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Assembly on Environmental, Occupational, and Population Health Newsletter

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EOPH

Web Editorial Committee

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TID Section Web Editorial Committee

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Dear EOPH members,

In this April issue of the EOPH newsletter, we share some of our members' recent "epub ahead of print" articles as well as other recent accomplishments by members in our assembly and fields.

The ATS 2019 International Conference is only one month away—at the end of the newsletter we have included several events that you won't want to miss. We look forward to seeing everyone in Dallas!

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.

Air Pollution and Environmental Exposures

[Impact of Long-Term Exposures to Ambient PM2.5 and Ozone on Acute Respiratory Distress Syndrome \(ARDS\) Risk for Older Adults in the United States.](#) Rhee J, Dominici F, Zanobetti A, Schwartz J, Wang Y, Di Q, Balmes J, Christiani DC. Chest. 2019 Mar 26. pii: S0012-3692(19)30711-1. doi: 10.1016/j.chest.2019.03.017. PMID:30926395

[Air Pollution Contributes to Asthma Deaths.](#) Beamer PI. Am J Respir Crit Care Med. 2019 Mar 26. doi: 10.1164/rccm.201903-0579ED. PMID:30912954

[Prevalence of Arthritis and Rheumatoid Arthritis in Coal Mining Counties of the U.S.](#) Schmajuk G, Trupin L, Yelin E, Blanc PD. Arthritis Care Res (Hoboken). 2019 Mar 15. doi: 10.1002/acr.23874. PMID:30875457

[Air pollution in the Asia-Pacific Region: A Joint Asian Pacific Society of Respiriology/American Thoracic Society perspective \(Republication\).](#) North CM, Rice MB, Ferkol T, Gozal D, Hui C, Jung SH, Kuribayashi K, McCormack MC, Mishima M, Morimoto Y, Song Y, Wilson KC, Kim WJ, Fong KM. Respiriology. 2019 Mar 28. doi: 10.1111/resp.13531. PMID:30920029

[Reported environmental exposures are inversely associated with obtaining a genetic diagnosis in the Undiagnosed Diseases Network.](#) Silverman EK, Allard P, Loscalzo J, Mulvihill JJ, Korrick SA; Undiagnosed Diseases Network. Am J Med Genet A. 2019 Mar 23. doi: 10.1002/ajmg.a.61132. [Epub ahead of print] PMID:30903737

[Synthesis of Harvard EPA Center Studies on Traffic-Related Particulate Pollution and Cardiovascular Outcomes in the Greater Boston Area.](#) Jhun I, Kim J, Cho B, Gold DR, Schwartz J, Coull BA, Zanobetti A, Rice MB, Mittleman MA, Garshick E, Vokonas P, Bind MA, Wilker EH, Dominici F, Suh H, Koutrakis P. J Air Waste Manag Assoc. 2019 Mar 19. doi: 10.1080/10962247.2019.1596994. PMID:30888266

[Exposure to Greater Air Pollution when Traveling Abroad is Associated with Decreased Lung Function.](#) Vilcassim MJR, Thurston GD, Chen LC, Lim CC, Gordon T. Am J Respir Crit Care Med. 2019 Mar 13. doi: 10.1164/rccm.201811-2235LE. PMID:30864816

[Lifetime exposure to traffic-related air pollution and symptoms of depression and anxiety at age 12 years.](#) Yolton K, Khoury JC, Burkle J, LeMasters G, Cecil K, Ryan P. Environ Res. 2019 Mar 2;173:199-206. doi: 10.1016/j.envres.2019.03.005. PMID:30925441

[Asbestos in commercial indian talc.](#) Fitzgerald S, Harty E, Joshi TK, Frank AL. Am J Ind Med. 2019 Mar 27. doi: 10.1002/ajim.22969. PMID:30916419

[Particle Depletion Does Not Remediate Acute Effects of Traffic-Related Air Pollution and Allergen: A Randomized, Double-Blinded Crossover Study.](#) Wooding DJ, Hyung Ryu M, 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. PMID:30974969

Asthma and Allergy

[Age-Dependent Pulmonary Reactivity to House Dust Mite Allergen: A Model of Adult-Onset Asthma?](#) Mack S, Shin J, Ahn Y, Castañeda AR, Peake J, Fulgar C, Zhang J, Cho Y, Pinkerton KE.

Am J Physiol Lung Cell Mol Physiol. 2019 Mar 6. doi: 10.1152/ajplung.00468.2018. PMID:30840481

[Omega-3 and Omega-6 Intake Modifies Asthma Severity and Response to Indoor Air Pollution in Children.](#) Brigham EP, Woo H, McCormack M, Rice J, Koehler K, Vulcain T, Wu T, Koch A, Sharma S, Kolahtooz F, Bose S, Hanson C, Romero K, Diette G, Hansel NN.

Am J Respir Crit Care Med. 2019 Mar 29. doi: 10.1164/rccm.201808-1474OC. PMID:30922077

[Association Between Fungal Spore Exposure in Inner-City Schools and Asthma Morbidity.](#) Baxi SN, Sheehan WJ, Sordillo JE, Muilenberg ML, Rogers CA, Gaffin JM, Permaul P, Lai PS, Louisias M, Petty CR, Fu C, Gold DR, Phipatanakul W.

Ann Allergy Asthma Immunol. 2019 Mar 20. pii: S1081-1206(19)30190-5. doi: 10.1016/j.anai.2019.03.011. PMID:30904580

[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 Mar 28. pii: 1900102. doi: 10.1183/13993003.00102-2019. PMID:30923181

[Identification of two early life eczema and non-eczema phenotypes with high risk for asthma development.](#) Johansson E, Biagini Myers JM, Martin LJ, He H, Ryan P, LeMasters GK, Bernstein DI, Lockey J, Khurana Hershey GK.

Clin Exp Allergy. 2019 Mar 4. doi: 10.1111/cea.13379. PMID:30830718

Chronic Obstructive Pulmonary Disease (COPD)

[Omics and the Search for Blood Biomarkers in COPD: Insights from COPDGene.](#) Regan EA, Hersh CP, Castaldi PJ, DeMeo DL, Silverman EK, Crapo JD, Bowler RP.

Am J Respir Cell Mol Biol. 2019 Mar 15. doi: 10.1165/rcmb.2018-0245PS. PMID:30874442

[Genetic Advances in COPD: Insights from COPDGene.](#) Ragland MF, Benway CJ, Lutz SM, Bowler RP, Hecker J, Hokanson JE, Crapo JD, Castaldi PJ, DeMeo DL, Hersh CP, Hobbs BD, Lange C, Beaty TH, Cho MH, Silverman EK.

Am J Respir Crit Care Med. 2019 Mar 25. doi: 10.1164/rccm.201808-1455SO. PMID:30908940

Smoking and Tobacco Use

[Harm perceptions and tobacco use initiation among youth in Wave 1 and 2 of the Population Assessment of Tobacco and Health \(PATH\) Study.](#) Strong DR, Leas E, Elton-Marshall T, Wackowski OA, Travers M, Bansal-Travers M, Hyland A, White M, Noble M, Cummings KM, Taylor K, Kaufman AR, Choi K, Pierce JP.

Prev Med. 2019 Mar 13;123:185-191. doi: 10.1016/j.ypmed.2019.03.017. PMID:30878572

Cellular Mechanisms

[Tollip Inhibits ST2 Signaling in Airway Epithelial Cells Exposed to Type 2 Cytokines and Rhinovirus.](#)

Dakhama A, Al Mubarak R, Pavelka N, Voelker D, Seibold M, Ledford JG, Kraft M, Li L, Chu HW. J Innate Immun. 2019 Mar 29;1-13. doi: 10.1159/000497072. PMID:30928973

Research Methods, Therapeutics, and Clinical Strategies

[Nonoperative Management Is Cost-Effective in Patients With Perforated Appendicitis With Longer Days of Symptoms.](#) Isani MA, Jackson J, Barry WE, Mallicote MU, Rosenberg D, Stein JE, Jensen AR, Kim ES.

J Surg Res. 2019 Mar 22;240:70-79. doi: 10.1016/j.jss.2019.02.033. PMID:30909067

[Outcomes from an inpatient beta-lactam allergy guideline across a large US health system.](#)

Blumenthal KG, Li Y, Hsu JT, Wolfson AR, Berkowitz DN, Carballo VA, Schwartz JM, Marquis KA, Elshaboury R, Gandhi RG, Lambl BB, Freeley MM, Gruszecki A, Wickner PG, Shenoy ES. *Infect Control Hosp Epidemiol.* 2019 Mar 27;1-8. doi: 10.1017/ice.2019.50. PMID:30915929

[A community-engaged approach to investigate cardiovascular-associated inflammation among American Indian women: A research protocol.](#)

Brooks JL, Berry DC, Currin EG, Ledford A, Knafel GJ, Fredrickson BL, Beeber LS; HAPPI Community Partnership Committee, Peden DB, Corbie-Smith GM.

Res Nurs Health. 2019 Mar 28. doi: 10.1002/nur.21944. PMID:30924164

[Decision models for distinguishing between clinically insignificant and significant tumors in prostate cancer biopsies: an application of Bayes' Theorem to reduce costs and improve outcomes.](#)

Swersey AJ, Colberg J, Evans R, Kattan MW, Ledolter J, Parker R.

Health Care Manag Sci. 2019 Mar 18. doi: 10.1007/s10729-019-09480-6. PMID:30880374

Genetics and Epigenetics

[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 Mar 29. doi: 10.1002/1878-0261.12482. PMID:30924596

[Epigenome-wide association study reveals methylation pathways associated with childhood allergic sensitization.](#)

Peng C, Van Meel ER, Cardenas A, Rifas-Shiman SL, Sonawane AR, Glass KR, Gold DR, Platts-Mills TA, Lin X, Oken E, Hivert MF, Baccarelli AA, De Jong NW, Felix JF, Jaddoe VW, Duijts L, Litonjua AA, DeMeo DL.

Epigenetics. 2019 Mar 15;1-22. doi: 10.1080/15592294.2019.1590085. PMID:30876376

Lung Transplantation

[Gene signatures common to allograft rejection are associated with lymphocytic bronchitis.](#)

Greenland JR, Wang P, Brotman JJ, Ahuja R, Chong TA, Kleinhenz ME, Leard LE, Golden JA, Hays SR, Kukreja J, Singer JP, Rajalingam R, Jones K, Laszik ZG, Trivedi NN, Greenland NY, Blanc PD.

Clin Transplant. 2019 Mar 8:e13515. doi: 10.1111/ctr.13515. PMID:30849195

Occupational Exposures, Health, and Mechanisms

[Wildland firefighter smoke exposure and risk of lung cancer and cardiovascular disease mortality.](#)

Navarro KM, Kleinman MT, Mackay CE, Reinhardt TE, Balmes JR, Broyles GA, Ottmar RD, Naher LP, Domitrovich JW.

Environ Res. 2019 Mar 26;173:462-468. doi: 10.1016/j.envres.2019.03.060. PMID:30981117

[Toenail concentrations of trace elements and occupational history in pancreatic cancer.](#)

Camargo J, Pumarega JA, Alguacil J, Sanz-Gallén P, Gasull M, Delclos GL, Amaral AFS, Porta M.

Environ Int. 2019 Mar 28;127:216-225. doi: 10.1016/j.envint.2019.03.037. PMID:30928845

Terrorism and Inhalational Disasters Section Updates



NEWS FLASH



TID section is on **twitter**

Follow TID section on **@ATSTIDSection**



Cast your vote by May 1st to elect the 2019–20 Section Co-Chair (this person will transition to section Chair in 2020-2021) and 2019–20 Nominating Committee Members (2 members will be elected).

Here is the link to the ballots: <https://t.co/GRTdPddp4H>

Attend TID events at #ATS2019

Save the dates:

Mini-Symposium

A16 - CHEMICAL THREATS AND INJURY: MECHANISMS AND TREATMENT

Sunday, May 19, 2019, 9:15 AM - 11:15 AM

Chairs: Sven-Eric Jordt, Shama Ahmad, Carl White

Location: Dallas Ballroom G (Level 3), Omni Dallas Downtown

TID Membership meeting

Tuesday, May 21, 2019, 4:30 PM – 6:30 PM

Location: Hyatt Regency Dallas Windsor (Atrium Level)

Invited Special TID Seminar:

John Balmes, M.D., University of California, San Francisco :

Where There's Wildfire, There's Smoke

- Reflections from the 2018 California Wildfire Season

TID section is soliciting ideas for putting together **podcasts, webinars, and journal clubs**. Please contact Satya Achanta (satya.achanta@duke.edu) if you are interested to lead any of these activities.

Heidi M. Mansour, Ph.D., R.Ph., Associate Professor of Pharmaceutical Sciences, The University of Arizona, College of Pharmacy, co-edited a book on Inhalation Aerosols that has just come out. Many of the author contributors are active ATS members.

[Inhalation Aerosols: Physical and Biological Basis for Therapy](#). Hickey, A. J. and Mansour, H.M. (Editors), Third Edition, Lung Biology in Health and Diseases Book Series, Founding Book Series Executive Editor Dr. Claude Lenfant, CRC Press/Taylor & Francis/Informa Healthcare, London, United Kingdom. (2019) 417 pages. ISBN 9781138064799

Dr. Mansour wants to share a promotional code: 20% Discount Available - enter the code SCI19 at checkout (please flyer here: [Inhalation Aerosols.pdf](#))

To include your publications, news articles, or presentations pertinent to TID section in the future EOPH newsletters, please email your content to Satya Achanta, DVM, PhD (satya.achanta@duke.edu), Web Director of TID section.

Kentucky B Reader Course Presented by CDC NIOSH and the Central Appalachian Regional Education and Research Center to be Held in June 2019

Attention Kentucky #Pulmonologists:

NIOSH and the Central Appalachian Regional ERC are providing a B Reader course in June 2019 with the hopes of increasing the number of pulmonologists who are certified B Readers in the state.

Go to:

<https://go.usa.gov/xmcQy>

ATS 2019: ATS Fellows to Faculty Workshop

The [ATS Fellows to Faculty Boot Camp](#) has officially opened for registration. The Fellows to Faculty Boot Camp is scheduled for Friday May 17 and Saturday May 18, 2019. Please share the information below with your colleagues to help get the word out.

New Program – Fellows to Faculty Boot Camp

The 2019 Fellow to Faculty Boot Camp program targets both clinical Pulmonary and Critical Care Medicine (PCCM) fellows and post-doctoral fellows who are within a year from transitioning to their terminal faculty position. The Fellow to Faculty Boot Camp program for post-docs and PCCM fellows consists of a two-day course covering specific knowledge and skills for the difficult and disruptive transition from fellowship and post-doctoral training to unsupervised practice as unsupervised clinical and/or research faculty. The program is sponsored by the Members in Transition and Training (MITT) Committee and co-chaired by Drs. Sushma Cribbs (skomaku@emory.edu) and Megan Ballinger (megan.ballinger@osumc.edu). To learn more about this program or register for this program please click on link: <http://conference.thoracic.org/program/early-career-professionals/fellow-to-faculty.php>

ATS 2019: Science and Innovation Center Reception for PhDs & Other Basic Science Researchers

The ATS Science and Innovation Center (SIC) working group and the PhD working group, would like to invite PhDs and other Basic Science Researchers to a special reception event in the SIC. The reception will provide an intimate setting for networking while also allowing guests to mingle. Cocktails will be provided. Register now.

For more information, please contact Lauren Krampen at lkrampen@thoracic.org.

This event is FREE to conference registrants, this event is first come, first serve. Registration does not guarantee admittance. Register [HERE](#).

Sunday, May 19

3 - 5 p.m.

Science and Innovation Center

Kay Bailey Hutchison Convention Center Dallas

Hall B (Level 2)

A complete listing of the events being held at the ATS 2019 Science and Innovation Center is available [HERE](#).

ATS 2019: Wildfire Workshop Scheduled for the 2019 ATS International Conference in Dallas



The frequency and severity of wildfires are increasing in North America and around the world. What are the pulmonary effects of wildfires on individuals, communities, and heavily exposed occupational groups? How should clinicians and the public health community respond to best protect respiratory health?

Join us for a groundbreaking workshop on the respiratory health effects of wildfires at the 2019 ATS International Conference! A diverse and transdisciplinary group of professionals representing key stakeholders will explore the current state of wildfire health science. We will hear the wildland firefighter perspective, with a focus on fire exposure assessment and worker health effects. We will learn about the specific impact of fire fuels (grasslands, forests, agricultural and prescribed burning) and the effect of

climate change on fire risk. We will explore the cardiopulmonary responses to wildfires and learn about surveillance modeling, risk assessment, and early warning strategies for individuals and communities. The workshop will end with a panel of regional policy makers discussing how to translate these findings into effective public policy to improve individual and public health.

Looking forward to collaborating with you in Dallas!

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.