj A, Mazumdar M, Mostofa G, Quamruzzaman Q, Rahman M, Hauser R, Baccarelli A, Liang L, Christiani DC.

Environ Int. 2017 Dec 12;112:23-32. doi: 10.1016/j.envint.2017.12.004. [Epub ahead of print]

[Injury, illness, and disability risk in American seafarers.](#)

Lefkowitz RY, Slade MD, Redlich CA.

Am J Ind Med. 2017 Dec 17. doi: 10.1002/ajim.22802. [Epub ahead of print]

[Serum YKL-40 in workers at an indium-tin oxide production facility.](#)

Harvey RR, Hawley BM, Virji MA, Cummings KJ.

Respirology. 2017 Dec 15. doi: 10.1111/resp.13236. [Epub ahead of print] No abstract available.

[Multi-source surveillance for work-related crushing injuries.](#)

Kica J, Rosenman KD.

Am J Ind Med. 2017 Dec 4. doi: 10.1002/ajim.22800. [Epub ahead of print]

[Advances in environmental and occupational disorders in 2016.](#)

Sheehan WJ, Gaffin JM, Peden DB, Bush RK, Phipatanakul W.

J Allergy Clin Immunol. 2017 Dec;140(6):1683-1692. doi: 10.1016/j.jaci.2017.09.032. Review.

[Clinical tool for disease phenotyping in granulomatous lung disease.](#)

Silveira LJ, Strand M, Van Dyke MV, Mroz MM, Faino AV, Dabelea DM, Maier LA, Fingerlin TE.

PLoS One. 2017 Nov 16;12(11):e0188119. doi: 10.1371/journal.pone.0188119. eCollection 2017.

[Chlorine Countermeasures: Supplemental Oxygen Equals Supplemental Lung Injury?](#)

Svendsen ER.

Am J Respir Cell Mol Biol. 2018 Jan;58(1):10-11. doi: 10.1165/rcmb.2017-0320ED. No abstract available.

[Correspondence regarding the article "The asbestos fibre burden in human lungs: new insights into the chrysotile debate".](#)

Oliver LC, Belpoggi F, Budnik LT, Egilman D, Frank AL, Mandrioli D, Soskolne CL, Terracini B, Welch L, Baur X.

[Exposure to naturally occurring mineral fibers due to off-road vehicle use: A review.](#)

Wolfe C, Buck B, Miller A, Lockey J, Weis C, Weissman D, Jones A, Ryan P.

Int J Hyg Environ Health. 2017 Nov;220(8):1230-1241. doi: 10.1016/j.ijheh.2017.07.003. Epub 2017 Jul 20. Review.

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.

Don't forget to vote!

Voting for Assembly Leaders is now open online. [Please click here to vote!](#) Members of the Society's 14 Assemblies can vote for future Assembly leaders online instead of in person at the Assembly membership meetings during the ATS International Conference. As a result, all Assembly members will have the opportunity to vote even if they are unable to attend their membership meeting.

This year we are voting for:

Assembly Chair

-Augusto Litonjua
-Stephanie London

Program Committee Chair

-Kevin Cromar
-Ilona Jaspers

Nominating Committee

-Jessica Castner
-Kristin Cummings
-Susan Tarlo



BreatheEasy Wildfire Podcast

Dr. Michael Lanspa hosted a [BreatheEasy Podcast that interviews EOPH Assembly member Dr. Kent Pinkerton](#) regarding the California wildfires and lung health impacts of these and other pollutant exposures. Please be sure to listen in, and consider subscribing to the BreatheEasy Podcast to stay up to date on a variety interesting and informative topics relating to pulmonary and critical care medicine.