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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,

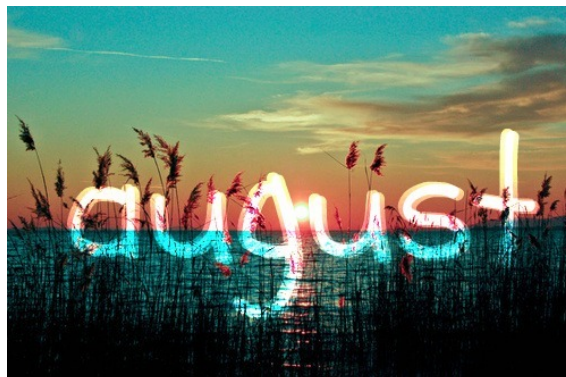
We hope you all had a great summer! In this August issue of the EOPH newsletter, we share some of our members' recent "epub ahead of print" articles and accomplishments. We also included information about World Lung Day.

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](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' exciting research that became available as "epubs ahead of print" in August. 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).

### ***Airflow Obstruction and Chronic Obstructive Pulmonary Disease***

#### [The association of tidal EFL with exercise performance, exacerbations, and death in COPD.](#)

Aarli BB, Calverley PM, Jensen RL, Dellacà R, Eagan TM, Bakke PS, Hardie JA.  
Int J Chron Obstruct Pulmon Dis. 2017 Jul 26;12:2179-2188. doi: 10.2147/COPD.S138720. eCollection 2017.

#### [Occupational exposures to solvents and metals are associated with fixed airflow obstruction.](#)

Alif SM, Dharmage SC, Benke G, Dennekamp M, Burgess JL, Lodge CJ, Morrison S, Johns DP, Giles GG, Gurrin LC, Thomas PS, Hopper JL, Wood-Baker R, Thompson BR, Feather IH, Vermeulen R, Kromhout H, Walters EH, Abramson MJ, Matheson MC.  
Scand J Work Environ Health. 2017 Aug 7.

#### [Childhood Lung Function Predicts Adult Chronic Obstructive Pulmonary Disease and Asthma-Chronic Obstructive Pulmonary Disease Overlap Syndrome.](#)

Bui DS, Burgess JA, Lowe AJ, Perret JL, Lodge CJ, Bui M, Morrison S, Thompson BR, Thomas PS, Giles GG, Garcia-Aymerich J, Jarvis D, Abramson MJ, Walters EH, Matheson MC, Dharmage SC.  
Am J Respir Crit Care Med. 2017 Jul 1;196(1):39-46.

#### [Reply: Bias in Association between FEV<sub>1</sub>/FVC% Predicted at 7 Years and Asthma-Chronic Obstructive Pulmonary Disease Overlap Syndrome.](#)

Bui DS, Burgess JA, Bui M, Abramson MJ, Walters EH, Dharmage SC.  
Am J Respir Crit Care Med. 2017 Jul 1;196(1):115-116.

#### [Genetic Association and Risk Scores in a Chronic Obstructive Pulmonary Disease Meta-analysis of 16,707 Subjects.](#)

Busch R, Hobbs BD, Zhou J, Castaldi PJ, McGeachie MJ, Hardin ME, Hawrylkiewicz I, Sliwinski P, Yim JJ, Kim WJ, Kim DK, Agusti A, Make BJ, Crapo JD, Calverley PM, Donner CF, Lomas DA, Wouters EF, Vestbo J, Tal-Singer R, Bakke P, Gulsvik A, Litonjua AA, Sparrow D, Paré PD, Levy RD, Rennard SI, Beaty TH, Hokanson J, Silverman EK, Cho MH; National Emphysema Treatment Trial Genetics; Evaluation of COPD Longitudinally to Identify Predictive Surrogate End-Points; International COPD Genetics Network; COPD Gene Investigators.  
Am J Respir Cell Mol Biol. 2017 Jul;57(1):35-46.

#### [Severity of Airflow Obstruction in Chronic Obstructive Pulmonary Disease \(COPD\): Proposal for a New Classification.](#)

Coton S, Vollmer WM, Bateman E, Marks GB, Tan W, Mejza F, Juvekar S, Janson C, Mortimer K, P A M, Buist AS, Burney PGJ; Burden of Obstructive Lung Disease Study investigators.  
COPD. 2017 Aug 11:1-7.

### ***Air Pollution***

#### [Particulate matter air pollution and liver cancer survival.](#)

Deng H, Eckel SP, Liu L, Lurmann FW, Cockburn MG, Gilliland FD.  
Int J Cancer. 2017 Aug 15;141(4):744-749.

#### [Role of atmospheric pollution on the natural history of idiopathic pulmonary fibrosis.](#)

Sesé L, Nunes H, Cottin V, Sanyal S, Didier M, Carton Z, Israel-Biet D, Crestani B, Cadranet J, Wallaert B, Tazi A, Maître B, Prévot G, Marchand-Adam S, Guillot-Dudoret S, Nardi A, Dury S, Giraud V, Gondouin A, Juvin K, Borie R, Wislez M, Valeyre D, Annesi-Maesano I.  
Thorax. 2017 Aug 10.

## **Allergy and Asthma**

### [Google Trends terms reporting rhinitis and related topics differ in European countries.](#)

Bousquet J, Agache I, Anto JM, Bergmann KC, Bachert C, Annesi-Maesano I, Bousquet PJ, D'Amato G, Demoly P, De Vries G, Eller E, Fokkens WJ, Fonseca J, Haahtela T, Hellings PW, Just J, Keil T, Klimek L, Kuna P, Lodrup Carlsen KC, Mösges R, Murray R, Nekam K, Onorato G, Papadopoulos NG, Samolinski B, Schmid-Grendelmeier P, Thibaudon M, Tomazic P, Triggiani M, Valiulis A, Valovirta E, Van Eerd M, Wickman M, Zuberbier T, Sheikh A.  
Allergy. 2017 Aug;72(8):1261-1266.

### [A pilot feeding study for adults with asthma: The healthy eating better breathing trial.](#)

Brigham EP, Matsui EC, Appel LJ, Bull DA, Curtin-Brosnan J, Zhai S, White K, Charleston JB, Hansel NN, Diette GB, McCormack MC.  
PLoS One. 2017 Jul 13;12(7):e0180068.

### [Cockroach allergen exposure and plasma cytokines among children in a tropical environment.](#)

Medsker BH, Forno E, Han YY, Acosta-Pérez E, Colón-Semidey A, Alvarez M, Alcorn JF, Canino GJ, Celedón JC.  
Ann Allergy Asthma Immunol. 2017 Jul;119(1):65-70.e3.

### [Phenotypes of Atopic Dermatitis Depending on the Timing of Onset and Progression in Childhood.](#)

Roduit C, Frei R, Depner M, Karvonen AM, Renz H, Braun-Fahrlander C, Schmausser-Hechfellner E, Pekkanen J, Riedler J, Dalphin JC, von Mutius E, Lauener RP; and the PASTURE study group, Hyvärinen A, Kirjavainen P, Remes S, Roponen M, Dalphin ML, Kaulek V, Ege M, Genuneit J, Illi S, Kabesch M, Schaub B, Pfefferle PI, Doekes G.  
JAMA Pediatr. 2017 Jul 1;171(7):655-662.

### [An immunoproteomic approach revealed antigenic proteins enhancing serodiagnosis performance of bird fancier's lung.](#)

Rouzet A, Reboux G, Dalphin JC, Gondouin A, De Vuyst P, Balliau T, Millon L, Valot B, Rousset S.  
J Immunol Methods. 2017 Jul 29.

## **Bacterial and Viral Infections**

### [Overlooked diagnosis of infected paratracheal air cysts in patients with respiratory symptoms: Case report.](#)

Bae K, Jeon KN, Park MJ, Lee SJ, Kim HC, Cha SI, Byun JH, Kim JW.  
Medicine (Baltimore). 2017 Jul;96(29):e7536.

### [Effect of home exposure to Staphylococcus aureus on asthma in adolescents.](#)

Davis MF, Ludwig S, Brigham EP, McCormack MC, Matsui EC.  
J Allergy Clin Immunol. 2017 Jul 21.

### [Nasopharyngeal viral PCR in immunosuppressed patients and its association with virus detection in bronchoalveolar lavage by PCR.](#)

Lachant DJ, Croft DP, McGrane Minton H, Prasad P, Kottmann RM.  
Respirology. 2017 Aug;22(6):1205-1211.

## **Cancer**

### [Interleukin-17A Promotes Lung Tumor Progression through Neutrophil Attraction to Tumor Sites and Mediating Resistance to PD-1 Blockade.](#)

Akbay EA, Koyama S, Liu Y, Dries R, Bufe LE, Silkes M, Alam MM, Magee DM, Jones R, Jinushi M, Kulkarni M, Carretero J, Wang X, Warner-Hatten T, Cavanaugh JD, Osa A, Kumanogoh A, Freeman GJ, Awad MM, Christiani DC, Bueno R, Hammerman PS, Dranoff G, Wong KK.  
J Thorac Oncol. 2017 Aug;12(8):1268-1279.

[Menstrual and reproductive factors and lung cancer risk: A pooled analysis from the international lung cancer consortium.](#)

Ben Khedher S, Neri M, Papadopoulos A, Christiani DC, Diao N, Harris CC, Olivo-Marston S, Schwartz AG, Cote M, Koushik A, Siemiatycki J, Landi MT, Hung RJ, McLaughlin J, Duell EJ, Andrew AS, Orlov I, Park BJ, Brenner H, Saum KU, Pesatori AC, Stücker I.  
Int J Cancer. 2017 Jul 15;141(2):309-323.

[ETV4 and AP1 Transcription Factors Form Multivalent Interactions with three Sites on the MED25 Activator-Interacting Domain.](#)

Currie SL, Doane JJ, Evans KS, Bhachech N, Madison BJ, Lau DKW, McIntosh LP, Skalicky JJ, Clark KA, Graves BJ.  
J Mol Biol. 2017 Jul 17.

[Large-scale association analysis identifies new lung cancer susceptibility loci and heterogeneity in genetic susceptibility across histological subtypes.](#)

McKay JD, Hung RJ, Han Y, Zong X, Carreras-Torres R, Christiani DC, Caporaso NE, Johansson M, Xiao X, Li Y, Byun J, Dunning A, Pooley KA, Qian DC, Ji X, et al.  
Nat Genet. 2017 Jul;49(7):1126-1132.

[Is the Incidence of Adenocarcinoma of the Lung Rising in Never Smokers?](#)

Samet JM.  
J Natl Cancer Inst. 2017 Jul 1;109(7).

[Polymorphisms in Epithelial-Mesenchymal Transition-Related Genes and the Prognosis of Surgically Treated Non-small Cell Lung Cancer.](#)

Seok Y, Kang HG, Lee SY, Jeong JY, Choi JE, Jung DK, Jin CC, Hong MJ, Do SK, Lee WK, Park JY, Shin KM, Yoo SS, Lee J, Cho S, Cha SI, Kim CH, Jheon S, Lee EB, Park JY.  
Ann Surg Oncol. 2017 Aug 1.

## ***Physiological Modeling and Testing***

[Utility of Lung Clearance Index Testing as a Noninvasive Marker of Deployment-related Lung Disease.](#)

Kreff SD, Strand M, Smith J, Stroup C, Meehan R, Rose C.  
J Occup Environ Med. 2017 Aug;59(8):707-711.

[Bayesian estimation of physiological parameters governing a dynamic two-compartment model of exhaled nitric oxide.](#)

Muchmore P, Rappaport EB, Eckel SP.  
Physiol Rep. 2017 Aug;5(15).

## ***Exposures During Pregnancy and Development***

[Wi-Fi radiation exposures to children in kindergartens and schools - results should lessen parental concerns.](#)

Bhatt CR, Abramson MJ, Benke G.  
Aust N Z J Public Health. 2017 Jul 27.

[Mechanisms and Treatment of Halogen Inhalation-Induced Pulmonary and Systemic Injuries in Pregnant Mice.](#)

Lambert JA, Carlisle MA, Lam A, Aggarwal S, Doran S, Ren C, Bradley WE, Dell'Italia L, Ambalavanan N, Ford DA, Patel RP, Jilling T, Matalon S.  
Hypertension. 2017 Aug;70(2):390-400.

[Anthropometric measures at birth and early childhood are associated with neurodevelopmental outcomes among Bangladeshi children aged 2-3years.](#)

Lee JJ, Kapur K, Rodrigues EG, Ibne Hasan MOS, Quamruzzaman Q, Wright RO, Bellinger DC, Christiani DC, Mazumdar M.  
Sci Total Environ. 2017 Jul 10;607-608:475-482.

[Investigating causal relation between prenatal arsenic exposure and birthweight: Are smaller infants more susceptible?](#)

Rahman ML, Valeri L, Kile ML, Mazumdar M, Mostofa G, Qamruzzaman Q, Rahman M, Baccarelli A, Liang L, Hauser R, Christiani DC.  
Environ Int. 2017 Aug 5;108:32-40.

[Validation of maternal reported pregnancy and birth characteristics against the Medical Birth Registry of Norway.](#)

Skulstad SM, Igland J, Johannessen A, Bertelsen RJ, Lønnebotn M, Omenaas ER, Svanes C, Real FG.  
PLoS One. 2017 Aug 4;12(8):e0181794.

[Effect of season of birth on cord blood IgE and IgE at birth: A systematic review and meta-analysis.](#)

Susanto NH, Vicendese D, Salim A, Lowe AJ, Dharmage SC, Tham R, Lodge C, Garden F, Allen K, Svanes C, Heinrich J, Abramson MJ, Erbas B.  
Environ Res. 2017 Aug;157:198-205.

[Breast milk polyunsaturated fatty acids: associations with adolescent allergic disease and lung function.](#)

Waidyatillake NT, Stoney R, Thien F, Lodge CJ, Simpson JA, Allen KJ, Abramson MJ, Erbas B, Svanes C, Dharmage SC, Lowe AJ.  
Allergy. 2017 Aug;72(8):1193-1201.

## **Genome-Wide and Epigenome-Wide Studies**

[An epigenome-wide association study of total serum IgE in Hispanic children.](#)

Chen W, Wang T, Pino-Yanes M, Forno E, Liang L, Yan Q, Hu D, Weeks DE, Baccarelli A, Acosta-Perez E, Eng C, Han YY, Boutaoui N, Laprise C, Davies GA, Hopkin JM, Moffatt MF, Cookson WOCM, Canino G, Burchard EG, Celedón JC.  
J Allergy Clin Immunol. 2017 Aug;140(2):571-577.

[Genome-wide gene by lead exposure interaction analysis identifies UNC5D as a candidate gene for neurodevelopment.](#)

Wang Z, Claus Henn B, Wang C, Wei Y, Su L, Sun R, Chen H, Wagner PJ, Lu Q, Lin X, Wright R, Bellinger D, Kile M, Mazumdar M, Tellez-Rojo MM, Schnaas L, Christiani DC.  
Environ Health. 2017 Jul 28;16(1):81.

## **Household Air Pollution**

[24-h Nitrogen dioxide concentration is associated with cooking behaviors and an increase in rescue medication use in children with asthma.](#)

Paulin LM, Williams D'L, Peng R, Diette GB, McCormack MC, Breyse P, Hansel NN.  
Environ Res. 2017 Aug 7;159:118-123.

## **Interstitial and Fibrotic Diseases**

[Prevalence and incidence of interstitial lung diseases in a multi-ethnic county of Greater Paris.](#)

Duchemann B, Annesi-Maesano I, Jacobe de Naurois C, Sanyal S, Brillet PY, Brauner M, Kambouchner M, Huynh S, Naccache JM, Borie R, Piquet J, Mekinian A, Virally J, Uzunhan Y, Cadranet J, Crestani B, Fain O, Lhote F, Dhote R, Saitenberg-Kermanac'h N, Rosental PA, Valeyre D, Nunes H.  
Eur Respir J. 2017 Aug 3;50(2).

[The 'Complex Restrictive' Pulmonary Function Pattern: Clinical and radiological analysis of a common but previously undescribed restrictive pattern.](#)

Clay RD, Iyer VN, Reddy DR, Siontis B, Scanlon PD.  
Chest. 2017 Jul 17.

[Surveillance for Silicosis Deaths Among Persons Aged 15-44 Years - United States, 1999-2015.](#)

Mazurek JM, Wood JM, Schleiff PL, Weissman DN.  
MMWR Morb Mortal Wkly Rep. 2017 Jul 21;66(28):747-752.

## ***Pulmonary Embolism***

[Predictive Value of Mean Platelet Volume for Pulmonary Embolism Recurrence.](#)

Araz O, Albez FS, Ucar EY, Kerget B, Yilmaz N, Akgun M.  
Lung. 2017 Aug;195(4):497-502.

[Are the thiol/disulfide redox status and HDL cholesterol levels associated with pulmonary embolism?: Thiol/disulfide redox status in pulmonary embolism.](#)

Parlak ES, Alisik M, Karalezli A, Sayilir AG, Bastug S, Er M, Hasanoglu HC, Erel O.  
Clin Biochem. 2017 Jul 29.

## ***Sleep Apnea, the Microbiome, and Bile Acid Homeostasis***

[2,3,7,8-Tetrachlorodibenzo-p-dioxin \(TCDD\)-elicited effects on bile acid homeostasis: Alterations in biosynthesis, enterohepatic circulation, and microbial metabolism.](#)

Fader KA, Nault R, Zhang C, Kumagai K, Harkema JR, Zacharewski TR.  
Sci Rep. 2017 Jul 19;7(1):5921. doi: 10.1038/s41598-017-05656-8.

[Sleep Apnea Screening Practices During Department of Transportation Medical Examinations.](#)

Hawkins MR, Durowoju R, Havlichek D 3rd, Rosenman KD.  
J Occup Environ Med. 2017 Jul 19.

[Impact of environmental microbiota on human microbiota of workers in academic mouse research facilities: An observational study.](#)

Lai PS, Allen JG, Hutchinson DS, Ajami NJ, Petrosino JF, Winters T, Hug C, Wartenberg GR, Vallarino J, Christiani DC.  
PLoS One. 2017 Jul 13;12(7):e0180969.

## ***Teamwork and Mentorship***

[Nursing teams: behind the charts.](#)

Bae SH, Farasat A, Nikolaev A, Seo JY, Foltz-Ramos K, Fabry D, Castner J.  
J Nurs Manag. 2017 Jul;25(5):354-365.

[Mentoring for Success in Tobacco Regulatory Science: A Qualitative Study.](#)

Russo AR, Solis AC, Villanti AC, Wipfli HL, Kern TT, Lawley RK, Collins LK, Abudayyeh HS, Chansky MC, Glantz SA, Samet JM, Benjamin EJ.  
Tob Regul Sci. 2017 Jul;3(3):280-292.

## **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).



## World Lung Day

The Forum of International Respiratory Societies (which was founded in part by the ATS) launched the “Charter for Lung Health” at the 70<sup>th</sup> World Health Assembly in Geneva, Switzerland. This charter calls for the recognition of **World Lung Day** on **September 25** to bring attention to respiratory diseases, a major cause of worldwide morbidity and mortality. The ATS is joining this call to action and aims to secure 100,000 signatures of support to urge the World Health Organization to consider a similar designation. For more information, go to <http://news.thoracic.org/world-lung-day-join-the-call/>. To sign the Charter for Lung Health, go to <https://www.firsnet.org/>.