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

Dear EOPH members,

In this September issue of the EOPH newsletter, we share some of our members' recent "epub ahead of print" articles and information about Global Pulmonary Fibrosis Awareness Month.

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 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 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.

Air Pollution

Long-term exposure to road traffic noise, ambient air pollution, and cardiovascular risk factors in the HUNT and lifelines cohorts.

Cai Y, Hansell AL, Blangiardo M, Burton PR; BioSHaRE, de Hoogh K, Doiron D, Fortier I, Gulliver J, Hveem K, Mbatchou S, Morley DW, Stolk RP, Zijlema WL, Elliott P, Hodgson S.
Eur Heart J. 2017 Aug 1;38(29):2290-2296.

Attributable risks of emergency hospital visits due to air pollutants in China: A multi-city study.

Chen G, Zhang Y, Zhang W, Li S, Williams G, Marks GB, Jalaludin B, Abramson MJ, Luo F, Yang D, Su X, Lin Q, Liu L, Lin J, Guo Y.
Environ Pollut. 2017 Sep;228:43-49.

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.

Inhalation of concentrated PM_{2.5} from Mexico City acts as an adjuvant in a guinea pig model of allergic asthma.

Falcon-Rodriguez CI, De Vizcaya-Ruiz A, Rosas-Pérez IA, Osornio-Vargas ÁR, Segura-Medina P.
Environ Pollut. 2017 Sep;228:474-483.

Long-term exposure to residential ambient fine and coarse particulate matter and incident hypertension in post-menopausal women.

Honda T, Eliot MN, Eaton CB, Whitsel E, Stewart JD, Mu L, Suh H, Szpiro A, Kaufman JD, Vedal S, Wellerius GA.
Environ Int. 2017 Aug;105:79-85.

Particulate Matter Exposure and Stress Hormone Levels: A Randomized, Double-Blind, Crossover Trial of Air Purification.

Li H, Cai J, Chen R, Zhao Z, Ying Z, Wang L, Chen J, Hao K, Kinney PL, Chen H, Kan H.
Circulation. 2017 Aug 15;136(7):618-627.

The nexus between urbanization and PM_{2.5} related mortality in China.

Liu M, Huang Y, Jin Z, Ma Z, Liu X, Zhang B, Liu Y, Yu Y, Wang J, Bi J, Kinney PL.
Environ Pollut. 2017 Aug;227:15-23.

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).

Community airborne particulate matter from mining for sand used as hydraulic fracturing proppant.

Peters TM, O'Shaughnessy PT, Grant R, Altmaier R, Swanton E, Falk J, Osterberg D, Parker E, Wyland NG, Sousan S, Stark AL, Thorne PS.
Sci Total Environ. 2017 Aug 7;609:1475-1482.

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, Cadranel 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.

Cardiorespiratory responses of air filtration: A randomized crossover intervention trial in seniors living in Beijing: Beijing Indoor Air Purifier StudY, BIAPSY.

Shao D, Du Y, Liu S, Brunekreef B, Meliefste K, Zhao Q, Chen J, Song X, Wang M, Wang J, Xu H, Wu R, Wang T, Feng B, Lung CS, Wang X, He B, Huang W.
Sci Total Environ. 2017 Dec 15;603-604:541-549.

Differential pulmonary effects of wintertime California and China particulate matter in healthy young mice.

Sun X, Wei H, Young DE, Bein KJ, Smiley-Jewell SM, Zhang Q, Fulgar CCB, Castañeda AR, Pham AK, Li W, Pinkerton KE.

Toxicol Lett. 2017 Aug 15;278:1-8.

Thymic cytoarchitecture changes in mice exposed to vanadium.

Ustarroz-Cano M, Garcia-Pelaez I, Cervantes-Yepez S, Lopez-Valdez N, Fortoul TI.
J Immunotoxicol. 2017 Dec;14(1):9-14.

Genetic and epigenetic susceptibility of airway inflammation to PM_{2.5} in school children: new insights from quantile regression.

Zhang Y, Salam MT, Berhane K, Eckel SP, Rappaport EB, Linn WS, Habre R, Bastain TM, Gilliland FD.
Environ Health. 2017 Aug 18;16(1):88.

Heat and mortality for ischemic and hemorrhagic stroke in 12 cities of Jiangsu Province, China.

Zhou L, Chen K, Chen X, Jing Y, Ma Z, Bi J, Kinney PL.
Sci Total Environ. 2017 Dec 1;601-602:271-277.

Asthma, Allergies, and Autoimmune Diseases

Irgm1 coordinately regulates autoimmunity and host defense at select mucosal surfaces.

Azzam KM, Madenspacher JH, Cain DW, Lai L, Gowdy KM, Rai P, Janardhan K, Clayton N, Cunningham W, Jensen H, Patel PS, Kearney JF, Taylor GA, Fessler MB.
JCI Insight. 2017 Aug 17;2(16).

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.

The Duffy antigen receptor for chemokines regulates asthma pathophysiology.

Chapman DG, Mougey EB, Van der Velden JL, Lahue KG, Aliyeva M, Daphtry N, George KL, Hoffman SM, Schneider RW, Tracy RP, Worthen GS, Poynter ME, Peters SP, Lima JJ, Janssen-Heininger YMW, Irvin CG.
Clin Exp Allergy. 2017 Sep;47(9):1214-1222.

Skin prick tests and specific IgE in 10-year-old children: Agreement and association with allergic diseases.

Chauveau A, Dalphin ML, Mauny F, Kaulek V, Schmausser-Hechfellner E, Renz H, et al.
Allergy. 2017 Sep;72(9):1365-1373.

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.

Functional phenotypes determined by fluctuation-based clustering of lung function measurements in healthy and asthmatic cohort participants.

Delgado-Eckert E, Fuchs O, Kumar N, Pekkanen J, Dolphin JC, Riedler J, Lauener R, Kabesch M, Kupczyk M, Dahmen SE, Mutius EV, Frey U; PASTURE and BIOAIR Study groups.
Thorax. 2017 Sep 2.

Effect of azithromycin on asthma exacerbations and quality of life in adults with persistent uncontrolled asthma (AMAZES): a randomised, double-blind, placebo-controlled trial.

Gibson PG, Yang IA, Upham JW, Reynolds PN, Hodge S, James AL, Jenkins C, Peters MJ, Marks GB, Baraket M, Powell H, Taylor SL, Leong LEX, Rogers GB, Simpson JL.
Lancet. 2017 Aug 12;390(10095):659-668.

Characteristics of asthmatics with detectable IL-32 γ in induced sputum.

Kwon JW, Chang HS, Heo JS, Bae DJ, Lee JU, Jung CA, Son JH, Park JS, Kim SH, Min KU, Park CS.
Respir Med. 2017 Aug;129:85-90.

Residential greenness and allergic respiratory diseases in children and adolescents - A systematic review and meta-analysis.

Lambert KA, Bowatte G, Tham R, Lodge C, Prendergast L, Heinrich J, Abramson MJ, Dharmage SC, Erbas B.
Environ Res. 2017 Aug 10;159:212-221.

Oxidative stress and cellular pathways of asthma and inflammation: Therapeutic strategies and pharmacological targets.

Mishra V, Banga J, Silveyra P.
Pharmacol Ther. 2017 Aug 23.

Validation of asthma recording in the Clinical Practice Research Datalink (CPRD).

Nissen F, Morales DR, Mullerova H, Smeeth L, Douglas IJ, Quint JK.
BMJ Open. 2017 Aug 11;7(8):e017474.

The School Inner-City Asthma Intervention Study: Design, rationale, methods, and lessons learned.

Phipatanakul W, Koutrakis P, Coull BA, Kang CM, Wolfson JM, Ferguson ST, Petty CR, Samnaliiev M, Cunningham A, Sheehan WJ, Gaffin JM, Baxi SN, Lai PS, Permaul P, Liang L, Thorne PS, Adamkiewicz G, Brennan KJ, Baccarelli AA, Gold DR.
Contemp Clin Trials. 2017 Sep;60:14-23.

Allergic sensitization to laboratory animals is more associated with asthma, rhinitis and skin symptoms than sensitization to common allergens.

Simoneti CS, Ferraz E, de Menezes MB, Bagatin E, Arruda LK, Vianna EO.
Clin Exp Allergy. 2017 Aug 8.

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.

Vitamin D insufficiency, plasma cytokines, and severe asthma exacerbations in school-aged children.

Szentpetery SE, Han YY, Brehm JM, Acosta-Pérez E, Forno E, Boutaoui N, Canino G, Alcorn JF, Celedón JC.
J Allergy Clin Immunol Pract. 2017 Aug 25.

Baseline Features of the Severe Asthma Research Program (SARP III) Cohort: Differences with Age.

Teague WG, Phillips BR, Fahy JV, Wenzel SE, Fitzpatrick AM, Moore WC, Hastie AT, Bleecker ER, Meyers DA, Peters SP, Castro M, Coverstone AM, Bacharier LB, Ly NP, Peters MC, Denlinger LC, Ramratnam S, Sorkness RL, Gaston BM, Erzurum SC, Comhair SAA, Myers RE, Zein J, DeBoer MD, Irani AM, Israel E, Levy B, Cardet JC, Phipatanakul W, Gaffin JM, Holguin F, Fajt ML, Aujla SJ, Mauger DT, Jarjour NN.

J Allergy Clin Immunol Pract. 2017 Aug 30.

Association of Breast Milk Fatty Acids and Allergic Disease Outcomes - a Systematic Review.

Waidyatillake NT, Dharmage SC, Allen KJ, Lodge CJ, Simpson JA, Bowatte G, Abramson MJ, Lowe AJ. Allergy. 2017 Sep 4.

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.

Allergen sensitization in a birth cohort at mid-childhood: focus on food component IgE and IgG4 responses.

Wilson JM, Workman L, Schuyler AJ, Rifas-Shiman SL, McGowan EC, Oken E, Gold DR, Hamilton RG, Platts-Mills TAE.

J Allergy Clin Immunol. 2017 Aug 31.

Biomarkers and of Diseases

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.

ALG13-CDG in a male with seizures, normal cognitive development, and normal transferrin isoelectric focusing.

Gadomski TE, Bolton M, Alfadhel M, Dvorak C, Ogunsakin OA, Nelson SL, Morava E.

Am J Med Genet A. 2017 Aug 4.

Usefulness of serum lactate dehydrogenase/pleural fluid adenosine deaminase ratio for differentiating *Mycoplasma pneumoniae* parapneumonic effusion and tuberculous pleural effusion.

Kim CH, Park JE, Yoo SS, Lee SY, Cha SI, Park JY, Lee J.

J Infect. 2017 Aug 10.

Application of the isoniazid assay in dried blood spots using the ultra-performance liquid chromatography-tandem mass spectrometry.

Lee K, Jun SH, Choi MS, Song SH, Park JS, Lee JH, Park KU, Song J.

Clin Biochem. 2017 Oct;50(15):882-885.

Short-Term Exposure to Ambient Air Pollution and Biomarkers of Systemic Inflammation: The Framingham Heart Study.

Li W, Dorans KS, Wilker EH, Rice MB, Ljungman PL, Schwartz JD, Coull BA, Koutrakis P, Gold DR, Keaney JF Jr, Vasan RS, Benjamin EJ, Mittleman MA.

Arterioscler Thromb Vasc Biol. 2017 Sep;37(9):1793-1800.

Blood monocyte transcriptome and epigenome analyses reveal loci associated with human atherosclerosis.

Liu Y, Reynolds LM, Ding J, Hou L, Lohman K, Young T, Cui W, Huang Z, Grenier C, Wan M, Stunnenberg HG, Siscovick D, Hou L, Psaty BM, Rich SS, Rotter JI, Kaufman JD, Burke GL, Murphy S, Jacobs DR Jr, Post W, Hoeschele I, Bell DA, Herrington D, Parks JS, Tracy RP, McCall CE, Stein JH. Nat Commun. 2017 Aug 30;8(1):393.

Seven-CpG-based prognostic signature coupled with gene expression predicts survival of oral squamous cell carcinoma.

Shen S, Wang G, Shi Q, Zhang R, Zhao Y, Wei Y, Chen F, Christiani DC.
Clin Epigenetics. 2017 Aug 24;9:88.

Classifying oxidative stress by F₂-isoprostane levels across human diseases: A meta-analysis.

van 't Erve TJ, Kadiiska MB, London SJ, Mason RP.
Redox Biol. 2017 Aug;12:582-599.

Acute changes in serum immune markers due to swimming in a chlorinated pool.

Vlaanderen J, van Veldhoven K, Font-Ribera L, Villanueva CM, Chadeau-Hyam M, Portengen L, Grimalt JO, Zwiener C, Heederik D, Zhang X, Vineis P, Kogevinas M, Vermeulen R.
Environ Int. 2017 Aug;105:1-11.

Whole blood microRNA markers are associated with acute respiratory distress syndrome.

Zhu Z, Liang L, Zhang R, Wei Y, Su L, Tejera P, Guo Y, Wang Z, Lu Q, Baccarelli AA, Zhu X, Bajwa EK, Taylor Thompson B, Shi GP, Christiani DC.
Intensive Care Med Exp. 2017 Aug 30;5(1):38.

Brain

Markers associated with neuron-specific Ube3a imprinting during neuronal differentiation of mouse embryonic stem cells.

Eitoku M, Kato H, Suganuma N, Kiyosawa H.
Cytotechnology. 2017 Aug 5.

Diabetes, depressive symptoms, and functional disability in African Americans: the Jackson Heart Study.

Kalyani RR, Ji N, Carnethon M, Bertoni AG, Selvin E, Gregg EW, Sims M, Golden SH.
J Diabetes Complications. 2017 Aug;31(8):1259-1265.

Long non-coding RNA MALAT1 promotes proliferation and suppresses apoptosis of glioma cells through derepressing Rap1B by sponging miR-101.

Li Z, Xu C, Ding B, Gao M, Wei X, Ji N.
J Neurooncol. 2017 Aug;134(1):19-28.

Brain network efficiency is influenced by the pathologic source of corticobasal syndrome.

Medaglia JD, Huang W, Segarra S, Olm C, Gee J, Grossman M, Ribeiro A, McMillan CT, Bassett DS.
Neurology. 2017 Aug 4.

The terminal latency of the phrenic nerve correlates with respiratory symptoms in amyotrophic lateral sclerosis.

Park JS, Park D.
Clin Neurophysiol. 2017 Sep;128(9):1625-1628.

Complementary cortical gray and white matter developmental patterns in healthy, preterm neonates.

Rajagopalan V, Scott JA, Liu M, Poskitt K, Chau V, Miller S, Studholme C.
Hum Brain Mapp. 2017 Sep;38(9):4322-4336.

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.

[Elective Venovenous Extracorporeal Membrane Oxygenation for Resection of Endotracheal Tumor: A Case Report.](#)

Dunkman WJ, Nicoara A, Schroder J, Wahidi MM, El Manafi A, Bonadonna D, Giovacchini CX, Lombard FW.
A A Case Rep. 2017 Aug 15;9(4):97-100.

[Interim ¹⁸F-FDG PET/CT may not predict the outcome in primary central nervous system lymphoma patients treated with sequential treatment with methotrexate and cytarabine.](#)

Jo JC, Yoon DH, Kim S, Lee K, Kang EH, Park JS, Ryu JS, Huh J, Park CS, Kim JH, Lee SW, Suh C. Ann Hematol. 2017 Sep;96(9):1509-1515.

[Predictive Factors and Treatment Outcomes of Tuberculous Pleural Effusion in Patients With Cancer and Pleural Effusion.](#)

Lee J, Lee YD, Lim JK, Lee DH, Yoo SS, Lee SY, Cha SI, Park JY, Kim CH. Am J Med Sci. 2017 Aug;354(2):125-130.

[Nivolumab infusion reaction manifesting as plantar erythema and pulmonary infiltrate in a lung cancer patient.](#)

Ogawara D, Soda H, Ikehara S, Sumiyoshi M, Iwasaki K, Okuno D, Dohtsu Y, Taniguchi H, Harada T, Fukuda Y, Mukae H. Thorac Cancer. 2017 Aug 28.

[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.

[Phase I study of pemetrexed and concurrent radiotherapy for previously untreated elderly patients with locally advanced non-squamous non-small cell lung cancer.](#)

Takemoto S, Nakamura Y, Fukuda M, Senju H, Gyotoku H, Taniguchi H, Shimada M, Ikeda T, Yamaguchi H, Nakatomi K, Hayashi N, Soda H, Mukae H. Thorac Cancer. 2017 Aug 3.

Chronic Obstructive Pulmonary Disease

[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.

[Barriers and outcomes of an evidence-based approach to diagnosis and management of chronic obstructive pulmonary disease \(COPD\) in Australia: a qualitative study.](#)

Dennis S, Reddel HK, Middleton S, Hasan I, Hermiz O, Phillips R, Crockett AJ, Vagholkar S, Marks GB, Zwar N. Fam Pract. 2017 Aug 1;34(4):485-490.

[Chronic Obstructive Pulmonary Disease in Hispanics: A 9-Year Update.](#)

Díaz A, Celli B, Celedón JC. Am J Respir Crit Care Med. 2017 Sep 1.

[Alpha-1 Antitrypsin PiMZ Genotype Is Associated with Chronic Obstructive Pulmonary Disease in Two Racial Groups.](#)

Foreman MG, Wilson C, DeMeo DL, Hersh CP, Beaty TH, Cho MH, Ziniti J, Curran-Everett D, Criner G, Hokanson JE, Brantly M, Rouhani FN, Sandhaus RA, Crapo JD, Silverman EK; Genetic Epidemiology of COPD (COPDGene) Investigators *. Ann Am Thorac Soc. 2017 Aug;14(8):1280-1287.

Frequency of exacerbations in patients with chronic obstructive pulmonary disease: an analysis of the SPIROMICS cohort.

Han MK, Quibrera PM, Carretta EE, Barr RG, Bleeker ER, Bowler RP, Cooper CB, Comellas A, Couper DJ, Curtis JL, Criner G, Dransfield MT, Hansel NN, Hoffman EA, Kanner RE, Krishnan JA, Martinez CH, Pirozzi CB, O'Neal WK, Rennard S, Tashkin DP, Wedzicha JA, Woodruff P, Paine R 3rd, Martinez FJ; SPIROMICS investigators.

Lancet Respir Med. 2017 Aug;5(8):619-626.

Obstructive Airway Disease: Rational, Evidence-Based Bronchodilator Therapy.

Newhouse MT, Amirav I.

Respir Care. 2017 Sep;62(9):1224-1225.

Comparing microbiota profiles in induced and spontaneous sputum samples in COPD patients.

Tangedal S, Aanerud M, Grønseth R, Drengenes C, Wiker HG, Bakke PS, Eagan TM.

Respir Res. 2017 Aug 29;18(1):164.

Triple Therapy for Chronic Obstructive Pulmonary Disease Management. Are Our Expectations Fulfilled?

Tashkin DP, Taube C.

Am J Respir Crit Care Med. 2017 Aug 15;196(4):402-404.

Developmental Origins of Adult Disease

Early smoke exposure is associated with asthma and lung function deficits in adolescents.

Dai X, Dharmage SC, Lowe AJ, Allen KJ, Thomas PS, Perret J, Waidyatillake N, Matheson MC, Svanes C, Welsh L, Abramson MJ, Lodge CJ.

J Asthma. 2017 Aug;54(6):662-669.

Preterm birth and low birth weight continue to increase the risk of asthma from age 7 to 43.

Matheson MC, D Olhaberriague AL, Burgess JA, Giles GG, Hopper JL, Johns DP, Abramson MJ, Walters EH, Dharmage SC.

J Asthma. 2017 Aug;54(6):616-623.

Adults born preterm: a review of general health and system-specific outcomes.

Raju TNK, Buist AS, Blaisdell CJ, Moxey-Mims M, Saigal S.

Acta Paediatr. 2017 Sep;106(9):1409-1437.

Childhood exposure to Libby amphibole asbestos and respiratory health in young adults.

Ryan PH, Rice CH, Lockey JE, Black B, Burkle J, Hilbert TJ, Levin L, Brokamp C, McKay R, Wolfe C, LeMasters GK.

Environ Res. 2017 Oct;158:470-479.

Glucose Metabolism

Relationship between the triglyceride glucose index and coronary artery calcification in Korean adults.

Kim MK, Ahn CW, Kang S, Nam JS, Kim KR, Park JS.

Cardiovasc Diabetol. 2017 Aug 23;16(1):108.

Enhancement of Glucose Uptake by Meso-Dihydroguaiaretic Acid through GLUT4 Up-Regulation in 3T3-L1 Adipocytes.

Lee A, Choi KM, Jung WB, Jeong H, Kim GY, Lee JH, Lee MK, Hong JT, Roh YS, Sung SH, Yoo HS. Molecules. 2017 Aug 28;22(9).

Differences in characteristics of glucose intolerance between patients with NAFLD and chronic hepatitis C as determined by CGMS.

Ochi T, Kawaguchi T, Nakahara T, Ono M, Noguchi S, Koshiyama Y, Munekage K, Murakami E, Hiramatsu A, Ogasawara M, Hirose A, Mizuta H, Masuda K, Okamoto N, Suganuma N, Chayama K, Yamaguchi M, Torimura T, Saibara T.

Sci Rep. 2017 Aug 31;7(1):10146.

Household Air and Environmental Pollution

Biomass smoke exposure as an occupational risk: cross-sectional study of respiratory health of women working as street cooks in Nigeria.

Awopeju OF, Nemery B, Afolabi OT, Poels K, Vanoirbeek J, Obaseki DO, Adewole OO, Lawin HA, Vollmer W, Erhabor GE.

Occup Environ Med. 2017 Aug 5.

Surface Sampling Collection and Culture Methods for Escherichia coli in Household Environments with High Fecal Contamination.

Exum NG, Kosek MN, Davis MF, Schwab KJ.

Int J Environ Res Public Health. 2017 Aug 22;14(8).

Modeling indoor particulate exposures in inner-city school classrooms.

Gaffin JM, Petty CR, Hauptman M, Kang CM, Wolfson JM, Abu Awad Y, Di Q, Lai PS, Sheehan WJ, Baxi S, Coull BA, Schwartz JD, Gold DR, Koutrakis P, Phipatanakul W.

J Expo Sci Environ Epidemiol. 2017 Sep;27(5):451-457.

Different types of housing and respiratory health outcomes.

Gan WQ, Sanderson WT, Browning SR, Mannino DM.

Prev Med Rep. 2017 Jun 8;7:124-129.

Kerosene lighting contributes to household air pollution in rural Uganda.

Muyanja D, Allen JG, Vallarino J, Valeri L, Kakuhikire B, Bangsberg DR, Christiani DC, Tsai AC, Lai PS. Indoor Air. 2017 Sep;27(5):1022-1029.

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, Breysse P, Hansel NN.

Environ Res. 2017 Aug 7;159:118-123.

Interstitial Lung Diseases and Fibrosis

Cobalt related interstitial lung disease.

Adams TN, Butt YM, Batra K, Glazer CS.

Respir Med. 2017 Aug;129:91-97.

Prevalence and incidence of interstitial lung diseases in a multi-ethnic county of Greater Paris.

Duchemann B, Annesi-Maesano I, Jacob 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, Cadranel J, Crestani B, Fain O, Lhote F, Dhote R, Saidenberg-Kermanac'h N, Rosenthal PA, Valeyre D, Nunes H.

Eur Respir J. 2017 Aug 3;50(2).

Human lung injury following exposure to humic substances and humic-like substances.

Ghio AJ, Madden MC.

Environ Geochem Health. 2017 Aug 1.

Thy1 (CD90) Expression Is Elevated in Radiation-Induced Periprosthetic Capsular Contracture: Implication for Novel Therapeutics.

Hansen TC, Woeller CF, Lacy SH, Koltz PF, Langstein HN, Phipps RP.

Plast Reconstr Surg. 2017 Aug;140(2):316-326.

Supplemental Oxygen in Interstitial Lung Disease: An Art in Need of Science.

Johannson KA, Pendharkar SR, Mathison K, Fell CD, Guenette JA, Kalluri M, Kolb M, Ryerson CJ.

Ann Am Thorac Soc. 2017 Sep;14(9):1373-1377.

A case of mild phenotype Alport syndrome caused by COL4A3 mutations.

Kamijo M, Kitamura M, Muta K, Uramatsu T, Obata Y, Nozu K, Kaito H, Iijima K, Mukae H, Nishino T. CEN Case Rep. 2017 Aug 30.

Exactly what is restrictive spirometry capturing?

Mannino DM.

Int J Tuberc Lung Dis. 2017 Sep 1;21(9):956.

High fasting insulin concentrations may be a pivotal predictor for the severity of hepatic fibrosis beyond the glycemic status in non-alcoholic fatty liver disease patients before development of diabetes mellitus.

Masuda K, Noguchi S, Ono M, Ochi T, Munekage K, Okamoto N, Suganuma N, Saibara T. Hepatol Res. 2017 Sep;47(10):983-990.

Myocardial Infarction and Obstructive Sleep Apnea

Outcomes of Acute Myocardial Infarction Patients Implanted With Biodegradable Polymer Biolimus-Eluting Stents Versus New-Generation Durable Polymer Drug-Eluting Stents: A Retrospective Analysis.

Choe JC, Cha KS, Jang HY, Choi JH, Kim BW, Ahn J, Park JS, Lee HW, Oh JH, Choi JH, Lee HC, Hong TJ, Ahn Y, Jeong MH; Korea Acute Myocardial Infarction Registry Investigators. Angiology. 2017 Sep;68(8):698-706.

Prevalence of obstructive sleep apnea in the general population: A systematic review.

Senaratna CV, Perret JL, Lodge CJ, Lowe AJ, Campbell BE, Matheson MC, Hamilton GS, Dharmage SC. Sleep Med Rev. 2017 Aug;34:70-81.

Kept in the loop: longitudinal strain-volume relationships for the assessment of left ventricular mechanical performance.

Wright SP, Lakin R, Wooding DJ, Groves L. J Physiol. 2017 Sep 1;595(17):5761-5763.

Occupational Lung Diseases

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.

Inhalation dosimetry modeling provides insights into regional respiratory tract toxicity of inhaled diacetyl.

Cichocki JA, Morris JB.

Toxicology. 2017 Aug 1;388:30-39.

High exposure to endotoxin in farming is associated with less new-onset pollen sensitisation.

Elholm G, Schlünssen V, Doekes G, Basinas I, Bolund ACS, Hjort C, Grønager PM, Omland Ø, Sigsgaard T.

Occup Environ Med. 2017 Aug 23.

Case-Finding for Persistent Airway Obstruction in Farmers: A Questionnaire With Optimal Diagnosis Criteria.

Guillien A, Soumagne TE, Puyraveau M, Berger P, Guillot SL, Rannou F, Jouneau S, Mauny FJ, Laplante JJ, Dalphin JC, Degano B. Am J Prev Med. 2017 Aug 14.

Predicting occupational asthma and rhinitis in bakery workers referred for clinical evaluation.

Jonaid BS, Rooyackers J, Stigter E, Portengen L, Krop E, Heederik D. Occup Environ Med. 2017 Aug;74(8):564-572.

Impact of hepatic P450-mediated biotransformation on the disposition and respiratory tract toxicity of inhaled naphthalene.

Kovalchuk N, Kelty J, Li L, Hartog M, Zhang QY, Edwards P, Van Winkle L, Ding X. Toxicol Appl Pharmacol. 2017 Aug 15;329:1-8. doi: 10.1016/j.taap.2017.05.015. Epub 2017 May 18.

Utility of Lung Clearance Index Testing as a Noninvasive Marker of Deployment-related Lung Disease.

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

Asbestos-related diseases in mineworkers: a clinicopathological study.

Ndlovu N, Rees D, Murray J, Vorajee N, Richards G, teWaterNaude J. ERJ Open Res. 2017 Aug 25;3(3).

Comparison of the toxicity of sintered and unsintered indium-tin oxide particles in murine macrophage and epidermal cells.

Olgun NS, Morris AM, Barber TL, Stefaniak AB, Kashon ML, Schwegler-Berry D, Cummings KJ, Leonard SS. Toxicol Appl Pharmacol. 2017 Sep 15; 331:85-93.

Early detection, clinical diagnosis, and management of lung disease from exposure to diacetyl.

Rose CS. Toxicology. 2017 Aug 1;388:9-14.

Challenges and Opportunities for Occupational Epidemiology in the Twenty-first Century.

Stayner LT, Collins JJ, Guo YL, Heederik D, Kogevinas M, Steenland K, Wesseling C, Demers PA. Curr Environ Health Rep. 2017 Aug 12.

Contact dermatitis is an unrecognized problem in the construction industry: Comparison of four different assessment methods.

Timmerman JG, Heederik D, Spee T, van Rooy FG, Krop EJM, Rustemeyer T, Smit LAM. Am J Ind Med. 2017 Aug 18.

Pregnancy, Prenatal, and Childhood Exposures

Sex differences in aortic augmentation index in adolescents.

Barraclough JY, Garden FL, Toelle B, O'Meagher S, Marks GB, Cowell CT, Celermajer DS, Ayer JG. J Hypertens. 2017 Oct;35(10):2016-2024.

Radiofrequency-electromagnetic field exposures in kindergarten children.

Bhatt CR, Redmayne M, Billah B, Abramson MJ, Benke G. J Expo Sci Environ Epidemiol. 2017 Sep;27(5):497-504.

Long-Acting β_2 -Agonists and Risk of Hypertensive Disorders of Pregnancy: A Cohort Study.

Blais L, Kettani FZ, Forget A, Beauchesne MF, Lemière C, Rey E. J Allergy Clin Immunol Pract. 2017 Aug 25.

Vitamin D prenatal programming of childhood metabolomics profiles at age 3 y.

Blighe K, Chawes BL, Kelly RS, Mirzakhani H, McGeachie M, Litonjua AA, Weiss ST, Lasky-Su JA. Am J Clin Nutr. 2017 Aug 23.

Birth weight trends in England and Wales (1986-2012): babies are getting heavier.

Ghosh RE, Berild JD, Sterrantino AF, Toledo MB, Hansell AL. Arch Dis Child Fetal Neonatal Ed. 2017 Aug 5.

Plane of nutrition during the rearing phase for replacement ewes of four genotypes: I - effects on growth and development, and on ovulation rate at first joining.

Keady TWJ, Hanrahan JP. Animal. 2017 Aug 24:1-9.

Plane of nutrition during the rearing phase for replacement ewes of four genotypes: II - effects on performance during first pregnancy and to weaning, and of their progeny.

Keady TWJ, Hanrahan JP.
Animal. 2017 Aug 24:1-11.

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.

College-Aged Males Experience Attenuated Sweet and Salty Taste with Modest Weight Gain.

Noel CA, Cassano PA, Dando R.
J Nutr. 2017 Aug 23.

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.

The Characterization of Polycyclic Aromatic Hydrocarbons in Northeastern US Trucking Terminals.

Walker ED, Hart JE, Garshick E, Cavallari JM, Davis ME, Smith TJ, Laden F.
Ann Work Expo Health. 2017 Aug 1;61(7):844-853.

Exposure to Low Levels of Lead in Utero and Umbilical Cord Blood DNA Methylation in Project Viva: An Epigenome-Wide Association Study.

Wu S, Hivert MF, Cardenas A, Zhong J, Rifas-Shiman SL, Agha G, Colicino E, Just AC, Amarasiriwardena C, Lin X, Litonjua AA, DeMeo DL, Gillman MW, Wright RO, Oken E, Baccarelli AA.
Environ Health Perspect. 2017 Aug 25;125(8):087019.

Public and Environmental Health

Improving medical leadership education through the Feagin leadership program.

Anderson KL, Cobb MIH, Gunasingha RM, Waldron NH, Atia A, Bailey JR, Doty JP, Boswick-Caffrey JH, Taylor DC.
Int J Med Educ. 2017 Aug 16;8:290-291.

Mobility assessment of a rural population in the Netherlands using GPS measurements.

Klous G, Smit LAM, Borlée F, Coutinho RA, Kretzschmar MEE, Heederik DJJ, Huss A.
Int J Health Geogr. 2017 Aug 9;16(1):30.

Environmental Health: Lessons from the Past and Looking to the Future.

Rice MB, Samet JM.
Ann Am Thorac Soc. 2017 Sep;14(9):1378-1382.

Public Health and All That Jazz.

Samet JM.
Am J Public Health. 2017 Sep;107(9):1352-1353.

Lost in translation: The challenge of adapting integrated approaches for worker health and safety for low- and middle-income countries.

Sorensen G, Nagler EM, Pawar P, Gupta PC, Pednekar MS, Wagner GR.
PLoS One. 2017 Aug 24;12(8):e0182607.

Receptors, Inflammation, and Pain

Mitochondrial ROS induced by chronic ethanol exposure promote hyper-activation of the NLRP3 inflammasome.

Hoyt LR, Randall MJ, Ather JL, DePuccio DP, Landry CC, Qian X, Janssen-Heininger YM, van der Vliet A, Dixon AE, Amiel E, Poynter ME.
Redox Biol. 2017 Aug;12:883-896.

Short-chain fatty acids, prebiotics, synbiotics, and systemic inflammation: a systematic review and meta-analysis.

McLoughlin RF, Berthon BS, Jensen ME, Baines KJ, Wood LG.
Am J Clin Nutr. 2017 Aug 9.

Involvement of Transient Receptor Potential Cation Channel Member A1 activation in the irritation and pain response elicited by skin-lightening reagent hydroquinone.

Tai Y, Wang C, Wang Z, Liang Y, Du J, He D, Fan X, Jordt SE, Liu B.
Sci Rep. 2017 Aug 8;7(1):7532. doi: 10.1038/s41598-017-07651-5.

Spinal Cord Injury

Plasma leptin and reduced FEV₁ and FVC in Chronic Spinal Cord Injury.

Garshick E, Walia P, Goldstein R, Teylan M, Lazzari A, Tun CG, Hart JE.
PM R. 2017 Aug 18.

Clinical factors associated with C-reactive protein in chronic spinal cord injury.

Goldstein RL, Walia P, Teylan M, Lazzari AA, Tun CG, Hart JE, Garshick E.
Spinal Cord. 2017 Aug 1.

FEV₁ and FVC and systemic inflammation in a spinal cord injury cohort.

Hart JE, Goldstein R, Walia P, Teylan M, Lazzari A, Tun CG, Garshick E.
BMC Pulm Med. 2017 Aug 15;17(1):113.

Tobacco Smoke

Early Postnatal Secondhand Smoke Exposure Disrupts Bacterial Clearance and Abolishes Immune Responses in Muco-Obstructive Lung Disease.

Lewis BW, Sultana R, Sharma R, Noël A, Langohr I, Patial S, Penn AL, Saini Y.
J Immunol. 2017 Aug 1;199(3):1170-1183.

Longitudinal Associations of Local Cigarette Prices and Smoking Bans with Smoking Behavior in the Multi-Ethnic Study of Atherosclerosis (MESA).

Mayne SL, Auchincloss AH, Stehr MF, Kern DM, Navas-Acien A, Kaufman JD, Michael YL, Roux AVD.
Epidemiology. 2017 Aug 16.

Cigarette smoke disrupts monolayer integrity by altering epithelial cell-cell adhesion and cortical tension.

Nishida K, Brune KA, Putcha N, Mandke P, O'Neal WK, Shade D, Srivastava V, Wang M, Lam H, An SS, Drummond MB, Hansel NN, Robinson DN, Sidhaye VK.
Am J Physiol Lung Cell Mol Physiol. 2017 Sep 1;313(3):L581-L591.

Variable Susceptibility to Cigarette Smoke-Induced Emphysema in 34 Inbred Strains of Mice Implicates Abi3bp in Emphysema Susceptibility.

Radder JE, Gregory AD, Leme AS, Cho MH, Chu Y, Kelly NJ, Bakke P, Gulsvik A, Litonjua AA, Sparrow D, Beaty TH, Crapo JD, Silverman EK, Zhang Y, Berndt A, Shapiro SD.
Am J Respir Cell Mol Biol. 2017 Sep;57(3):367-375.

Viral, Bacterial, and Fungal Infections

A case series of histoplasmosis patients with elevated serum soluble interleukin-2 receptor levels.
Hirayama T, Takazono T, Iwata K, Senju H, Shimazaki T, Tashiro M, Saijo T, et al.
J Infect Chemother. 2017 Sep;23(9):642-647.

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.

Cytomegalovirus Viral Load in Bronchoalveolar Lavage to Diagnose Lung Transplant Associated CMV Pneumonia.

Lodding IP, Schultz HH, Jensen JU, Kirkby N, Perch M, Andersen C, Lundgren JD, Iversen M.
Transplantation. 2017 Aug 24.

Evolutionary dynamics of an expressed MHC class II β locus in the Ranidae (Anura) uncovered by genome walking and high-throughput amplicon sequencing.

Mulder KP, Cortazar-Chinarro M, Harris DJ, Crottini A, Campbell Grant EH, Fleischer RC, Savage AE.
Dev Comp Immunol. 2017 Nov;76:177-188.

Tedizolid inhibits MUC5AC production induced by methicillin-resistant *Staphylococcus aureus* in human airway epithelial cells.

Takeda K, Kaku N, Morinaga Y, Kosai K, Uno N, Imamura Y, Hasegawa H, Miyazaki T, Izumikawa K, Mukae H, Yanagihara K.
J Infect Chemother. 2017 Sep;23(9):598-603.

Nationwide surveillance of bacterial respiratory pathogens conducted by the surveillance committee of Japanese Society of Chemotherapy, the Japanese Association for Infectious Diseases, and the Japanese Society for Clinical Microbiology in 2012: General view of the pathogens' antibacterial susceptibility.

Yanagihara K, Watanabe A, Aoki N, Matsumoto T, Yoshida M, Sato J, Wakamura T, Sunakawa K, Kadota J, Kiyota H, Iwata S, Kaku M, Hanaki H, Ohsaki Y, Fujiuchi S, Takahashi M, et al. J Infect Chemother. 2017 Sep;23(9):587-597.

Prevalence and risk factors for colonization of *Clostridium difficile* among adults living near livestock farms in the Netherlands.

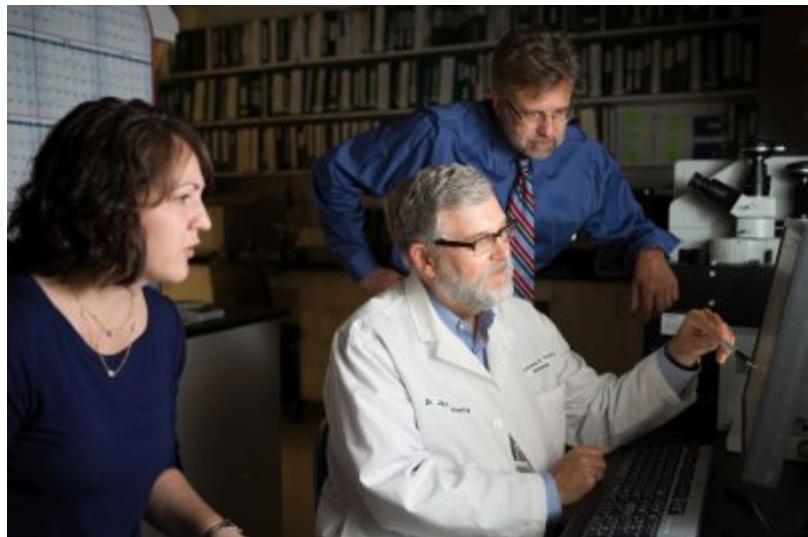
Zomer TP, VAN Duijkeren E, Wielders CCH, Veenman C, Hengeveld P, VAN DER Hoek W, DE Greeff SC, Smit LAM, Heederik DJ, Yzermans CJ, Kuijper EJ, Maassen CBM.
Epidemiol Infect. 2017 Aug 14:1-5.

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 or tnordgren@unmc.edu.



Jack Harkema received a new appointment at Michigan State University, the Albert C. and Lois E. Dehn Endowed Chair in Pathobiology and Diagnostic Investigation. This is the first endowed chair at Michigan State University to be awarded to a Veterinary Pathologist (and an Inhalation Toxicologist)



Harkema's research and productive collaborations are reflected in more than 240 publications with coauthors from 19 different units at MSU and 133 national and international laboratories. His most notable contributions to science include designing, constructing, and utilizing mobile air research laboratories to study the inhalation toxicology of "real-world" particulate air pollution found in urban and rural communities; illustrating how toxicologic pathology of the respiratory tract should be microscopically examined and morphometrically measured using state-of-the-art digital imaging techniques; and elucidating the pathobiology underlying the harmful health effects of commonly encountered air pollutants, like ozone and particulate matter.

#GPFAM: Global Pulmonary Fibrosis Awareness Month

September is Global Pulmonary Fibrosis Awareness Month. Spread awareness about lung scarring and the importance of fibrosis research this month!