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EOPH

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Dear EOPH members,

It was great to see everyone at the 2019 ATS Meeting last month! In this June issue of the EOPH newsletter, we share some of our members' recent "epub ahead of print" articles as well as photos from our EOPH Assembly Meeting awards presentation.

Are you interested in getting more involved with ATS and the EOPH assembly? Register [HERE](#) to indicate your interest!

Do you have a topic you would like to hear more about or a journal article that you would like to hear discussed? Send all ideas/announcements to tara.nordgren@medsch.ucr.edu.

Sincerely,

Your EOPH and TID Web Editorial Committees



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 tara.nordgren@medsch.ucr.edu.

Climate Change and Advocacy

[Limiting global warming to 1.5 to 2.0°C-A unique and necessary role for health professionals.](#)

Maibach EW, Sarfaty M, Mitchell M, Gould R. PLoS Med. 2019 May 14;16(5):e1002804. doi: 10.1371/journal.pmed.1002804. eCollection 2019 May. PMID: 31086357

Air Pollution and Environmental Exposures

[Association of Changes in Air Quality With Incident Asthma in Children in California, 1993-2014.](#)

Garcia E, Berhane KT, Islam T, McConnell R, Urman R, Chen Z, Gilliland FD. JAMA. 2019 May 21;321(19):1906-1915. doi: 10.1001/jama.2019.5357. PMID: 31112259

[Cluster-based bagging of constrained mixed-effects models for high spatiotemporal resolution nitrogen oxides prediction over large regions.](#) Li L, Girguis M, Lurmann F, Wu J, Urman R, Rappaport

E, Ritz B, Franklin M, Breton C, Gilliland F, Habre R. Environ Int. 2019 Jul;128:310-323. doi: 10.1016/j.envint.2019.04.057. Epub 2019 May 8. PMID: 31078000

[Changes in the acute response of respiratory diseases to PM_{2.5} in New York State from 2005 to 2016.](#)

Hopke PK, Croft D, Zhang W, Lin S, Masiol M, Squizzato S, Thurston SW, van Wijngaarden E, Utell MJ, Rich DQ. Sci Total Environ. 2019 Aug 10;677:328-339. doi: 10.1016/j.scitotenv.2019.04.357. Epub 2019 Apr 26. PMID: 31059876

[Associations between Ozone and Fine Particulate Matter and Respiratory Illness Found to Vary between Children and Adults. Implications for U.S. Air Quality Policy.](#) English P, Balmes J. Am J Respir Crit Care Med. 2019 Apr 1;199(7):817-819. doi: 10.1164/rccm.201811-2106ED. No abstract available. PMID: 30485120

[Machine-learned modeling of PM_{2.5} exposures in rural Lao PDR.](#) Hill LD, Pillarisetti A, Delapena S, Garland C, Pennise D, Pelletreau A, Koetting P, Motmans T, Vongnakhone K, Khammavong C,

Boatman MR, Balmes J, Hubbard A, Smith KR. Sci Total Environ. 2019 Aug 1;676:811-822. doi: 10.1016/j.scitotenv.2019.04.258. Epub 2019 Apr 18. PMID: 31071563

[Seasonal Variation of Water Quality in Unregulated Domestic Wells.](#) Ornelas Van Horne Y, Parks J,

Tran T, Abrell L, Reynolds KA, Beamer PI. Int J Environ Res Public Health. 2019 May 5;16(9). pii: E1569. doi: 10.3390/ijerph16091569. PMID: 31060292

[Term birth weight and ambient air pollutant concentrations during pregnancy, among women living in Monroe County, New York.](#) Li R, Hopke PK, Dozier A, Thurston SW, Thevenet-Morrison K, Croft D,

Masiol M, Squizzato S, Chalupa D, Rich DQ. J Expo Sci Environ Epidemiol. 2019 Apr 2. doi: 10.1038/s41370-019-0131-8. [Epub ahead of print] PMID: 30940881

[Synergistic Association of House Endotoxin Exposure and Ambient Air Pollution with Asthma](#)

[Outcomes.](#) Mendy A, Wilkerson J, Salo PM, Weir CH, Feinstein L, Zeldin DC, Thorne PS. Am J Respir Crit Care Med. 2019 Apr 9. doi: 10.1164/rccm.201809-1733OC. [Epub ahead of print] PMID: 30965018

[Can the effects of outdoor air pollution on asthma be mitigated?](#) Stevens EL, Rosser F, Forno

E, Peden D, Celedón JC. J Allergy Clin Immunol. 2019 Jun;143(6):2016-2018.e1. doi: 10.1016/j.jaci.2019.04.011. Epub 2019 Apr 25. No abstract available. PMID: 31029773

[Does Breathing Wood Smoke Make the Flu Worse? Sex Might Matter.](#) Frampton MW. Am J Respir Crit Care Med. 2019 Apr 15;199(8):940-941. doi: 10.1164/rccm.201810-2030ED. No abstract available. PMID: 30480478

[Wood Smoke Exposure Alters Human Inflammatory Responses to Viral Infection in a Sex-Specific Manner. A Randomized, Placebo-controlled Study.](#) Rebuli ME, Speen AM, Martin EM, Addo KA, Pawlak EA, Glista-Baker E, Robinette C, Zhou H, Noah TL, Jaspers I. Am J Respir Crit Care Med. 2019 Apr 15;199(8):996-1007. doi: 10.1164/rccm.201807-1287OC. PMID: 30360637

[Toxic Effects of Particulate Matter Derived from Dust Samples Near the Dzhidinski Ore Processing Mill, Eastern Siberia, Russia.](#) Zychowski KE, Wheeler A, Sanchez B, Harmon M, Steadman Tyler CR, Herbert G, Lucas SN, Ali AM, Avasarala S, Kunda N, Robinson P, Muttill P, Cerrato JM, Bleske B, Smirnova O, Campen MJ. Cardiovasc Toxicol. 2019 Apr 8. doi: 10.1007/s12012-019-09507-y. [Epub ahead of print] PMID: 30963444

[Air Pollution Exposure and Asthma Incidence in Children: Demonstrating the Value of Air Quality Standards.](#) Thurston GD, Rice MB. JAMA. 2019 May 21;321(19):1875-1877. doi: 10.1001/jama.2019.5343. No abstract available. PMID: 31112243

[Long-term Exposure to Ozone and Cause-Specific Mortality Risk in the U.S.](#) Lim CC, Hayes RB, Ahn J, Shao Y, Silverman DT, Jones RR, Garcia C, Bell ML, Thurston GD. Am J Respir Crit Care Med. 2019 May 3. doi: 10.1164/rccm.201806-1161OC. [Epub ahead of print] PMID:31051079

[Trends in Excess Morbidity and Mortality Associated with Air Pollution above ATS-Recommended Standards, 2008 to 2017.](#) Cromar KR, Gladson LA, Ewart G. Ann Am Thorac Soc. 2019 May 21. doi: 10.1513/AnnalsATS.201812-914OC. [Epub ahead of print] PMID: 31112414

[Clearing the Air on Personal Interventions to Reduce Exposure to Wildfire Smoke.](#) Laumbach RJ. Ann Am Thorac Soc. 2019 May 30. doi: 10.1513/AnnalsATS.201812-894PS. [Epub ahead of print] No abstract available. PMID: 31145636

[Exposure to air pollution is associated with adverse cardiopulmonary health effects in international travelers.](#) Vilcassim MJR, Thurston GD, Chen LC, Lim CC, Saunders E, Yao Y, Gordon T. J Travel Med. 2019 May 6. pii: taz032. doi: 10.1093/jtm/taz032. [Epub ahead of print] PMID: 31058996

[Temporal Trends in Cardiovascular Hospital Discharges Following a Mass Chlorine Exposure Event in Graniteville, South Carolina.](#) Howell AV, Vena JE, Cai B, Lackland DT, Ingram LA, Lawson AB, Svendsen ER. Front Public Health. 2019 May 8;7:112. doi:

[Long-Term Exposure to Ambient Ozone and Progression of Subclinical Arterial Disease: The Multi-Ethnic Study of Atherosclerosis and Air Pollution.](#) Wang M, Sampson PD, Sheppard LE, Stein JH, Vedal S, Kaufman JD. Environ Health Perspect. 2019 May;127(5):57001. doi: 10.1289/EHP3325. PMID: 31063398

[The Association between Long-Term Air Pollution and Urinary Catecholamines: Evidence from the Multi-Ethnic Study of Atherosclerosis.](#) Hajat A, Diez Roux AV, Castro-Diehl C, Cosselman K, Golden SH, Hazlehurst MF, Szpiro A, Vedal S, Kaufman JD. Environ Health Perspect. 2019 May;127(5):57007. doi: 10.1289/EHP3286. PMID: 31095432

[Particle Depletion Does Not Remediate Acute Effects of Traffic-Related Air Pollution and Allergen: A Randomized, Double-Blinded Crossover Study.](#) Wooding DJ, Ryu MH, Hüls A, Lee AD, Lin DTS, Rider CF, Yuen ACY, Carlsten C. Am J Respir Crit Care Med. 2019 Apr 12. doi: 10.1164/rccm.201809-1657OC. [Epub ahead of print] PMID: 30974969

Asthma and Allergy

[Elucidation of causal direction between asthma and obesity: a bi-directional Mendelian randomization study.](#) Xu S, Gilliland FD, Conti DV. *Int J Epidemiol.* 2019 Apr 21. pii: dyz070. doi: 10.1093/ije/dyz070. [Epub ahead of print] PMID: 31005996

[Maternal Asthma, Preeclampsia and Risk of Childhood Asthma at Age Six.](#) Mirzakhani H, Carey VJ, McElrath TF, Hollis BW, O'Connor GT, Zeiger RS, Bacharier L, Litonjua AA, Weiss ST. *Am J Respir Crit Care Med.* 2019 May 6. doi: 10.1164/rccm.201901-0081LE. [Epub ahead of print] No abstract available. PMID: 31059286

[Serum cadmium and lead, current wheeze, and lung function in a nationwide study of adults in the United States.](#) Yang G, Sun T, Han YY, Rosser F, Forno E, Chen W, Celedón JC. *J Allergy Clin Immunol Pract.* 2019 May 27. pii: S2213-2198(19)30486-6. doi: 10.1016/j.jaip.2019.05.029. [Epub ahead of print] PMID: 31146018

[Transcriptomics of atopy and atopic asthma in white blood cells from children and adolescents.](#) Jiang Y, Gruzieva O, Wang T, Forno E, Boutaoui N, Sun T, Merid SK, Acosta-Pérez E, Kull I, Canino G, Antó JM, Bousquet J, Melén E, Chen W, Celedón JC. *Eur Respir J.* 2019 May 18;53(5). pii: 1900102. doi: 10.1183/13993003.00102-2019. Print 2019 May. PMID: 30923181

[Role of Leptin in the Association Between Body Adiposity and Persistent Asthma: A Longitudinal Study.](#) Li Z, Leynaert B, Dumas O, Diaz Gil O, Garcia-Aymerich J, Fito Colomer M, Le Moual N, Pison C, Romieu I, Siroux V, Camargo CA Jr, Varraso R, Nadif R. *Obesity (Silver Spring).* 2019 Jun;27(6):894-898. doi: 10.1002/oby.22466. Epub 2019 Apr 20. PMID: 31004416

[Epigenomics and Transcriptomics in the Prediction and Diagnosis of Childhood Asthma: Are We There Yet?](#) Forno E, Celedón JC. *Front Pediatr.* 2019 Apr 2;7:115. doi: 10.3389/fped.2019.00115. eCollection 2019. Review. PMID: 31001502

Chronic Obstructive Pulmonary Disease (COPD)

[Rural Residence and Poverty Are Independent Risk Factors for Chronic Obstructive Pulmonary Disease in the United States.](#) Raju S, Keet CA, Paulin LM, Matsui EC, Peng RD, Hansel NN, McCormack MC. *Am J Respir Crit Care Med.* 2019 Apr 15;199(8):961-969. doi: 10.1164/rccm.201807-1374OC. PMID: 30384774

[The St. George's Respiratory Questionnaire Definition of Chronic Bronchitis May Be a Better Predictor of COPD Exacerbations Compared With the Classic Definition.](#) Kim V, Zhao H, Regan E, Han MK, Make BJ, Crapo JD, Jones PW, Curtis JL, Silverman EK, Criner GJ; COPDGene Investigators. *Chest.* 2019 May 15. pii: S0012-3692(19)30881-5. doi: 10.1016/j.chest.2019.03.041. [Epub ahead of print] PMID: 31047955

[Mucociliary Clearance in Former Tobacco Smokers with Both Chronic Obstructive Pulmonary Disease and Chronic Bronchitis and the Effect of Roflumilast.](#) Laube BL, Carson KA, Sharpless G, Paulin LM, Hansel NN. *J Aerosol Med Pulm Drug Deliv.* 2019 Apr 8. doi: 10.1089/jamp.2018.1459. [Epub ahead of print. PMID: 30964381

[Introducing the New COPD Pocket Consultant Guide App: Can A Digital Approach Improve Care? A Statement of the COPD Foundation.](#) Thomashow B, Crapo JD, Drummond MB, Han MK, Kalhan R, Malanga E, Malanga V, Mannino DM, Rennard S, Sciruba FC, Willard KS, Wise R, Yawn B. *Chronic Obstr Pulm Dis.* 2019 May 10;6(3). doi: 10.15326/jcopdf.6.3.2018.0167. [Epub ahead of print] PMID: 31075813

[Short-term effects of particle gamma radiation activities on pulmonary function in COPD patients.](#) Vieira CLZ, Koutrakis P, Huang S, Grady S, Hart JE, Coull BA, Laden F, Requia W, Schwartz J, Garshick E. *Environ Res.* 2019 May 21;175:221-227. doi: 10.1016/j.envres.2019.05.032. [Epub ahead of print] PMID: 31146094

[Metabolomics Identifies Novel Blood Biomarkers of Pulmonary Function and COPD in the General Population.](#) Yu B, Flexeder C, McGarrah RW 3rd, Wyss A, Morrison AC, North KE, Boerwinkle E, Kastenmüller G, Gieger C, Suhre K, Karrasch S, Peters A, Wagner GR, Michelotti GA, Mohny RP, Schulz H, London SJ. *Metabolites*. 2019 Apr 1;9(4). pii: E61. doi: 10.3390/metabo9040061. PMID: 30939782

[Safety and Tolerability of Comprehensive Research Bronchoscopy in Chronic Obstructive Pulmonary Disease. Results from the SPIROMICS Bronchoscopy Substudy.](#) Wells JM, Arenberg DA, Barjaktarevic I, Bhatt SP, Bowler RP, Christenson SA, Couper DJ, Dransfield MT, Han MK, Hoffman EA, Kaner RJ, Kim V, Kleerup E, Martinez FJ, Moore WC, O'Beirne SL, Paine R 3rd, Putcha N, Raman SM, Barr RG, Rennard SI, Woodruff PG, Curtis JL. *Ann Am Thorac Soc*. 2019 Apr;16(4):439-446. doi: 10.1513/AnnalsATS.201807-441OC. PMID: 30653926

Diet and Health Effects

[A case-control analysis of maternal diet and risk of neural tube defects in Bangladesh.](#) Obrycki JF, Lee JJ, Kapur K, Paul L, Hasan MOSI, Mia S, Quamruzzaman Q, Christiani DC, Mazumdar M. *Birth Defects Res*. 2019 Apr 15. doi: 10.1002/bdr2.1505. [Epub ahead of print] PMID: 30989821

[High intake of dietary fructose in overweight/obese teenagers associated with depletion of Eubacterium and Streptococcus in gut microbiome.](#) Jones RB, Alderete TL, Kim JS, Millstein J, Gilliland FD, Goran MI. *Gut Microbes*. 2019 Apr 16:1-8. doi: 10.1080/19490976.2019.1592420. [Epub ahead of print] PMID: 30991877

[Insufficient zinc intake enhances lung inflammation in response to agricultural organic dust exposure.](#) Knoell DL, Smith DA, Sapkota M, Heires AJ, Hanson CK, Smith LM, Poole JA, Wyatt TA, Romberger DJ. *J Nutr Biochem*. 2019 May 3;70:56-64. doi: 10.1016/j.jnutbio.2019.04.007. [Epub ahead of print] PMID: 31153019

[Mediterranean Diet and the Association Between Air Pollution and Cardiovascular Disease Mortality Risk.](#) Lim CC, Hayes RB, Ahn J, Shao Y, Silverman DT, Jones RR, Thurston GD. *Circulation*. 2019 Apr 9;139(15):1766-1775. doi: 10.1161/CIRCULATIONAHA.118.035742. PMID: 30700142

Bacterial Infections

[Alternative Explanation for Spread of Klebsiella Pneumoniae Infection from Pyogenic Liver Abscess into Thorax.](#) Ho JQ, Kuschner WG. *Am J Med Sci*. 2019 Apr 6. pii: S0002-9629(19)30136-3. doi: 10.1016/j.amjms.2019.04.001. [Epub ahead of print] No abstract available. PMID: 31176419

Smoking and Tobacco Use

[Diffuse idiopathic skeletal hyperostosis in smokers is associated with Restrictive Spirometry Pattern: an analysis in the COPD Gene cohort.](#) Oudkerk SF, Mohamed Hoesein FAA, Öner FC, Verlaan JJ, de Jong PA, Kuperus JS, Cho M, McDonald ML, Lynch DA, Silverman EK, Crapo JD, Make BJ, Lowe KE, Regan EA. *J Rheumatol*. 2019 May 1. pii: jrheum.181357. doi: 10.3899/jrheum.181357. [Epub ahead of print] PMID: 31043539

[Endotoxin and \[Formula: see text\] Contamination in Electronic Cigarette Products Sold in the United States.](#) Lee MS, Allen JG, Christiani DC. *Environ Health Perspect*. 2019 Apr;127(4):47008. doi: 10.1289/EHP3469. PMID: 31017484

[Linkage Between Poverty and Smoking in Philadelphia and Its Impact on Future Directions for Tobacco Control in the City.](#) Shusted CS, Kane GC. *Popul Health Manag*. 2019 May 29. doi: 10.1089/pop.2019.0006. [Epub ahead of print] PMID: 31140919

Cellular Mechanisms

[Early Proteome Shift and Serum Bioactivity Precede Diesel Exhaust-induced Impairment of Cardiovascular Recovery in Spontaneously Hypertensive Rats.](#)

Thompson LC, Shannahan JH, Perez CM, Haykal-Coates N, King C, Hazari MS, Brown JM, Farraj AK. *Sci Rep.* 2019 May 3;9(1):6885. doi: 10.1038/s41598-019-43339-8. PMID: 31053794

[Dysregulation of Gap Junction Function and Cytokine Production in Response to Non-Genotoxic Polycyclic Aromatic Hydrocarbons in an In Vitro Lung Cell Model.](#)

Romo D, Velmurugan K, Upham BL, Dwyer-Nield LD, Bauer AK. *Cancers (Basel).* 2019 Apr 23;11(4). pii: E572. doi: 10.3390/cancers11040572. PMID:31018556

[Airway Exposure to Modified Multi-walled Carbon Nanotubes Perturbs Cardiovascular Adenosinergic Signaling in Mice.](#)

Thompson LC, Sheehan NL, Walters DM, Lust RM, Brown JM, Wingard CJ. *Cardiovasc Toxicol.* 2019 Apr;19(2):168-177. doi: 10.1007/s12012-018-9487-6. PMID: 30382549

[Early Mechanistic Events Induced by Low Molecular Weight Polycyclic Aromatic Hydrocarbons in Mouse Lung Epithelial Cells: A Role for Eicosanoid Signaling.](#)

Siegrist KJ, Romo D, Upham BL, Armstrong M, Quinn K, Vanderlinden L, Osgood RS, Velmurugan K, Elie M, Manke J, Reinhold D, Reisdorph N, Saba L, Bauer AK. *Toxicol Sci.* 2019 May 1;169(1):180-193. doi: 10.1093/toxsci/kfz030. PMID: 30690640

[Nanoparticle exposure driven circulating bioactive peptidome causes systemic inflammation and vascular dysfunction.](#)

Mostovenko E, Young T, Muldoon PP, Bishop L, Canal CG, Vucetic A, Zeidler-Erdely PC, Erdely A, Campen MJ, Ottens AK. *Part Fibre Toxicol.* 2019 May 29;16(1):20. doi: 10.1186/s12989-019-0304-6. PMID: 31142334

[Cortical Pain Processing in the Rat Anterior Cingulate Cortex and Primary Somatosensory Cortex.](#)

Xiao Z, Martinez E, Kulkarni PM, Zhang Q, Hou Q, Rosenberg D, Talay R, Shalot L, Zhou H, Wang J, Chen ZS. *Front Cell Neurosci.* 2019 Apr 24;13:165. doi: 10.3389/fncel.2019.00165. eCollection 2019. PMID: 31105532

HIV/AIDS

[Lower serum adiponectin level is associated with lipodystrophy among HIV-infected men in the Study to Understand the Natural History of HIV/AIDS in the Era of Effective Therapy \(SUN\) study.](#)

Klos B, Patel P, Rose C, Bush T, Conley L, Kojic EM, Henry K, Brooks JT, Hammer J; SUN study investigators. *HIV Med.* 2019 May 31. doi: 10.1111/hiv.12754. [Epub ahead of print] PMID: 31149766

[A strengths-based case management intervention to link HIV-positive PWID in Russia to HIV care - results from a randomized controlled trial.](#)

Samet JH, Blokhina E, Cheng DM, Walley AY, Lioznov D, Gnatienko N, Quinn EK, Briden C, Chaisson CE, Toussova O, Gifford AL, Raj A, Krupitsky E. *AIDS.* 2019 Apr 5. doi: 10.1097/QAD.0000000000002230. [Epub ahead of print] PMID: 30964750

[The Effect of Hormonal Contraception on Cervicovaginal Mucosal End Points Associated with HIV Acquisition.](#)

Thurman A, Chandra N, Schwartz JL, Brache V, Chen BA, Asin S, Rollenhagen C, Herold BC, Fichorova RN, Hillier SL, Weiner DH, Mauck C, Doncel GF. *AIDS Res Hum Retroviruses.* 2019 May 14. doi: 10.1089/AID.2018.0298. [Epub ahead of print] PMID: 30997816

Research Methods, Therapeutics, and Clinical Strategies

[Environmental Health Sciences in a Translational Research Framework: More than Benches and Bedsides.](#)

Kaufman JD, Curl CL. *Environ Health Perspect.* 2019 Apr;127(4):45001. doi: 10.1289/EHP4067. PMID: 30957526

[Criteria for Early-Phase Diffuse Idiopathic Skeletal Hyperostosis: Development and Validation.](#)

Kuperus JS, Oudkerk SF, Foppen W, Mohamed Hoesein FA, Gielis WP, Waalwijk J, Regan EA,

Lynch DA, Oner FC, de Jong PA, Verlaan JJ. Radiology. 2019 May;291(2):420-426. doi: 10.1148/radiol.2019181695. Epub 2019 Apr 2. PMID: 30938626

[A novel approach for exposing and sharing clinical data: the Translator Integrated Clinical and Environmental Exposures Service.](#) Fecho K, Pfaff E, Xu H, Champion J, Cox S, Stillwell L, Peden DB, Bizon C, Krishnamurthy A, Tropsha A, Ahalt SC. J Am Med Inform Assoc. 2019 Apr 26. pii: ocz042. doi: 10.1093/jamia/ocz042. [Epub ahead of print] PMID: 31077269

[Association of Statewide Implementation of the Prehospital Traumatic Brain Injury Treatment Guidelines With Patient Survival Following Traumatic Brain Injury: The Excellence in Prehospital Injury Care \(EPIC\) Study.](#) Spaite DW, Bobrow BJ, Keim SM, Barnhart B, Chikani V, Gaither JB, Sherrill D, Denninghoff KR, Mullins T, Adelson PD, Rice AD, Viscusi C, Hu C. JAMA Surg. 2019 May 8:e191152. doi: 10.1001/jamasurg.2019.1152. [Epub ahead of print] PMID: 31066879

[Laparotomy complications on extracorporeal life support: Surgical site bleeding does not increase mortality.](#) Barry WE, Castle SL, Golden J, Rosenberg DM, Jensen AR, Bliss D. J Pediatr Surg. 2019 Apr 25. pii: S0022-3468(18)30808-X. doi: 10.1016/j.jpedsurg.2018.11.018. [Epub ahead of print] PMID: 31103272

[Pilot Study: Neurocognitive Disorders and Colonoscopy in Older Adults.](#) Arias F, Rivero M, Levy SA, Armstrong R, Estores DS, Tighe P, Price CC. Anesth Analg. 2019 May 15. doi: 10.1213/ANE.0000000000004212. [Epub ahead of print] PMID: 31107264

[GRFS and CRFS in alternative donor hematopoietic cell transplantation for pediatric patients with acute leukemia.](#) Mehta RS, Holtan SG, Wang T, Hemmer MT, Spellman SR, Arora M, Couriel DR, Alousi AM, Pidala J, Abdel-Azim H, Ahmed I, Aljurf M, Askar M, Auletta JJ, Bhatt V, Bredeson C, Chhabra S, Gadalla S, Gajewski J, Gale RP, Gergis U, Hematti P, Hildebrandt GC, Inamoto Y, Kitko C, Khandelwal P, MacMillan ML, Majhail N, Marks DI, Mehta P, Nishihori T, Olsson RF, Pawarode A, Diaz MA, Prestidge T, Qayed M, Rangarajan H, Ringden O, Saad A, Savani BN, Seo S, Shah A, Shah N, Schultz KR, Solh M, Spitzer T, Szer J, Teshima T, Verdonck LF, Williams KM, Wirk B, Wagner J, Yared JA, Weisdorf DJ. Blood Adv. 2019 May 14;3(9):1441-1449. doi: 10.1182/bloodadvances.2018030171. PMID: 31053571

[FLUORESCIN ANGIOGRAPHIC EVALUATION OF PERIPHERAL RETINAL VASCULATURE AFTER PRIMARY INTRAVITREAL RANIBIZUMAB FOR RETINOPATHY OF PREMATURITY.](#)

Harper CA 3rd, Wright LM, Young RC, Read SP, Chang EY. Retina. 2019 Apr;39(4):700-705. doi: 10.1097/IAE.0000000000001996. PMID: 29300248

[Investigation into Possible Association of Oxandrolone and Heterotopic Ossification Following Burn Injury.](#) Thorpe CR, Ucer Ozgurel S, Simko LC, Goldstein R, Grant GG, Pagani C, Hwang C, Vasquez K, Sorkin M, Vaishampayan A, Goverman J, Sheridan RL, Friedstat J, Schulz JT, Schneider JC, Levi B, Ryan CM. J Burn Care Res. 2019 Apr 12. pii: irz063. doi: 10.1093/jbcr/irz063. [Epub ahead of print] PMID: 31053861

[Identification of Acute Kidney Injury Subphenotypes with Differing Molecular Signatures and Responses to Vasopressin Therapy.](#) Bhatraju PK, Zelnick LR, Herting J, Katz R, Mikacenic C, Kosamo S, Morrell ED, Robinson-Cohen C, Calfee CS, Christie JD, Liu KD, Matthay MA, Hahn WO, Dmyterko V, Slivinski NSJ, Russell JA, Walley KR, Christiani DC, Liles WC, Himmelfarb J, Wurfel MM. Am J Respir Crit Care Med. 2019 Apr 1;199(7):863-872. doi: 10.1164/rccm.201807-1346OC. PMID: 30334632

[Perioperative complications and outcome after surgery for treatment of gastric carcinoma in dogs: A Veterinary Society of Surgical Oncology retrospective study of 40 cases \(2004-2018\).](#) Abrams B, Wavreille VA, Husbands BD, Matz BM, Massari F, Liptak JM, Cray MT, de Mello Souza CH, Wustefeld-Janssens BG, Oblak ML, Su L, Selmic LE. Vet Surg. 2019 May 29. doi: 10.1111/vsu.13239. [Epub ahead of print] PMID: 31140634

[Antibody Fab-Fc properties outperform titer in predictive models of SIV vaccine-induced protection.](#)

Pittala S, Bagley K, Schwartz JA, Brown EP, Weiner JA, Prado IJ, Zhang W, Xu R, Ota-Setlik A, Pal R, Shen X, Beck C, Ferrari G, Lewis GK, LaBranche CC, Montefiori DC, Tomaras GD, Alter G, Roederer M, Fouts TR, Ackerman ME, Bailey-Kellogg C. *Mol Syst Biol.* 2019 May 2;15(5):e8747. doi: 10.15252/msb.20188747. PMID: 31048360

[Comparing Alternative Breast Milk Feeding Questions to U.S. Breastfeeding Surveillance Questions.](#)

O'Sullivan EJ, Geraghty SR, Cassano PA, Rasmussen KM. *Breastfeed Med.* 2019 Jun;14(5):347-353. doi: 10.1089/bfm.2018.0256. Epub 2019 Apr 2. PMID: 30939039

[Parallel group ICA+ICA: Joint estimation of linked functional network variability and structural covariation with application to schizophrenia.](#)

Qi S, Sui J, Chen J, Liu J, Jiang R, Silva R, Iraj A, Damaraju E, Salman M, Lin D, Fu Z, Zhi D, Turner JA, Bustillo J, Ford JM, Mathalon DH, Voyvodic J, McEwen S, Preda A, Belger A, Potkin SG, Mueller BA, Adali T, Calhoun VD. *Hum Brain Mapp.* 2019 May 16. doi: 10.1002/hbm.24632. [Epub ahead of print] PMID: 31099151

Genetics and Epigenetics

[Resequencing Study Confirms Host Defense and Cell Senescence Gene Variants Contribute to the Risk of Idiopathic Pulmonary Fibrosis.](#)

Moore C, Blumhagen RZ, Yang IV, Walts A, Powers J, Walker T, Bishop M, Russell P, Vestal B, Cardwell J, Markin CR, Mathai SK, Schwarz MI, Steele MP, Lee J, Brown KK, Loyd JE, Crapo JD, Silverman EK, Cho MH, James JA, Guthridge JM, Cogan JD, Kropski JA, Swigris JJ, Bair C, Soon Kim D, Ji W, Kim H, Song JW, Maier LA, Pacheco KA, Hirani N, Poon AS, Li F, Jenkins RG, Braybrooke R, Saini G, Maher TM, Molyneaux PL, Saunders P, Zhang Y, Gibson KF, Kass DJ, Rojas M, Sembrat J, Wolters PJ, Collard HR, Sundry JS, O'Riordan T, Streck ME, Noth I, Ma SF, Porteous MK, Kreider ME, Patel NB, Inoue Y, Hirose M, Arai T, Akagawa S, Eickelberg O, Fernandez IE, Behr J, Mogulkoc N, Corte TJ, Glaspole I, Tomassetti S, Ravaglia C, Poletti V, Crestani B, Borie R, Kannengiesser C, Parfrey H, Fiddler C, Rassi D, Molina-Molina M, Machahua C, Montes Worboys A, Gudmundsson G, Isaksson HJ, Lederer DJ, Podolanczuk AJ, Montesi SB, Bendstrup E, Danchel V, Selman M, Pardo A, Henry MT, Keane MP, Doran P, Vašáková M, Sterclova M, Ryerson CJ, Wilcox PG, Okamoto T, Furusawa H, Miyazaki Y, Laurent G, Baltic S, Prele C, Moodley Y, Shea BS, Ohta K, Suzukawa M, Narumoto O, Nathan SD, Venuto DC, Woldehanna ML, Kokturk N, de Andrade JA, Luckhardt T, Kulkarni T, Bonella F, Donnelly SC, McElroy A, Armstrong ME, Aranda A, Carbone RG, Puppo F, Beckman KB, Nickerson DA, Fingerlin TE, Schwartz DA. *Am J Respir Crit Care Med.* 2019 Apr 29. doi: 10.1164/rccm.201810-1891OC. [Epub ahead of print] PMID: 31034279

[A2ML1 and otitis media: novel variants, differential expression and relevant pathways.](#)

Larson ED, Magno JPM, Steritz MJ, Llanes EGDV, Cardwell J, Pedro M, Roberts TB, Einarsdottir E, Rosanes RAQ, Greenlee C, Santos RAP, Yousaf A, Streubel SO, Santos ATR, Ruiz AG, Lagrana-Villagrancia SM, Ray D, Yarza TKL, Scholes MA, Anderson CB, Acharya A; University of Washington Center for Mendelian Genomics, Gubbels SP, Bamshad MJ, Cass SP, Lee NR, Shaikh RS, Nickerson DA, Mohlke KL, Prager JD, Cruz TLG, Yoon PJ, Abes GT, Schwartz DA, Chan AL, Wine TM, Cutiongco-de la Paz EM, Friedman N, Kechris K, Kere J, Leal SM, Yang IV, Patel JA, Tantoco MLC, Riazuddin S, Chan KH, Mattila PS, Reyes-Quintos MRT, Ahmed ZM, Jenkins HA, Chonmaitree T, Hafrén L, Chiong CM, Santos-Cortez RLP. *Hum Mutat.* 2019 Apr 22. doi: 10.1002/humu.23769. [Epub ahead of print] PMID: 31009165

[Meta-analysis of epigenome-wide association studies in neonates reveals widespread differential DNA methylation associated with birthweight.](#)

Küpers LK, Monnereau C, Sharp GC, Yousefi P, Salas LA, Ghantous A, Page CM, Reese SE, Wilcox AJ, Czamara D, Starling AP, Novoloaca A, Lent S, Roy R, Hoyo C, Breton CV, Allard C, Just AC, Bakulski KM, Holloway JW, Everson TM, Xu CJ, Huang RC, van der Plaats DA, Wielscher M, Merid SK, Ullemar V, Rezwani FI, Lahti J, van Dongen J, Langie SAS, Richardson TG, Magnus MC, Nohr EA, Xu Z, Duijts L, Zhao S, Zhang W, Plusquin M, DeMeo DL, Solomon O, Heimovaara JH, Jima DD, Gao L, Bustamante M, Perron P, Wright RO, Hertz-Picciotto I, Zhang H, Karagas MR, Gehring U, Marsit CJ, Beilin LJ, Vonk JM, Jarvelin MR, Bergström A, Örtqvist AK, Ewart S, Villa PM, Moore SE, Willemsen G, Standaert ARL, Håberg SE, Sørensen TIA, Taylor JA, Räikkönen K, Yang IV, Kechris K, Nawrot TS, Silver MJ, Gong YY, Richiardi L,

Kogevinas M, Litonjua AA, Eskenazi B, Huen K, Mbarek H, Maguire RL, Dwyer T, Vrijheid M, Bouchard L, Baccarelli AA, Croen LA, Karmaus W, Anderson D, de Vries M, Sebert S, Kere J, Karlsson R, Arshad SH, Hämäläinen E, Routledge MN, Boomsma DI, Feinberg AP, Newschaffer CJ, Govarts E, Moisse M, Fallin MD, Melén E, Prentice AM, Kajantie E, Almqvist C, Oken E, Dabelea D, Boezen HM, Melton PE, Wright RJ, Koppelman GH, Trevisi L, Hivert MF, Sunyer J, Munthe-Kaas MC, Murphy SK, Corpeleijn E, Wiemels J, Holland N, Herceg Z, Binder EB, Davey Smith G, Jaddoe VVW, Lie RT, Nystad W, London SJ, Lawlor DA, Relton CL, Snieder H, Felix JF. *Nat Commun.* 2019 Apr 23;10(1):1893. doi: 10.1038/s41467-019-09671-3. PMID: 31015461

[A multi-ancestry genome-wide study incorporating gene-smoking interactions identifies multiple new loci for pulse pressure and mean arterial pressure.](#) Sung YJ, de Las Fuentes L, Winkler TW, Chasman DI, Bentley AR, Kraja AT, Ntalla I, Warren HR, Guo X, Schwander K, Manning AK, Brown MR, Aschard H, Feitosa MF, Franceschini N, Lu Y, Cheng CY, Sim X, Vojinovic D, Marten J, Musani SK, Kilpeläinen TO, Richard MA, Aslibekyan S, Bartz TM, Dorajoo R, Li C, Liu Y, Rankinen T, Smith AV, Tajuddin SM, Tayo BO, Zhao W, Zhou Y, Matoba N, Sofer T, Alver M, Amini M, Boissel M, Chai JF, Chen X, Divers J, Gandin I, Gao C, Giulianini F, Goel A, Harris SE, Hartwig FP, He M, Horimoto ARVR, Hsu FC, Jackson AU, Kammerer CM, Kasturiratne A, Komulainen P, Kühnel B, Leander K, Lee WJ, Lin KH, Luan J, Lyytikäinen LP, McKenzie CA, Nelson CP, Noordam R, Scott RA, Sheu WHH, Stančáková A, Takeuchi F, van der Most PJ, Varga TV, Waken RJ, Wang H, Wang Y, Ware EB, Weiss S, Wen W, Yanek LR, Zhang W, Zhao JH, Afaq S, Alfred T, Amin N, Arking DE, Aung T, Barr RG, Bielak LF, Boerwinkle E, Bottinger EP, Braund PS, Brody JA, Broeckel U, Cade B, Campbell A, Canouil M, Chakravarti A, Cocca M, Collins FS, Connell JM, de Mutsert R, de Silva HJ, Dörr M, Duan Q, Eaton CB, Ehret G, Evangelou E, Faul JD, Forouhi NG, Franco OH, Friedlander Y, Gao H, Gigante B, Gu CC, Gupta P, Hagenaars SP, Harris TB, He J, Heikkinen S, Heng CK, Hofman A, Howard BV, Hunt SC, Irvin MR, Jia Y, Katsuya T, Kaufman J, Kerrison ND, Khor CC, Koh WP, Koistinen HA, Kooperberg CB, Krieger JE, Kubo M, Kutalik Z, Kuusisto J, Lakka TA, Langefeld CD, Langenberg C, Launer LJ, Lee JH, Lehne B, Levy D, Lewis CE, Li Y; Lifelines Cohort Study, Lim SH, Liu CT, Liu J, Liu J, Liu Y, Loh M, Lohman KK, Louie T, Mägi R, Matsuda K, Meitinger T, Metspalu A, Milani L, Momozawa Y, Mosley TH Jr, Nalls MA, Nasri U, O'Connell JR, Ogunniyi A, Palmas WR, Palmer ND, Pankow JS, Pedersen NL, Peters A, Peyser PA, Polasek O, Porteous D, Raitakari OT, Renström F, Rice TK, Ridker PM, Robino A, Robinson JG, Rose LM, Rudan I, Sabanayagam C, Salako BL, Sadow K, Schmidt CO, Schreiner PJ, Scott WR, Sever P, Sims M, Sitlani CM, Smith BH, Smith JA, Snieder H, Starr JM, Strauch K, Tang H, Taylor KD, Teo YY, Tham YC, Uitterlinden AG, Waldenberger M, Wang L, Wang YX, Wei WB, Wilson G, Wojczynski MK, Xiang YB, Yao J, Yuan JM, Zonderman AB, Becker DM, Boehnke M, Bowden DW, Chambers JC, Chen YI, Weir DR, de Faire U, Deary IJ, Esko T, Farrall M, Forrester T, Freedman BI, Froguel P, Gasparini P, Gieger C, Horta BL, Hung YJ, Jonas JB, Kato N, Kooner JS, Laakso M, Lehtimäki T, Liang KW, Magnusson PKE, Oldehinkel AJ, Pereira AC, Perls T, Rauramaa R, Redline S, Rettig R, Samani NJ, Scott J, Shu XO, van der Harst P, Wagenknecht LE, Wareham NJ, Watkins H, Wickremasinghe AR, Wu T, Kamatani Y, Laurie CC, Bouchard C, Cooper RS, Evans MK, Gudnason V, Hixson J, Kardina SLR, Kritchevsky SB, Psaty BM, van Dam RM, Arnett DK, Mook-Kanamori DO, Fornage M, Fox ER, Hayward C, van Duijn CM, Tai ES, Wong TY, Loos RJJ, Reiner AP, Rotimi CN, Bierut LJ, Zhu X, Cupples LA, Province MA, Rotter JI, Franks PW, Rice K, Elliott P, Caulfield MJ, Gauderman WJ, Munroe PB, Rao DC, Morrison AC. *Hum Mol Genet.* 2019 Apr 10. pii: ddz070. doi: 10.1093/hmg/ddz070. [Epub ahead of print] PMID: 31127295

[Potentially functional genetic variants in the TNF/TNFR signaling pathway genes predict survival of patients with non-small cell lung cancer in the PLCO cancer screening trial.](#) Guo Y, Feng Y, Liu H, Luo S, Clarke JW, Moorman PG, Su L, Shen S, Christiani DC, Wei Q. *Mol Carcinog.* 2019 Jul;58(7):1094-1104. doi: 10.1002/mc.23017. Epub 2019 Apr 15. PMID: 30989732

[Genome-Wide Association Analysis of Single-Breath DL_{CO}.](#) Sakornsakolpat P, McCormack M, Bakke P, Gulsvik A, Make BJ, Crapo JD, Cho MH, Silverman EK. *Am J Respir Cell Mol Biol.* 2019 May;60(5):523-531. doi: 10.1165/rcmb.2018-0384OC. PMID: 30694715

[SIPA1L3 methylation modifies the benefit of smoking cessation on lung adenocarcinoma survival: an epigenomic-smoking interaction analysis.](#) Zhang R, Lai L, Dong X, He J, You D, Chen C, Lin L, Zhu Y, Huang H, Shen S, Wei L, Chen X, Guo Y, Liu L, Su L, Shafer A, Moran S, Fleischer T, Bjaanaes MM, Karlsson A, Planck M, Staaf J, Helland Å, Esteller M, Wei Y, Chen F, Christiani DC. *Mol Oncol.* 2019 May;13(5):1235-1248. doi: 10.1002/1878-0261.12482. Epub 2019 Apr 17. PMID: 30924596

[Prenatal Particulate Air Pollution and DNA Methylation in Newborns: An Epigenome-Wide Meta-Analysis.](#) Gruzieva O, Xu CJ, Yousefi P, Relton C, Merid SK, Breton CV, Gao L, Volk HE, Feinberg JI, Ladd-Acosta C, Bakulski K, Auffray C, Lemonnier N, Plusquin M, Ghantous A, Herceg Z, Nawrot TS, Pizzi C, Richiardi L, Rusconi F, Vineis P, Kogevinas M, Felix JF, Duijts L, den Dekker HT, Jaddoe VVW, Ruiz JL, Bustamante M, Antó JM, Sunyer J, Vrijheid M, Gutzkow KB, Grazuleviciene R, Hernandez-Ferrer C, Annesi-Maesano I, Lepeule J, Bousquet J, Bergström A, Kull I, Söderhäll C, Kere J, Gehring U, Brunekreef B, Just AC, Wright RJ, Peng C, Gold DR, Kloog I, DeMeo DL, Pershagen G, Koppelman GH, London SJ, Baccarelli AA, Melén E. *Environ Health Perspect.* 2019 May;127(5):57012. doi: 10.1289/EHP4522. Epub 2019 May 31. PMID: 31148503

[A Genome-Wide Association Study implicates NR2F2 in Lymphangiomyomatosis Pathogenesis.](#) Kim W, Giannikou K, Dreier JR, Lee S, Tyburczy ME, Silverman EK, Radzikowska E, Wu S, Wu CL, Henske EP, Hunninghake G, Carel H, Roman A, Pujana MA, Moss J, Won S, Kwiatkowski DJ. *Eur Respir J.* 2019 Apr 18. pii: 1900329. doi: 10.1183/13993003.00329-2019. [Epub ahead of print] PMID: 31000673

[Genetic overlap of chronic obstructive pulmonary disease and cardiovascular disease-related traits: a large-scale genome-wide cross-trait analysis.](#) Zhu Z, Wang X, Li X, Lin Y, Shen S, Liu CL, Hobbs BD, Hasegawa K, Liang L; International COPD Genetics Consortium, Boezen HM, Camargo CA Jr, Cho MH, Christiani DC. *Respir Res.* 2019 Apr 2;20(1):64. doi: 10.1186/s12931-019-1036-8. PMID: 30940143

[Genomic interactions with exposure to inhaled pollutants.](#) London SJ, Melén E. *J Allergy Clin Immunol.* 2019 Jun;143(6):2011-2013.e1. doi: 10.1016/j.jaci.2019.04.008. Epub 2019 Apr 25. No abstract available. PMID: 31029775

[Integrative Genomics Analysis Identifies ACVR1B as a Candidate Causal Gene of Emphysema Distribution.](#) Boueiz A, Pham B, Chase R, Lamb A, Lee S, Naing ZCC, Cho MH, Parker MM, Sakornsakolpat P, Hersh CP, Crapo JD, Stergachis AB, Tal-Singer R, DeMeo DL, Silverman EK, Zhou X, Castaldi PJ; COPDGene investigators, by Core Units:, ECLIPSE Investigators:, GenKOLS Investigators:.. *Am J Respir Cell Mol Biol.* 2019 Apr;60(4):388-398. doi: 10.1165/rcmb.2018-01100C. PMID: 30335480

Cancer

[PARP Inhibitor Efficacy Depends on CD8+ T-cell Recruitment via Intratumoral STING Pathway Activation in BRCA-Deficient Models of Triple-Negative Breast Cancer.](#) Pantelidou C, Sonzogni O, De Oliveria Taveira M, Mehta AK, Kothari A, Wang D, Visal T, Li MK, Pinto J, Castrillon JA, Cheney EM, Bouwman P, Jonkers J, Rottenberg S, Guerriero JL, Wulf GM, Shapiro GI. *Cancer Discov.* 2019 Jun;9(6):722-737. doi: 10.1158/2159-8290.CD-18-1218. Epub 2019 Apr 23. PMID: 31015319

[Association of Peritumoral Radiomics With Tumor Biology and Pathologic Response to Preoperative Targeted Therapy for HER2 \(ERBB2\)-Positive Breast Cancer.](#) Braman N, Prasanna P, Whitney J, Singh S, Beig N, Etesami M, Bates DDB, Gallagher K, Bloch BN, Vulchi M, Turk P, Bera K, Abraham J, Sikov WM, Somlo G, Harris LN, Gilmore H, Plecha D, Varadan V, Madabhushi A. *JAMA Netw Open.* 2019 Apr 5;2(4):e192561. doi: 10.1001/jamanetworkopen.2019.2561. PMID: 31002322

[Ethylene oxide and risk of lympho-hematopoietic cancer and breast cancer: a systematic literature review and meta-analysis.](#) Marsh GM, Keeton KA, Riordan AS, Best EA, Benson SM. *Int Arch Occup Environ Health.* 2019 May 20. doi: 10.1007/s00420-019-01438-z. [Epub ahead of print] PMID: 31111206

Occupational Exposures, Health, and Mechanisms

[Multisource surveillance for non-fatal work-related agricultural injuries.](#) Kica J, Rosenman KD. J Agromedicine. 2019 May 2;1-10. doi: 10.1080/1059924X.2019.1606746. [Epub ahead of print] PMID: 31044658

[Occupational Lung Disease.](#) Perlman DM, Maier LA. Med Clin North Am. 2019 May;103(3):535-548. doi: 10.1016/j.mcna.2018.12.012. Epub 2019 Mar 7. Review. PMID: 30955520

[Assessment of fine particles released during paper printing and shredding processes.](#)

Shin N, Velmurugan K, Su C, Bauer AK, Tsai CSJ. Environ Sci Process Impacts. 2019 May 3. doi: 10.1039/c9em00015a. [Epub ahead of print] PMID: 31049512

[Exploring the Role of Depression as a Moderator of a Workplace Obesity Intervention for Latino Immigrant Farmworkers.](#) Kemmick Pintor J, Mitchell DC, Schenker MB.

J Immigr Minor Health. 2019 Apr;21(2):383-392. doi: 10.1007/s10903-018-0743-4. PMID: 29737446

[Post-1971 Era Uranium Workers in New Mexico Have Significant Lung Disease Burden.](#) Assad N, Wigh S, Kocher E, Shore X, Myers O, Moreno M, Karr R, Armstrong E, Cook LS, Sood A. Ann Am Thorac Soc. 2019 Apr;16(4):515-518. doi: 10.1513/AnnalsATS.201805-309RL. No abstract available. PMID:30525911

[Impacts of weather, work rate, hydration, and clothing in heat-related illness](#)

[in California farmworkers.](#) Vega-Arroyo AJ, Mitchell DC, Castro JR, Armitage TL, Tancredi DJ, Bennett DH, Schenker MB. Am J Ind Med. 2019 Apr 9. doi: 10.1002/ajim.22973. [Epub ahead of print] PMID: 30964208

[Patterns of progressive massive fibrosis on modern coal miner chest radiographs.](#)

Halldin CN, Blackley DJ, Markle T, Cohen RA, Laney AS. Arch Environ Occup Health. 2019 May 20;1-7. doi: 10.1080/19338244.2019.1593099. [Epub ahead of print] PMID: 31107177

[Among All Miners, Coal Miners Demonstrate a Disproportionately High Prevalence of Obstructive Spirometric Abnormality and Chronic Bronchitis.](#) Sood A, Shore X, Myers O, Assad N, Pollard C,

Cook LS. J Occup Environ Med. 2019 Apr;61(4):328-334. doi: 10.1097/JOM.0000000000001547. PMID: 30688766

[Rates and occupational characteristics of international seafarers with mental illness.](#) Lefkowitz RY, Slade MD, Redlich CA. Occup Med (Lond). 2019 May 16. pii: kqz069. doi: 10.1093/occmed/kqz069. [Epub ahead of print] PMID: 31094424

[Injuries associated with long working hours among employees in the US mining industry: risk factors and adverse outcomes.](#) Friedman LS, AlMBERG KS, Cohen RA. Occup Environ Med. 2019 Jun;76(6):389-395. doi: 10.1136/oemed-2018-105558. Epub 2019 Apr 12. PMID: 30979785

[Increasing Hypersensitivity Pneumonitis-related Mortality in the United States from 1988 to 2016.](#)

Fernández Pérez ER, Sprunger DB, Ratanawatkul P, Maier LA, Huie TJ, Swigris JJ, Solomon JJ, Mohning MP, Keith RC, Brown KK. Am J Respir Crit Care Med. 2019 May 15;199(10):1284-1287. doi: 10.1164/rccm.201807-1258LE. No abstract available. PMID: 30768910

[Reply to: Hypersensitivity Pneumonitis Mortality by Industry and Occupation.](#) Fernández Pérez ER, Sprunger D, Ratanawatkul P, Maier LA, Huie TJ, Swigris JJ, Solomon JJ, Mohning M, Keith RC, Brown KK. Am J Respir Crit Care Med. 2019 May 3. doi: 10.1164/rccm.201904-0876LE. [Epub ahead of print] No abstract available. PMID: 31051089

[Animal production, insecticide use and self-reported symptoms and diagnoses of COPD, including chronic bronchitis, in the Agricultural Health Study.](#) Rinsky JL, Richardson DB, Kreiss K, Nylander-French L, Beane Freeman LE, London SJ, Henneberger PK, Hoppin JA. Environ Int. 2019 Jun;127:764-772. doi: 10.1016/j.envint.2019.02.049. Epub 2019 Apr 25. PMID: 31029031

[Impact of occupational exposure on human microbiota.](#) Lai PS, Christiani DC. *Curr Opin Allergy Clin Immunol.* 2019 Apr;19(2):86-91. doi: 10.1097/ACI.0000000000000502. PMID: 30507717

[Combined Collagen-Induced Arthritis and Organic Dust-Induced Airway Inflammation to Model Inflammatory Lung Disease in Rheumatoid Arthritis.](#) Poole JA, Thiele GM, Janike K, Nelson AJ, Duryee MJ, Rentfro K, England BR, Romberger DJ, Carrington JM, Wang D, Swanson BJ, Klassen LW, Mikuls TR. *J Bone Miner Res.* 2019 Apr 17. doi: 10.1002/jbmr.3745. [Epub ahead of print] PMID: 30995344

[Pollutants in the workplace: Effect on occupational asthma.](#) Kelly KJ, Poole JA. *J Allergy Clin Immunol.* 2019 Jun;143(6):2014-2015. doi: 10.1016/j.jaci.2019.04.013. Epub 2019 Apr 25. No abstract available. PMID: 31029774

[Multisystem afflictions in former National Football League players.](#) Morris TP, McCracken C, Baggish A, Weisskopf M, Zafonte R, Taylor HA, Nadler LM, Speizer FE, Pascual-Leone A. *Am J Ind Med.* 2019 May 27. doi: 10.1002/ajim.22992. [Epub ahead of print] PMID: 31134638

[Mortality Among Professional American-Style Football Players and Professional American Baseball Players.](#) Nguyen VT, Zafonte RD, Chen JT, Kponee-Shovein KZ, Paganoni S, Pascual-Leone A, Speizer FE, Baggish AL, Taylor HA Jr, Nadler LM, Courtney TK, Connor A, Weisskopf MG. *JAMA Netw Open.* 2019 May 3;2(5):e194223. doi: 10.1001/jamanetworkopen.2019.4223. PMID:31125098

[Clustering asthma symptoms and cleaning and disinfecting activities and evaluating their associations among healthcare workers.](#) Su FC, Friesen MC, Humann M, Stefaniak AB, Stanton ML, Liang X, LeBouf RF, Henneberger PK, Virji MA. *Int J Hyg Environ Health.* 2019 Apr 19. pii: S1438-4639(18)31017-4. doi: 10.1016/j.ijheh.2019.04.001. [Epub ahead of print] PMID: 31010790

Interstitial Lung Disease

[Is Progression of Pulmonary Fibrosis Due to Ventilation-Induced Lung Injury?](#) Albert RK, Smith B, Perlman CE, Schwartz DA. *Am J Respir Crit Care Med.* 2019 Apr 25. doi: 10.1164/rccm.201903-0497PP. [Epub ahead of print] PMID: 31022350

[Malondialdehyde-Acetaldehyde Adducts and Antibody Responses in Rheumatoid Arthritis-Interstitial Lung Disease.](#) England BR, Duryee MJ, Roul P, Mahajan TD, Singh N, Poole JA, Ascherman DP, Caplan L, Demoruelle MK, Deane KD, Klassen LW, Thiele GM, Mikuls TR. *Arthritis Rheumatol.* 2019 Apr 1. doi: 10.1002/art.40900. [Epub ahead of print] PMID: 30933423

[Increased Airway Wall Thickness in Interstitial Lung Abnormalities and Idiopathic Pulmonary Fibrosis.](#) Miller ER, Putman RK, Diaz AA, Xu H, San José Estépar R, Araki T, Nishino M, Poli de Frías S, Hida T, Ross J, Coxson H, Dupuis J, O'Connor GT, Silverman EK, Rosas IO, Hatabu H, Washko G, Hunninghake GM. *Ann Am Thorac Soc.* 2019 Apr;16(4):447-454. doi: 10.1513/AnnalsATS.201806-424OC. PMID: 30543456

[Telomere length and genetic variant associations with interstitial lung disease progression and survival.](#) Newton CA, Oldham JM, Ley B, Anand V, Adegunsoye A, Liu G, Batra K, Torrealba J, Kozlitina J, Glazer C, Streck ME, Wolters PJ, Noth I, Garcia CK. *Eur Respir J.* 2019 Apr 11;53(4). pii: 1801641. doi: 10.1183/13993003.01641-2018. Print 2019 Apr. PMID: 30635297

Diabetes

[Evidence of heterogeneity in statin-associated type 2 diabetes mellitus risk: A meta-analysis of randomized controlled trials and observational studies.](#) Engeda JC, Stackhouse A, White M, Rosamond WD, Lhachimi SK, Lund JL, Keyserling TC, Avery CL. *Diabetes Res Clin Pract.* 2019 May;151:96-105. doi: 10.1016/j.diabres.2019.04.005. Epub 2019 Apr 4. PMID: 30954511

[The Incidence of Diabetic Ketoacidosis During "Emerging Adulthood" in the USA and Canada: a Population-Based Study.](#) Gaffney A, Christopher A, Katz A, Chateau D, McDougall C, Bor D, Himmelstein D, Woolhandler S, McCormick D. J Gen Intern Med. 2019 May 7. doi: 10.1007/s11606-019-05006-6. [Epub ahead of print] PMID: 31065950

[Per- and polyfluoroalkyl substances and blood lipid levels in pre-diabetic adults-longitudinal analysis of the diabetes prevention program outcomes study.](#) Lin PD, Cardenas A, Hauser R, Gold DR, Kleinman KP, Hivert MF, Fleisch AF, Calafat AM, Webster TF, Horton ES, Oken E. Environ Int. 2019 Aug;129:343-353. doi: 10.1016/j.envint.2019.05.027. Epub 2019 May 28. PMID: 31150976

Depression and Immunity

[Prenatal Maternal Depression and Neonatal Immune Responses.](#) Hahn J, Gold DR, Coull BA, McCormick MC, Finn PW, Perkins DL, Rich-Edwards JW, Rifas Shiman SL, Oken E, Kuzbansky LD. Psychosom Med. 2019 May;81(4):320-327. doi: 10.1097/PSY.0000000000000686. PMID: 31048634

[Influence of Spirituality on Depression-Induced Inflammation and Executive Functioning in a Community Sample of African Americans.](#) Herren OM, Burris SE, Levy SA, Kirk K, Banks KS, Jones VL, Beard B, Mwendwa DT, Callender CO, Campbell AL. Ethn Dis. 2019 Apr 18;29(2):267-276. doi: 10.18865/ed.29.2.267. eCollection 2019 Spring. PMID: 31057312

Health Disparities

[Rural Residence and Poverty Are Independent Risk Factors for Chronic Obstructive Pulmonary Disease in the United States.](#) Raju S, Keet CA, Paulin LM, Matsui EC, Peng RD, Hansel NN, McCormack MC. Am J Respir Crit Care Med. 2019 Apr 15;199(8):961-969. doi: 10.1164/rccm.201807-1374OC. PMID: 30384774

[Study Design, Protocol and Profile of the Maternal And Developmental Risks from Environmental and Social Stressors \(MADRES\) Pregnancy Cohort: a Prospective Cohort Study in Predominantly Low-Income Hispanic Women in Urban Los Angeles.](#) Bastain TM, Chavez T, Habre R, Girguis MS, Grubbs B, Toledo-Corral C, Amadeus M, Farzan SF, Al-Marayati L, Lerner D, Noya D, Quimby A, Twogood S, Wilson M, Chatzi L, Cousineau M, Berhane K, Eckel SP, Lurmann F, Johnston J, Dunton GF, Gilliland F, Breton C. BMC Pregnancy Childbirth. 2019 May 30;19(1):189. doi: 10.1186/s12884-019-2330-7. PMID: 31146718

[With equal access, African Americans have superior survival compared to Caucasians with Multiple Myeloma: a VA study.](#) Fillmore NR, Yellapragada SV, Ifeora C, Mehta A, Cirstea D, White PS, Rivero G, Zimolzak A, Pyarajan S, Do N, Brophy M Dr, Munshi NC. Blood. 2019 Apr 19. pii: blood.2019000406. doi: 10.1182/blood.2019000406. [Epub ahead of print] No abstract available. PMID: 31003998

[Determinants of vitamin D status among Black and White low-income pregnant and non-pregnant reproductive-aged women from Southeast Louisiana.](#) Burke NL, Harville EW, Wickliffe JK, Shankar A, Lichtveld MY, McCaskill ML. BMC Pregnancy Childbirth. 2019 Apr 2;19(1):111. doi: 10.1186/s12884-019-2246-2. PMID: 30940107

[Exploring latent classes to identify prenatal and early-life sources of racial disparities in allergic disease.](#) Wegienka G, Sitarik A, Levin AM, Zoratti EM, Ownby D, Johnson CC, Havstad S. Ann Allergy Asthma Immunol. 2019 Jun;122(6):650-652.e1. doi: 10.1016/j.anai.2019.03.030. Epub 2019 Apr 4. No abstract available. PMID: 30953785

Cardiovascular Disease

[Subjects with diffuse idiopathic skeletal hyperostosis have an increased burden of coronary artery disease: An evaluation in the COPDGene cohort.](#) Oudkerk SF, Mohamed Hoesein FAA, PThM Mali W, Öner FC, Verlaan JJ, de Jong PA, Kinney GL, Hokanson J, Lynch D, Silverman EK, Budoff MJ, Regan EA. Atherosclerosis. 2019 May 30;287:24-29. doi: 10.1016/j.atherosclerosis.2019.05.030. [Epub ahead of print] PMID: 31181416

Voice Disorders

[Airflow Patterns of Running Speech in Patients With Voice Disorders.](#) Gilman M, Maira C, Hapner ER. J Voice. 2019 May;33(3):277-283. doi: 10.1016/j.jvoice.2017.12.004. Epub 2018 Jul 26. PMID: 30057271

Terrorism and Inhalational Disasters Section Updates



ATS TID section welcomes its new chair (2019-2020), **Dr. Erik R. Svendsen**. Dr. Svendsen is the Director of the Division of Environmental Health Science and Practice at the National Center for Environmental Health, a part of the Centers for Disease Control and Prevention (CDC).



President's message

Hello fellow ATS-TID Section members,

Our Section officers and representatives have been busy since the Annual Meeting in Dallas, working on developing items for the 2020 meeting. Inside this newsletter, you will read about highlights from the 2019 ATS International Conference relevant to our section.

Please feel free to connect with any of the officers regarding questions you may have, new ideas or directions for the TID section, or to volunteer your time to support our section. We need your help to reach our fullest capacity.

Thank you for the opportunity to serve as the Chair of TID Section, I am looking forward to a productive year!

Erik R. Svendsen, PhD

Chair, ATS-TID Section

Current officers of ATS-TID section

Chair: **Erik R. Svendsen, PhD**, Centers for Disease Control and Prevention

Co-Chair: **Rakesh Patel, PhD**, The University of Alabama, Birmingham

Nominating committee:

Chair: **Sven-Eric Jordt, PhD**, Duke University

Members: **Matthew D. McGraw, MD**, University of Rochester

Sky Vanderburg, MD, University of California, San Francisco

EOPH planning committee Rep: **Matthew D. McGraw, MD**, University of Rochester

EOPH program committee Rep: **Shama Ahmad, PhD**, The University of Alabama, Birmingham

Chair appointee: **Rafael de la Hoz, MD, MPH, MSc**, Mount Sinai

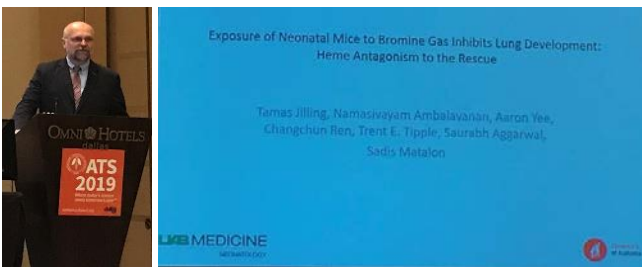
Web Director: **Satya Achanta, DVM, PhD**, Duke University

Congratulations to all new and continuing officers of TID section!

We had a great turn out at the ATS Mini-Symposium on CHEMICAL THREATS AND INJURY: MECHANISMS AND TREATMENT on Sunday, May 19, 2019, 9:15 AM - 11:15 AM. The symposium was chaired by Sven-Eric Jordt, Shama Ahmad, and Carl White.



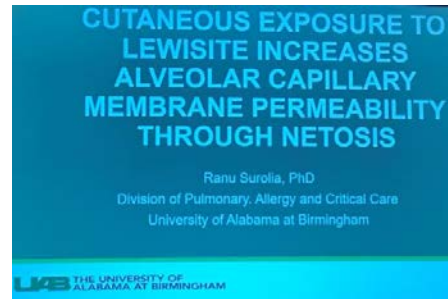
Eight speakers presented their groundbreaking work on understanding the pathophysiology of chemical threat agents and developing advanced medical countermeasures. The audience appreciated the progress in medical countermeasures efforts.



Exposure of Neonatal Mice to Bromine Gas Inhibits Lung Development:
Heme Antagonism to the Rescue

Tamas Jilling, Namasivayam Ambalavanan, Aaron Yee,
Changchun Ren, Trent E. Tipple, Saurabh Aggarwal,
Sadis Malatou

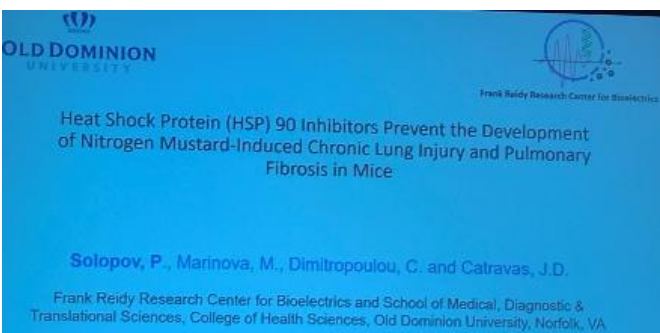
UAB MEDICINE
UNIVERSITY OF ALABAMA AT BIRMINGHAM



CUTANEOUS EXPOSURE TO
LEWISITE INCREASES
ALVEOLAR CAPILLARY
MEMBRANE PERMEABILITY
THROUGH NETOSIS

Ranu Surolia, PhD
Division of Pulmonary, Allergy and Critical Care
University of Alabama at Birmingham

UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM



OLD DOMINION
UNIVERSITY

Frank Reidy Research Center for Bioelectronics

Heat Shock Protein (HSP) 90 Inhibitors Prevent the Development
of Nitrogen Mustard-Induced Chronic Lung Injury and Pulmonary
Fibrosis in Mice

Solopov, P., Mannova, M., Dimitropoulou, C. and Catravas, J.D.

Frank Reidy Research Center for Bioelectronics and School of Medical, Diagnostic &
Translational Sciences, College of Health Sciences, Old Dominion University, Norfolk, VA



Mitochondrial DNA Repair
Ameliorates Inhalation
Lung Injury

Saurabh Aggarwal MD., PhD.
Department of Anesthesiology and Perioperative Medicine

UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM



Neutralization of Extracellular Nucleic Acids Rescues Rats from Chemical-Induced ARDS

Nithya Mariappan, PhD
Division of Molecular and Translational Biomedicine
Department of Anesthesiology and Perioperative Medicine
University of Alabama at Birmingham



University of Colorado
Anschutz Medical Campus
Pulmonary Artery Research Center

ASPR

American Thoracic Society Conference, Kay Bailey Hutchison Convention Center, Dallas, TX 2019

Swine Model of High Dose Sulfur Mustard Inhalation, and Improved Outcome After Rescue with Fibrinolytic Treatment

Ryan Braze
Study Director, BMDI Swine Program
University of Colorado Denver, School of Medicine
Pulmonary Artery Research Center
Nov 10th, 2019



TRPV4 Inhibitor Improves Pulmonary Function and Oxygen Saturation in a Pig Translational Model of Chlorine Gas-Induced Acute Lung Injury

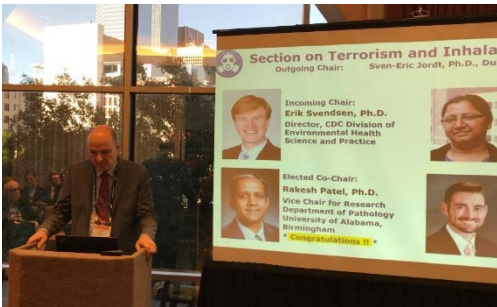
Satya Achanta, DVM, PhD
Assistant Professor, Department of Anesthesiology
Duke University School of Medicine



TID Membership meeting



TID section membership meeting was well attended with over 35 members.



ATS TID section Chair, Dr. Sven-Eric Jordt, Ph.D. (2018-2019) welcomed the membership with the updates and accomplishments over the past year. Dr. Jordt highlighted collaboration with the Organization for the Prohibition of Chemical Weapons (OPCW) on medical countermeasures. Dr. Jordt also revealed the results of elections for the new officers.



Thank you, Dr. Jordt, for your dynamic leadership as Chair of TID section 2018-2019!!!

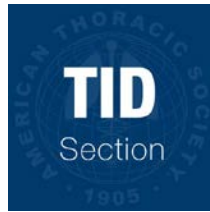
Dr. Erik Svendsen, the new Chair of the TID section, presented Dr. Jordt with a token of appreciation from ATS!



John Balmes, M.D., University of California, San Francisco gave special invited TID seminar on **Where There's Wildfire, There's Smoke - Reflections from the 2018 California Wildfire Season'**



TID section is on [twitter](#)
Follow TID section on [@ATSTIDSection](#)



TID section is soliciting ideas for putting together **podcasts, webinars, and journal clubs**. Please contact Satya Achanta, DVM, PhD (satya.achanta@duke.edu), Web Director of TID section, if you are interested to lead any of these activities. Also, please email your publications, news articles, or presentations pertinent to TID section to include in the future EOPH newsletters.

ATS 2019 EOPH Assembly Awardees

Congratulations to our EOPH Assembly 2019 Awardees!

John Peters Award – Diane Gold, MD, MPH



David Bates Award – Hiroki Tashiro, MD, PhD



Val Vallyathan Award (Junior) – Chris Rider, PhD



Val Vallyathan Award (Senior) – Kent Pinkerton, PhD



Margaret Becklake Award – Ngombe Léon-Kabamba, MD, MPH

Plus, all of our 2019 ATS Abstract Travel Awardees!

Jed Bassein, BS

Caryn Brehm, MD

Terri Burgess, BS

Parker Duffney, PhD

Chinedu Ejike, MD, MPH, FACP, FHM

Sheiphali Gandhi, MD

Thanh Hoang, PhD

Ryan Huff, MSc, BMS

Nancy Lin, MD

Nithya Mariappan, PhD

Anthony Nardone, MS

Boting Ning, MPH

Ross Osgood, PhD

Meghan Rebuli, PhD

Christopher Rider, BSc(Hons), PhD

Alex Romero, BA, BS

Sinjini Sikdar, Ph.D.

Pavel Solopov, PhD, DVM

Hiroki Tashiro, MD, PhD

Sherrie Xie, BS

New York Times published Op-Ed “PM2.5 kills people” by Dr. John Balms



“PM 2.5 kills people”. So begins a recent op-ed piece by Dr. John Balms in the New York Times. Balms’ piece is one of two recent articles in the popular press that expertly highlight the science and public policies surrounding outdoor and indoor air pollution. In the New York Times article, “Don’t Let a Killer Pollutant Loose”, Dr. Balms draws attention to recent changes at the Environmental Protection Agency, and the Clean Air Scientific Advisory Committee specifically, that have the potential to discredit clean air quality standards—standards that are based on decades of peer-reviewed scientific evidence. Dr. Balms was also quoted in the recent New Yorker article “The Hidden Air Pollution in Our Homes”, that explored dangerous emissions from common

domestic activities (such as cooking Thanksgiving dinner!) “Is inhaling particles from diesel engines worse than inhaling particles from fried foods?” (Balms) said. “The research hasn’t been done.” Check out these insightful articles online, and pass them on to friends and colleagues!

Don’t Let a Killer Pollutant Loose, by Dr. John Balms

<https://www.nytimes.com/2019/04/14/opinion/air-pollution-trump.html>

The Hidden Air Pollution in Our Homes

<https://www.newyorker.com/magazine/2019/04/08/the-hidden-air-pollution-in-our-homes>

Interesting Clinical Cases?

The web committee is currently calling for “Quick Hit” clinical cases, which will be posted on the website and highlighted in this newsletter. This is an excellent peer-reviewed writing opportunity for trainees. Submit clinical cases to

tara.nordgren@medsch.ucr.edu.