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Assembly on Environmental, Occupational, and Population Health Newsletter

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EOPH

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Dear EOPH members,

In this August issue of the EOPH newsletter, we include some of our members' recent "epub ahead of print" articles. Do you have a recent publication and want to be sure it makes it in the monthly EOPH Newsletter? Please send the citation or link to tara.nordgren@medsch.ucr.edu.

Would you like to become more engaged with our social media accounts, but don't know where to start? Over the next several newsletters we will be providing tips on how to do just that. Check out our Twitter Tips section in this newsletter to learn how to set up your Twitter account and get started.

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.

Air Pollution and Environmental Exposures

[A land use regression model of nitrogen dioxide and fine particulate matter in a complex urban core in Lanzhou, China.](#)

Jin L, Berman JD, Warren JL, Levy JI, **Thurston G**, Zhang Y, Xu X, Wang S, Zhang Y, Bell ML. Environ Res. 2019 Jul 22;177:108597. doi: 10.1016/j.envres.2019.108597. [Epub ahead of print] PMID: 31401375

[Mapping urban air quality using mobile sampling with low-cost sensors and machine learning in Seoul, South Korea.](#)

Lim CC, Kim H, Vilcassim MJR, Thurston GD, Gordon T, Chen LC, Lee K, Heimbinder M, Kim SY. Environ Int. 2019 Jul 27;131:105022. doi: 10.1016/j.envint.2019.105022. [Epub ahead of print] PMID: 31362154

[PM2.5 air pollution and cause-specific cardiovascular disease mortality.](#)

Hayes RB, Lim C, Zhang Y, Cromar K, Shao Y, Reynolds HR, Silverman DT, Jones RR, Park Y, Jerrett M, Ahn J, Thurston GD. Int J Epidemiol. 2019 Jul 10. pii: dyz114. doi: 10.1093/ije/dyz114. [Epub ahead of print] PMID: 31289812

COPD

[Subtyping COPD using visual and quantitative CT features.](#)

Park J, Hobbs BD, Crapo JD, Make BJ, Regan EA, Humphries S, Carey VJ, Lynch DA, Silverman EK; COPDGene Investigators. Chest. 2019 Jul 5. pii: S0012-3692(19)31255-3. doi: 10.1016/j.chest.2019.06.015. [Epub ahead of print] PMID: 31283919

[Subtyping COPD using visual and quantitative CT features.](#)

Park J, Hobbs BD, Crapo JD, Make BJ, Regan EA, Humphries S, Carey VJ, Lynch DA, Silverman EK; COPDGene Investigators. Chest. 2019 Jul 5. pii: S0012-3692(19)31255-3. doi: 10.1016/j.chest.2019.06.015. [Epub ahead of print] PMID: 31283919

Cellular Mechanisms

[Nrf2-regulated miR-380-3p blocks the translation of Sp3 protein and its mediation of paraquat-induced toxicity in mouse neuroblastoma N2a cells.](#)

Cai Z, Zheng F, Ding Y, Zhan Y, Gong R, Li J, Aschner M, Zhang Q, Wu S, Li H. Toxicol Sci. 2019 Jul 31. pii: kfz162. doi: 10.1093/toxsci/kfz162. [Epub ahead of print] PMID: 31368498

Occupational Exposures

[Reply to: Occupational Burden in Chronic Respiratory Disease: Call for Recognition, Training and Data Capture.](#)

Blanc PD, Redlich CA. Am J Respir Crit Care Med. 2019 Jul 25. doi: 10.1164/rccm.201907-1379LE. [Epub ahead of print] No abstract available. PMID: 31343269

[Increased pulmonary artery diameter is associated with reduced FEV₁ in former World Trade Center workers.](#)

de la Hoz RE, Jeon Y, Reeves AP, San José Estépar R, Liu X, Doucette JT, Celedón JC, Nolan A. Clin Respir J. 2019 Jul 25. doi: 10.1111/crj.13067. [Epub ahead of print]
PMID: 31347281

Asthma and Allergy

[Transcriptome profiling reveals Th2 bias and identifies endogenous itch mediators in poison ivy contact dermatitis.](#)

Liu B, Tai Y, Liu B, Caceres AI, Yin C, Jordt SE. JCI Insight. 2019 Jun 11;5. pii: 124497. doi: 10.1172/jci.insight.124497.
PMID:31184997

Research Methods, Therapeutics, and Clinical Strategies

[Autologous Bone Cranioplasty: A Retrospective Comparative Analysis of Frozen and Subcutaneous Bone Flap Storage Methods.](#)

Rosinski CL, Chaker AN, Zakrzewski J, Geever B, Patel S, Chiu R, Rosenberg D, Parola R, Shah K, Behbahani M, Mehta AI. World Neurosurg. 2019 Jul 25. pii: S1878-8750(19)32045-5. doi: 10.1016/j.wneu.2019.07.139. [Epub ahead of print]
PMID: 31351936

[Rapid MALDI-TOF molecular imaging: Instrument enhancements and their practical consequences.](#)

Vestal M, Li L, Dobrinskikh E, Shi Y, Wang B, Shi X, Li S, Vestal C, Parker K. J Mass Spectrom. 2019 Jul 17. doi: 10.1002/jms.4423. [Epub ahead of print]
PMID: 31314129

[Optimal route planning for image-guided EBUS bronchoscopy.](#)

Zang X, Gibbs JD, Cheirsilp R, Byrnes PD, Toth J, Bascom R, Higgins WE. Comput Biol Med. 2019 Jul 26;112:103361. doi: 10.1016/j.combiomed.2019.103361. [Epub ahead of print]
PMID:31362107

[The Effect of Reverse Causality and Selective Attrition on the Relationship Between Body Mass Index and Mortality in Postmenopausal Women.](#)

Banack HR, Bea JW, Kaufman JS, Stokes A, Kroenke CH, Stefanick ML, Beresford SA, Bird CE, Garcia L, Wallace R, Wild RA, Caan B, Wactawski-Wende J. Am J Epidemiol. 2019 Jul 5. pii: kwz160. doi: 10.1093/aje/kwz160. [Epub ahead of print]
PMID: 31274146

[Unintentional error in formula preparation and its simulated impact on infant weight and adiposity.](#)

Altazan AD, Gilmore LA, Guo J, Rosenberg DM, Toupou D, Gowins A, Burton JH, Beyl RA, Chow CC, Hall KD, Redman LM. Pediatr Obes. 2019 Jul 26:e12564. doi: 10.1111/ijpo.12564. [Epub ahead of print]
PMID: 31347776

Genetics

[A Genome-wide Functional Signature Ontology Map and Applications to Natural Product Mechanism of Action Discovery.](#)

McMillan EA, Kwon G, Clemenceau JR, Fisher KW, Vaden RM, Shaikh AF, Neilsen BK, Kelly D, Potts MB, Sung YJ, Mendiratta S, Hight SK, Lee Y, MacMillan JB, Lewis RE, Kim HS, White MA. Cell Chem Biol. 2019 Jul 31. pii: S2451-9456(19)30239-9. doi: 10.1016/j.chembiol.2019.07.008. [Epub ahead of print]
PMID: 31378711

[Overlap of Genetic Risk Between Interstitial Lung Abnormalities and Idiopathic Pulmonary Fibrosis.](#)

Hobbs BD, Putman RK, Araki T, Nishino M, Gudmundsson G, Gudnason V, Eiriksdottir G, Zilhao

Nogueira NR, Dupuis J, Xu H, O'Connor GT, Manichaikul A, Nguyen J, Podolanczuk AJ, Madahar P, Rotter JI, Lederer DJ, Barr RG, Rich SS, Ampleford EJ, Ortega VE, Peters SP, O'Neal WK, Newell JD Jr, Bleecker ER, Meyers DA, Allen RJ, Oldham JM, Ma SF, Noth I, Jenkins RG, Maher TM, Hubbard RB, Wain LV, Fingerlin TE, Schwartz DA, Washko GR, Rosas IO, Silverman EK, Hatabu H, Cho MH, Hunninghake GM; COPDGene Investigators, ECLIPSE Investigators, SPIROMICS Research Group, and UK ILD Consortium.

Am J Respir Crit Care Med. 2019 Jul 24. doi: 10.1164/rccm.201903-0511OC. [Epub ahead of print]

PMID: 31339356

[Mitochondrial clearance and maturation of autophagosomes are compromised in LRRK2 G2019S familial Parkinson's disease patient fibroblasts.](#)

Korecka JA, Thomas R, Christensen DP, Hinrich AJ, Ferrari EJ, Levy SA, Hastings ML, Hallett PJ, Isacson O.

Hum Mol Genet. 2019 Jul 1. pii: ddz126. doi: 10.1093/hmg/ddz126. [Epub ahead of print]

PMID:31261377

Lung Mechanics and Airways Disease

[Mechanics of pulmonary airways: Linking structure to function through constitutive modeling, biochemistry, and histology.](#)

Eskandari M, Nordgren TM, O'Connell GD.

Acta Biomater. 2019 Jul 19. pii: S1742-7061(19)30500-8. doi: 10.1016/j.actbio.2019.07.020. [Epub ahead of print]

PMID: 31330329

[Radiographic Pulmonary Vessel Volume, Lung Function, and Airways Disease in the Framingham Heart Study.](#)

Synn AJ, Li W, San José Estépar R, Zhang C, Washko GR, O'Connor GT, Araki T, Hatabu H, Bankier AA, Mittleman MA, Rice MB.

Eur Respir J. 2019 Jul 4. pii: 1900408. doi: 10.1183/13993003.00408-2019. [Epub ahead of print]

PMID: 31248956

Mesothelioma

[Mesothelioma of the tunica vaginalis testis.](#)

Butnor KJ, Pavlisko EN, Sporn TA, Roggli VL.

Hum Pathol. 2019 Jul 31. pii: S0046-8177(19)30133-9. doi: 10.1016/j.humpath.2019.07.009. [Epub ahead of print]

PMID: 31376434

Influenza

[Outcomes of immunocompromised adults hospitalized with laboratory-confirmed influenza in the United States, 2011-2015.](#)

Collins JP, Campbell AP, Openo K, Farley MM, Cummings CN, Hill M, Schaffner W, Lindegren ML, Thomas A, Billing L, Bennett N, Spina N, Bargsten M, Lynfield R, Eckel S, Ryan P, Yousey-Hindes K, Herlihy R, Kirley PD, Garg S, Anderson EJ.

Clin Infect Dis. 2019 Jul 11. pii: ciz638. doi: 10.1093/cid/ciz638. [Epub ahead of print]

PMID: 31298691

Health Insurance

[The Effects on Hospital Utilization of the 1966 and 2014 Health Insurance Coverage Expansions in the United States.](#)

Gaffney A, McCormick D, Bor DH, Goldman A, Woolhandler S, Himmelstein DU.

Ann Intern Med. 2019 Jul 23. doi: 10.7326/M18-2806. [Epub ahead of print]

PMID: 31330539

Fibrosis

[Progression of probable UIP and UIP on HRCT.](#)

Salvatore M, Singh A, Yip R, Fevrier E, Henschke CI, Yankelevitz D, Padilla M.
Clin Imaging. 2019 Jul 12;58:140-144. doi: 10.1016/j.clinimag.2019.07.003. [Epub ahead of print]
PMID: 31326632

[Age-dependent dysregulation of redox genes may contribute to fibrotic pulmonary disease susceptibility.](#)

Elko EA, Mahoney JM, Vacek P, van der Vliet A, Anathy V, van der Velden JLJL, Janssen-Heininger YMW, Seward DJ.
Free Radic Biol Med. 2019 Jul 14;141:438-446. doi: 10.1016/j.freeradbiomed.2019.07.011. [Epub ahead of print]
PMID: 31315063

Cigarettes, E-cigs, and Cannabis Smoke Exposure

[Danger in the vapor? ECMO for adolescents with status asthmaticus after vaping.](#)

Bradford LE, Rebuli ME, Ring BJ, Jaspers I, Clement KC, Loughlin CE.
J Asthma. 2019 Jul 27:1-5. doi: 10.1080/02770903.2019.1643361. [Epub ahead of print]
PMID: 31352844

[Flavorant-Solvent Reaction Products and Menthol in JUUL E-Cigarettes and Aerosol.](#)

Erythropel HC, Davis LM, de Winter TM, Jordt SE, Anastas PT, O'Malley SS, Krishnan-Sarin S, Zimmerman JB.
Am J Prev Med. 2019 Jul 26. pii: S0749-3797(19)30187-4. doi: 10.1016/j.amepre.2019.04.004. [Epub ahead of print] No abstract available.
PMID: 31358341

[Pulmonary effects of inhaled cannabis smoke.](#)

Tashkin DP, Roth MD.
Am J Drug Alcohol Abuse. 2019 Jul 12:1-14. doi: 10.1080/00952990.2019.1627366. [Epub ahead of print]
PMID: 31298945

Diabetes

[Comparison of Major Adverse Cardiac Events Between Instantaneous Wave-Free Ratio and Fractional Flow Reserve-Guided Strategy in Patients With or Without Type 2 Diabetes: A Secondary Analysis of a Randomized Clinical Trial.](#)

DEFINE-FLAIR Trial Investigators, Lee JM, Choi KH, Koo BK, Dehbi HM, Doh JH, Nam CW, Shin ES, Cook CM, Al-Lamee R, Petraco R, Sen S, Malik IS, Nijjer SS, Mejía-Rentería H, Alegria-Barrero E, Alghamdi A, Altman J, Baptista SB, Bhindi R, Bojara W, Brugaletta S, Silva PC, Di Mario C, Erglis A, Gerber RT, Going O, Härle T, Hellig F, Indolfi C, Janssens L, Jeremias A, Kharbanda RK, Khashaba A, Kikuta Y, Krackhardt F, Laine M, Lehman SJ, Matsuo H, Meuwissen M, Niccoli G, Piek JJ, Ribichini F, Samady H, Sapontis J, Seto AH, Sezer M, Sharp ASP, Singh J, Takashima H, Talwar S, Tanaka N, Tang K, Van Belle E, van Royen N, Vinhas H, Vrints CJ, Walters D, Yokoi H, Samuels B, Buller C, Patel MR, Serruys P, Escaned J, Davies JE.
JAMA Cardiol. 2019 Jul 17. doi: 10.1001/jamacardio.2019.2298. [Epub ahead of print]
PMID: 31314045

[Associations of Perfluoroalkyl and Polyfluoroalkyl Substances With Incident Diabetes and Microvascular Disease.](#)

Cardenas A, Hivert MF, Gold DR, Hauser R, Kleinman KP, Lin PD, Fleisch AF, Calafat AM, Ye X, Webster TF, Horton ES, Oken E.
Diabetes Care. 2019 Jul 11. pii: dc182254. doi: 10.2337/dc18-2254. [Epub ahead of print]
PMID: 31296647

Terrorism and Inhalational Disasters Section Updates



ATS is calling for [abstracts](#) for 2020 ATS international conference. Please choose EOPH as the primary assembly during the abstract submission so that the abstract will be appropriately reviewed and grouped in a thematic session.

The [Best of ATS Video Lecture Series \(BAVLS\)](#) is soliciting educational videos. The deadline for submission is November 15th, 2019.

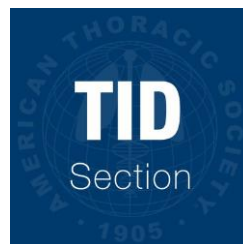
[BARDA Industry Day 2019](#) will feature two days of exciting speakers, breakout sessions, and valuable networking opportunities on October 15-16th 2019. The audience will learn about U.S. Government medical countermeasure priorities, interact with BARDA and ASPR staff, and network with public and private sector colleagues working in medical countermeasures.

Dr. Sven-Eric Jordt, PhD, Associate Professor of Anesthesiology, Pharmacology and Cancer Biology, Duke University School of Medicine, Durham, NC has been in news several times in the last couple of months. [Dr. Jordt Quoted in Wired About the Health Effects of Vaping on the Vascular System](#). [Dr. Jordt Featured in Gizmodo About the Rise of Lung Disease Linked to Vaping](#). [A Joint Study Between Dr. Jordt's Lab and Yale University Raises Concerns About Juul Products](#).

The questionable use of tear gas in controlling ongoing protests in Hong Kong lead to worldwide criticism (<https://www.nytimes.com/interactive/2019/08/18/world/asia/hong-kong-tear-gas.html>). Review of several video footages from Hong Kong reveals that law enforcement officers ignored the guidelines for the use of tear gas agents. Dr. Jordt offered his expert opinion on the use of tear gas in Hong Kong. [Dr. Jordt Weighs in on the Use of Tear Gas During Protests in Hong Kong](#).



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.

Twitter Tips!

Would you like to become more engaged with our social media accounts, but don't know where to start? Over the next several newsletters we will be providing tips on how to do just that. This month, we are providing tips on how to sign up for a Twitter Account. Next month, we will provide additional

information on how to optimize your Twitter profile and tweet. We look forward to engaging with you on Twitter soon!

How to Sign Up for a Twitter Account

- 1) Use your web browser to navigate to the [Twitter](#) website.
- 2) Click the large “Sign Up” button.
- 3) Type your desired username and basic information in the appropriate fields (name, email address, and password).
- 4) Consider two additional options: Keep Me Signed-In on This Computer and Tailor Twitter Based on My Recent Website Visits.
- 5) Click the large “Create My Account” button after agreeing to Twitter’s terms of service.
- 6) Type the CAPTCHA code in the field, if you’re prompted to do so.
- 7) Follow the onscreen tutorial to find people you know, i.e.: @ATS_EOPH where you will find the latest tweets in environmental or occupational factors in lung disease from ATS EOPH, the Official ATS Environmental, Occupational and Population Health Assembly account.
- 8) To confirm your email address, log in to the email account you used to sign up for your Twitter account.
- 9) Open the email and click the blue “Confirm Your Account Now” button or click the link in the email.

Congratulations! You are now on Twitter! Feel free to explore and check out next month’s EOPH Newsletter to learn more about how to optimize your Twitter profile and tweet.

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.