

THE ASSEMBLY ON

Environmental, Occupational, and Population Health

NEWSLETTER



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Dear EOPH Members,

We hope everyone is staying safe and healthy as we continue to navigate and respond to the COVID-19 pandemic.

ATS has rescheduled the 2020 international conference that will be held virtually **August 5-10th**.

We have also included some resources to help everyone stay informed as to the current status of the pandemic.

Also included in this July 2020 newsletter are some of our members' recent and "epub ahead of print" articles from the months of May 2020 to July 2020.

If you have a recent publication that you would like to share in the upcoming newsletter, please send the title and citation link to sophia.kwon@nyulangone.org and TID Section relevant publications to satya.achanta@duke.edu.

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

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" or were submitted for inclusion in this newsletter. It is possible that our search may miss your best work, so please send your recent publications to Sophia.Kwon@nyulangone.org.

Air Pollution and Environmental Exposures

[Serum-borne factors alter cerebrovascular endothelial microRNA expression following particulate matter exposure near an abandoned uranium mine on the Navajo Nation.](#)

Sanchez B, Zhou X, Gardiner AS, Herbert G, Lucas S, Morishita M, **Wagner JG**, Lewandowski R, **Harkema JR**, Shuey C, **Campen MJ**, Zychowski KE. *Part Fibre Toxicol.* 2020 Jul 1;17(1):29. doi: 10.1186/s12989-020-00361-3.PMID: 32611356

[Association of Neutrophil to Lymphocyte Ratio With Pulmonary Function in a 30-Year Longitudinal Study of US Veterans.](#)

Gao X, Coull B, Lin X, Vokonas P, Sparrow D, Hou L, DeMeo DL, **Litonjua AA**, **Schwartz J**, Baccarelli AA. *JAMA Netw Open.* 2020 Jul 1;3(7):e2010350. doi: 10.1001/jamanetworkopen.2020.10350.PMID: 32658288

[The impact of measurement error in modeled ambient particles exposures on health effect estimates in multilevel analysis: A simulation study.](#)

Samoli E, Butland BK, Rodopoulou S, Atkinson RW, Barratt B, Beevers SD, Beddows A, Dimakopoulou K, **Schwartz JD**, Yazdi MD, Katsouyanni K. *Environ Epidemiol.* 2020 May 27;4(3):e094. doi: 10.1097/EE9.000000000000094. eCollection 2020 Jun.PMID: 32656489

[Comparing the performance of air pollution models for nitrogen dioxide and ozone in the context of a multilevel epidemiological analysis.](#)

Butland BK, Samoli E, Atkinson RW, Barratt B, Beevers SD, Kitwiroon N, Dimakopoulou K, Rodopoulou S, **Schwartz JD**, Katsouyanni K. *Environ Epidemiol.* 2020 May 13;4(3):e093. doi: 10.1097/EE9.000000000000093. eCollection 2020 Jun.PMID: 32656488

[Modifiable risk factors for poor cognitive function in former American-style football players: Findings from the Harvard Football Players Health Study.](#)

Roberts AL, Zafonte RD, **Speizer F**, Baggish A, Taylor H, Nadler L, Weisskopf M. *J Neurotrauma.* 2020 Jul 8. doi: 10.1089/neu.2020.7070. Online ahead of print.PMID: 32640866

[Organic dust-induced lung injury and repair: Bi-directional regulation by TNF \$\alpha\$ and IL-10.](#)

Wyatt TA, Nemecek M, Chandra D, DeVasure JM, Nelson AJ, Romberger DJ, **Poole JA**. *J Immunotoxicol.* 2020 Dec;17(1):153-162. doi: 10.1080/1547691X.2020.1776428.PMID: 32634062

[Do Two Wrongs Make a Right? Persistent Uncertainties Regarding Environmental Selenium-Mercury Interactions.](#)



Gerson JR, Walters DM, Eagles-Smith CA, Bernhardt ES, Brandt JE. *Environ Sci Technol*. 2020 Jul 20. doi: 10.1021/acs.est.0c01894. Online ahead of print. PMID: 32633495

[Parallel Glyco-SPOT Synthesis of Glycopeptide Libraries.](#)

Mehta AY, Veeraiyah RKH, Dutta S, Goth CK, Hanes MS, Gao C, Stavenhagen K, Kardish R, Matsumoto Y, Heimburg-Molinaro J, Boyce M, Pohl NLB, Cummings RD. *Cell Chem Biol*. 2020 Jun 29:S2451-9456(20)30230-0. doi: 10.1016/j.chembiol.2020.06.007. Online ahead of print. PMID: 32610041

[Erythrocyte omega-3 index, ambient fine particle exposure and brain aging.](#)

Chen C, Xun P, Kaufman JD, Hayden KM, Espeland MA, Whitsel EA, Serre ML, Vizuete W, Orchard T, Harris WS, Wang X, Chui HC, Chen JC, He K. *Neurology*. 2020 Jul 15:10.1212/WNL.0000000000010074. doi: 10.1212/WNL.0000000000010074. Online ahead of print. PMID: 32669395

[Air Pollution and Interstitial Lung Diseases: Defining Epigenomic Effects.](#)

Goobie GC, Nouraie M, Zhang Y, Kass DJ, Ryerson CJ, Carlsten C, Johansson KA. *Am J Respir Crit Care Med*. 2020 Jun 22. doi: 10.1164/rccm.202003-0836PP. Online ahead of print. PMID: 32569479

[Air pollution and systemic inflammation in patients with suspected obstructive sleep apnea living in an urban residential area.](#)

Laratta CR, Kendzerska T, Carlsten C, Brauer M, van Eeden SF, Hirsch Allen AJM, Fox N, Peres BU, Ayas NT. *Chest*. 2020 Jun 16:S0012-3692(20)31678-0. doi: 10.1016/j.chest.2020.05.596. Online ahead of print. PMID: 32561443

[Particle depletion of diesel exhaust restores allergen-induced lung-protective surfactant protein D in human lungs.](#)

Ryu MH, Lau KS, Wooding DJ, Fan S, Sin DD, Carlsten C. *Thorax*. 2020 Aug;75(8):640-647. doi: 10.1136/thoraxjnl-2020-214561. Epub 2020 May 28. PMID: 32467339

[Dibutyl Phthalate Augments Allergen-induced Lung Function Decline and Alters Human Airway Immunology: A Randomized Crossover Study.](#)

Maestre-Battle D, Huff RD, Schwartz C, Alexis NE, Tebbutt SJ, Turvey S, Bølling AK, Carlsten C. *Am J Respir Crit Care Med*. 2020 Apr 22. doi: 10.1164/rccm.201911-2153OC. Online ahead of print. PMID: 32320637

[Vascular effects of physical activity are not modified by short-term inhaled diesel exhaust: Results of a controlled human exposure study.](#)

Koch S, Zelembaba A, Tran R, Laeremans M, Hives B, Carlsten C, De Boever P, Koehle MS. *Environ Res*. 2020 Apr;183:109270. doi: 10.1016/j.envres.2020.109270. Epub 2020 Feb 20. PMID: 32311911

[Personal strategies to minimise effects of air pollution on respiratory health: advice for providers, patients and the public.](#)

Carlsten C, Salvi S, Wong GWK, Chung KF. *Eur Respir J*. 2020 Jun 4;55(6):1902056. doi: 10.1183/13993003.02056-2019. Print 2020 Jun. PMID: 32241830



Influenza and Other Infectious Diseases

Inhaled Corticosteroids Use and Risk of Invasive Pneumococcal Disease Risk in a Population-based Study.

Torén K, **Blanc PD**, Qvarfordt I, Aspevall O, Schiöler L. *Ann Am Thorac Soc.* 2020 Jul 10. doi: 10.1513/AnnalsATS.202004-352OC. Online ahead of print. PMID: 32649216

Collective interactions augment influenza A virus replication in a host-dependent manner.

Phipps KL, Ganti K, Jacobs NT, Lee CY, Carnaccini S, **White MC**, Manandhar M, Pickett BE, Tan GS, Ferreri LM, Perez DR, Lowen AC. *Nat Microbiol.* 2020 Jul 6. doi: 10.1038/s41564-020-0749-2. Online ahead of print. PMID: 32632248

Neonatal and Pediatric Disease

Frequency of hand-to-head, -mouth, -eyes, and -nose contacts for adults and children during eating and non-eating macro-activities.

Wilson AM, Verhougstraete MP, **Beamer PI**, King MF, Reynolds KA, Gerba CP. *J Expo Sci Environ Epidemiol.* 2020 Jul 15:1-11. doi: 10.1038/s41370-020-0249-8. Online ahead of print. PMID: 32669669

A prospective cohort study of in utero and early childhood arsenic exposure and infectious disease in 4- to 5-year-old Bangladeshi children.

Ahmed SM, Branscum A, Welch BM, Megowan M, Bethel JW, Odden MC, Joya SA, Ibn Hasan MOS, Lin PI, Mostofa G, Quamruzzaman Q, Rahman M, **Christiani DC**, Kile ML. *Environ Epidemiol.* 2020 Apr 9;4(2):e086. doi: 10.1097/EE9.0000000000000086. eCollection 2020 Apr. PMID: 32656486

Environmental chemical burden in metabolic tissues and systemic biological pathways in adolescent bariatric surgery patients: A pilot untargeted metabolomic approach.

Valvi D, Walker DI, Inge T, Bartell SM, Jenkins T, Helmuth M, Ziegler TR, La Merrill MA, **Eckel SP**, Conti D, Liang Y, Jones DP, McConnell R, Chatzi L. *Environ Int.* 2020 Jul 16;143:105957. doi: 10.1016/j.envint.2020.105957. Online ahead of print. PMID: 32683211

Research Methods, Training, and Clinical Care

Visual Emphysema at Chest CT in GOLD Stage 0 Cigarette Smokers Predicts Disease Progression: Results from the COPDGene Study.

Oh AS, Strand M, Pratte K, **Regan EA**, Humphries S, Crapo JD, Lynch DA; Genetic Epidemiology of COPDGene Investigators. *Radiology.* 2020 Jul 7:192429. doi: 10.1148/radiol.2020192429. Online ahead of print. PMID: 32633676

Statistical considerations for the analysis of massively parallel reporter assays data.

Qiao D, Zigler CM, Cho MH, **Silverman EK**, Zhou X, Castaldi PJ, Laird NH. *Genet Epidemiol.* 2020 Jul 18. doi: 10.1002/gepi.22337. Online ahead of print. PMID: 32681690

Information fraction estimation based on the number of events within the standard treatment regimen.

Dang HM, Alonzo T, Franklin M, Mack WJ, Krailo MD, **Eckel SP**. *Biom J.* 2020 Jul 6. doi: 10.1002/bimj.201900236. Online ahead of print. PMID: 32627859



Asthma and Allergy

[House Dust Microbiota in Relation to Adult Asthma and Atopy in a U.S. Farming Population](#)

Lee MK, Wyss AB, Carnes MU, Richards M, Parks CG, Beane Freeman LE, Thorne PS, Umbach DM, Azcarate-Peril MA, Peddada SD, **London SJ**.

J Allergy Clin Immunol. 2020 Jun 29. pii: S0091-6749(20)30890-3. doi: 10.1016/j.jaci.2020.06.013. PMID: 32615170

[The Role of Aeroallergen Sensitization Testing in Asthma Management.](#)

Casale TB, Pedersen S, Rodriguez Del Rio P, **Liu AH**, Demoly P, Price D.J Allergy Clin Immunol Pract. 2020 Jul 17:S2213-2198(20)30706-6. doi: 10.1016/j.jaip.2020.07.004. Online ahead of print.PMID: 32687905

[The Role of Aeroallergen Sensitization Testing in Asthma Management.](#)

Casale TB, Pedersen S, Rodriguez Del Rio P, **Liu AH**, Demoly P, Price D.J Allergy Clin Immunol Pract. 2020 Jul 17:S2213-2198(20)30706-6. doi: 10.1016/j.jaip.2020.07.004. Online ahead of print.PMID: 32687905

[Methylation of cysteinyl leukotriene receptor 1 genes associates with lung function in asthmatics exposed to traffic-related air pollution.](#)

Rabinovitch N, Jones MJ, Gladish N, Faino AV, Strand M, Morin AM, MacIsaac J, Lin DTS, Reynolds PR, Singh A, Gelfand EW, Kobor MS, **Carlsten C**.Epigenetics. 2020 Jul 12:1-9. doi:

10.1080/15592294.2020.1790802. Online ahead of print.PMID: 32657253

[Chronic stress and asthma in adolescents.](#)

Landeo-Gutierrez J, **Celedón JC**.Ann Allergy Asthma Immunol. 2020 Jul 9:S1081-1206(20)30478-6. doi: 10.1016/j.anai.2020.07.001. Online ahead of print.PMID: 32653405 Review.

[House dust microbiota in relation to adult asthma and atopy in a U.S. farming population.](#)

Lee MK, Wyss AB, Carnes MU, Richards M, Parks CG, Beane Freeman LE, Thorne PS, Umbach DM, Azcarate-Peril MA, Peddada SD, **London SJ**.J Allergy Clin Immunol. 2020 Jun 29:S0091-6749(20)30890-3. doi: 10.1016/j.jaci.2020.06.013. Online ahead of print.PMID: 32615170

[An epistatic interaction between pre-natal smoke exposure and socioeconomic status has a significant impact on bronchodilator drug response in African American youth with asthma.](#)

Magaña J, Contreras MG, Keys KL, Risse-Adams O, Goddard PC, Zeiger AM, Mak ACY, Elhawary JR, Samedy-Bates LA, Lee E, Thakur N, Hu D, Eng C, Salazar S, Huntsman S, Hu T, Burchard EG, **White MJ**.BioData Min. 2020 Jul 3;13:7. doi: 10.1186/s13040-020-00218-7. eCollection 2020.PMID: 32636926

[House dust microbiota in relation to adult asthma and atopy in a U.S. farming population.](#)

Lee MK, Wyss AB, Carnes MU, Richards M, Parks CG, Beane Freeman LE, **Thorne PS**, Umbach DM, Azcarate-Peril MA, Peddada SD, London SJ.J Allergy Clin Immunol. 2020 Jun 29:S0091-6749(20)30890-3. doi: 10.1016/j.jaci.2020.06.013. Online ahead of print.PMID: 32615170

[Fetal Origins of Asthma: A Longitudinal Study from Birth to Age 36 Years.](#)

Guerra S, Lombardi E, Stern DA, **Sherrill DL**, Gilbertson-Dahdal D, Wheatley-Guy CM, Snyder EM, Wright AL, Martinez FD, Morgan WJ.Am J Respir Crit Care Med. 2020 Jul 10. doi: 10.1164/rccm.202001-0194OC. Online ahead of print.PMID: 32649838



Cigarettes, E-cigs, and other Tobacco and Cannabis Smoke Exposures

Predictive validity of the adult tobacco dependence index: Findings from waves 1 and 2 of the Population Assessment of Tobacco and Health (PATH) study.

Strong DR, Leas E, Noble M, **White M**, Frissell KC, Glasser A, Katz L, Taylor K, Compton WM, Conway KP, Lambert E, Kimmel HL, Silveira ML, Green V, Hull LC, Cummings KM, Hyland A, Niaura R. *Drug Alcohol Depend.* 2020 Jun 30;214:108134. doi: 10.1016/j.drugalcdep.2020.108134. Online ahead of print. PMID: 32629146

Occupational Injuries and Exposures

Allergy and Lung Injury Among Rescue Workers Exposed to the World Trade Center Disaster Assessed 17 Years After Exposure to Ground Zero

Caruana DL, Huang PH, Li JC, Cheslack-Postava K, Szema AM
J Occup Environ Med. 2020 May 12. doi: 10.1097/JOM.0000000000001903. Online ahead of print. PMID: 32404837

Gamma-Butyrolactone Overdose Potentially Complicated by Co-Ingestion of Industrial Solvent N-Methyl-2-pyrrolidone.

Melamed J, Gerona R, **Blanc PD**, Takamoto P, Conner S, Goodnough R. *J Anal Toxicol.* 2020 Jul 16:bkaa076. doi: 10.1093/jat/bkaa076. Online ahead of print. PMID: 32672803

Evidence for Environmental-human Microbiota Transfer at a Manufacturing Facility with Novel Work-related Respiratory Disease.

Wu BG, Kapoor B, **Cummings KJ**, Stanton ML, Nett RJ, **Kreiss K**, **Abraham JL**, Colby TV, Franko AD, Green FHY, Sanyal S, Clemente JC, Gao Z, Coffre M, Meyn P, Heguy A, Li Y, Sulaiman I, Borbet TC, Koralov SB, Tallaksen RJ, Wendland D, Bachelder VD, Boylstein RJ, Park JH, **Cox-Ganser JM**, Virji MA, Crawford JA, Edwards NT, Veillette M, Duchaine C, Warren K, Lundeen S, Blaser MJ, Segal LN. *Am J Respir Crit Care Med.* 2020 Jul 16. doi: 10.1164/rccm.202001-0197OC. Online ahead of print. PMID: 32673495

Acute differences in blood lipids and inflammatory biomarkers following controlled exposures to cookstove air pollution in the STOVES study.

Walker ES, Fedak KM, Good N, **Balmes J**, Brook RD, Clark ML, Cole-Hunter T, Devlin RB, L'Orange C, Luckasen G, Mehaffy J, Shelton R, Wilson A, Volckens J, Peel JL. *Int J Environ Health Res.* 2020 Jul 2:1-14. doi: 10.1080/09603123.2020.1785402. Online ahead of print. PMID: 32615777

Evidence for Environmental-human Microbiota Transfer at a Manufacturing Facility with Novel Work-related Respiratory Disease.

Wu BG, Kapoor B, Cummings KJ, Stanton ML, Nett RJ, Kreiss K, **Abraham JL**, Colby TV, Franko AD, Green FHY, Sanyal S, Clemente JC, Gao Z, Coffre M, Meyn P, Heguy A, Li Y, Sulaiman I, Borbet TC, Koralov SB, Tallaksen RJ, Wendland D, Bachelder VD, Boylstein RJ, Park JH, **Cox-Ganser JM**, Virji MA, Crawford JA, Edwards NT, Veillette M, Duchaine C, Warren K, Lundeen S, Blaser MJ, Segal LN. *Am J Respir Crit Care Med.* 2020 Jul 16. doi: 10.1164/rccm.202001-0197OC. Online ahead of print. PMID: 32673495

Cellular Mechanisms

Ozone-derived oxysterols impair lung macrophage phagocytosis via adduction of some phagocytosis receptors.
Duffney PF, Kim HH, Porter NA, **Jaspers I**. *J Biol Chem.* 2020 Jul 20;jbc.RA120.013699. doi: 10.1074/jbc.RA120.013699. Online ahead of print. PMID: 32690608



Cancer

[Novel genetic variants in genes of the Fc gamma receptor-mediated phagocytosis pathway predict non-small cell lung cancer survival.](#)

Qian D, Liu H, Zhao L, Wang X, Luo S, Moorman PG, Patz EF Jr, **Su L**, Shen S, **Christiani DC**, Wei Q. *Transl Lung Cancer Res.* 2020 Jun;9(3):575-586. doi: 10.21037/tlcr-19-318.PMID: 32676321

[Novel genetic variants of *KIR3DL2* and *PVR* involved in immunoregulatory interactions are associated with non-small cell lung cancer survival.](#)

Wu Y, Yang S, Liu H, Luo S, Stinchcombe TE, Glass C, **Su L**, Shen S, **Christiani DC**, Wang Q, Wei Q. *Am J Cancer Res.* 2020 Jun 1;10(6):1770-1784. eCollection 2020.PMID: 32642289

COPD, Chronic Bronchitis, and other Chronic Lung Diseases

[Methotrexate and rheumatoid arthritis associated interstitial lung disease.](#)

Juge PA, Lee JS, Lau J, Kawano-Dourado L, Rojas Serrano J, Sebastiani M, Koduri G, Matteson E, Bonfiglioli K, Sawamura M, Kairalla R, Cavagna L, Bozzalla Cassione E, Manfredi A, Mejia M, Rodríguez-Henriquez P, González-Pérez MI, Falfán-Valencia R, Buendia-Roldán I, Pérez-Rubio G, Ebstein E, Gazal S, Borie R, Ottaviani S, Kannengiesser C, Wallaert B, Uzunhan Y, Nunes H, Valeyre D, Saidenberg-Kermanac'h N, Boissier MC, Wemeau-Stervinou L, Flipo RM, Marchand-Adam S, Richette P, Allanore Y, Dromer C, Truchetet ME, Richez C, Schaeverbeke T, Lioté H, Thabut G, Deane KD, Solomon J, Doyle T, Ryu JH, Rosas I, Holers VM, Boileau C, Debray MP, Porcher R, **Schwartz DA**, Vassallo R, Crestani B, Dieudé P. *Eur Respir J.* 2020 Jul 9:2000337. doi: 10.1183/13993003.00337-2020. Online ahead of print.PMID: 32646919

[Chronic Hypersensitivity Pneumonitis, an Interstitial Lung Disease with Distinct Molecular Signatures.](#)

Furusawa H, Cardwell JH, Okamoto T, Walts AD, Konigsberg IR, Kurche JS, Bang TJ, Schwarz MI, Brown KK, Kropski JA, Rojas M, Cool CD, Lee JS, Wolters PJ, Yang IV, Schwartz DA. *Am J Respir Crit Care Med.* 2020 Jun 30. doi: 10.1164/rccm.202001-0134OC. Online ahead of print.PMID: 32602730

[Interstitial lung abnormalities detected incidentally on CT: a Position Paper from the Fleischner Society.](#)

Hatabu H, Hunninghake GM, Richeldi L, Brown KK, Wells AU, Remy-Jardin M, Verschakelen J, Nicholson AG, Beasley MB, **Christiani DC**, San José Estépar R, Seo JB, Johkoh T, Sverzellati N, Ryerson CJ, Graham Barr R, Goo JM, Austin JHM, Powell CA, Lee KS, Inoue Y, Lynch DA. *Lancet Respir Med.* 2020 Jul;8(7):726-737. doi: 10.1016/S2213-2600(20)30168-5.PMID: 32649920 Review.

[Increased airway iron parameters and risk for exacerbation in COPD: an analysis from SPIROMICS.](#)

Zhang WZ, Oromendia C, Kikkers SA, Butler JJ, O'Beirne S, Kim K, O'Neal WK, Freeman CM, Christenson SA, Peters SP, Wells JM, Doerschuk C, **Putchá N**, Barjaktarevic I, Woodruff PG, Cooper CB, Bowler RP, Comellas AP, Criner GJ, Paine R 3rd, Hansel NN, Han MK, Crystal RG, Kaner RJ, Ballman KV, Curtis JL, Martinez FJ, Cloonan SM. *Sci Rep.* 2020 Jun 29;10(1):10562. doi: 10.1038/s41598-020-67047-w.PMID: 32601308

SARS-CoV-2 / COVID-19

[The Promise and Challenge of Home Health Services During the COVID-19 Pandemic.](#)

Sood A, Walker J. *Am Fam Physician.* 2020 Jul 1;102(1):8-9.PMID: 32603072 No abstract available.



[Improving Clinical Trial Enrollment - In the Covid-19 Era and Beyond.](#)

North CM, Dougan ML, Sacks CA. *N Engl J Med.* 2020 Jul 15. doi: 10.1056/NEJMp2019989. Online ahead of print. PMID: 32668133 No abstract available.

[Gene expression and *in situ* protein profiling of candidate SARS-CoV-2 receptors in human airway epithelial cells and lung tissue.](#)

Aguiar JA, Tremblay BJ, Mansfield MJ, Woody O, Lobb B, Banerjee A, Chandiramohan A, Tiessen N, Cao Q, Dvorkin-Gheva A, Revill S, Miller MS, **Carlsten C**, Organ L, Joseph C, John A, Hanson P, Austin R, McManus BM, Jenkins G, Mossman K, Ask K, Doxey AC, Hirota JA. *Eur Respir J.* 2020 Jul 16:2001123. doi: 10.1183/13993003.01123-2020. Online ahead of print. PMID: 32675206

[Another invisible enemy indoors: COVID-19, human health, the home, and United States indoor air policy.](#)

Nwanaji-Enwerem JC, Allen JG, **Beamer PI**. *J Expo Sci Environ Epidemiol.* 2020 Jul 8:1-3. doi: 10.1038/s41370-020-0247-x. Online ahead of print. PMID: 32641763

[The Structural and Social Determinants of the Racial/Ethnic Disparities in the U.S. COVID-19 Pandemic: What's Our Role?](#)

Thakur N, Lovinsky-Desir S, Bime C, Wisnivesky JP, **Celedón JC**; Health Equality and Diversity Committee of the American Thoracic Society. *Am J Respir Crit Care Med.* 2020 Jul 17. doi: 10.1164/rccm.202005-1523PP. Online ahead of print. PMID: 32677842

["The Most Dangerous Strain".](#)

Almeida M, **Silverman ER**. *J Natl Med Assoc.* 2020 Jun 26:S0027-9684(20)30111-5. doi: 10.1016/j.jnma.2020.05.013. Online ahead of print. PMID: 32601019



Updates from Terrorism and Inhalation Disasters Section



The highly controversial deployment of tear gas agents against protestors during COVID-19 pandemic continues around the country...

<https://www.nytimes.com/2020/06/03/us/tear-gas-risks-protests-coronavirus.html>



Sven-Eric Jordt, PhD, Associate Professor of Anesthesiology at Duke University School of Medicine shared their expert opinion on toxic effects of tear gas agents, potential cumulative effects during COVID-19 pandemic, and possible spike in the number of positive COVID-19 cases.

The Risks Of Using Milk To Soothe Tear-Gassed Eyes; An Expert Says Use Water Instead <https://www.forbes.com/sites/marlamilling/2020/07/21/the-risks-of-using-milk-to-soothe-tear-gassed-eyes-an-expert-says-use-water-instead/#43b88ebf3387>





ATS calls for moratorium on tear gas use

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Press Releases from the ATS ▶ 2020 Press Releases ▶ Tear Gas Use During COVID-19 Pandemic Irresponsible; Moratorium Needed, Says American Thoracic Society

Tear Gas Use During COVID-19 Pandemic Irresponsible; Moratorium Needed, Says American Thoracic Society

June 11, 2020 -- [The American Thoracic Society](#) calls for a moratorium on the use of tear gas and other chemical agents deployed by law enforcement against protestors participating in demonstrations, including current campaigns sparked by the death of George Floyd.

"The use of chemical crowd control agents is outlawed in the time of war. They cause significant short- and long-term respiratory health injury and likely propagate the spread of viral illnesses, including COVID-19," said ATS President Juan C. Celedón, MD, DrPH, ATSF.

"Recent research calls into question the assumed safety of tear gas such as 2-chlorobenzalmalonitrile (CS), and the highly concentrated pepper oil used in exploding shells and grenades," said Sven-Eric Jordt, PhD, a leading researcher in tear gas and related lung injury. Those studies have identified chronic bronchitis, compromised lung function, and acute lung injury (in military recruits) as consequences of tear gas exposure.

<https://www.thoracic.org/about/newsroom/press-releases/journal/2020/tear-gas-use-during-covid-19-pandemic-irresponsible-moratorium-needed,-says-american-thoracic-society.php>



ATS 2020 VIRTUAL is coming in August 5-10

https://conference.thoracic.org/program/index.php?_ga=2.31580988.364561536.1593316025-1343231238.1517242217



Register today for ATS virtual meeting:

https://conference.thoracic.org/attendees/index.php?_ga=2.103928064.1871420371.1595629704-1343231238.1517242217

Fees & Categories

All Members (including members in-training): \$50.00

Non-Members (including non-members in-training): \$150.00

Registration Fees Include

Registration for ATS 2020 Virtual Conference includes access to all available virtual content through November 10, 2020.

ATS Refund Policy

For ATS 2020 Virtual, all conference registration sales are final. The ATS will not offer refunds.

Check out session information: <https://conference.thoracic.org/program/session-information/index.php>

The relevant ATS 2020 Virtual sessions for TID membership –

Session: **A90 - EMERGING DANGERS FROM E-CIGARETTES: LET'S HAVE A VAPE DEBATE**

Chairs: Ilona Jaspers, Ph.D and Sven Eric Jordt, Ph.D

Date & Time: **Wednesday, 08/05/2020, 08:30 AM - 10:30 AM**

Room: **ATS 2020 Virtual**

Session: **C11: EVOLVING KNOWLEDGE OF THE EFFECT OF CANNABIS AND CANNABINOIDS ON THE LUNG**

Chairs: Kristina Bailey, MD and Laura E Crotty Alexander

Date & Time: pending

Room: **ATS 2020 Virtual**

Session: **D85: ENVIRONMENTAL EXPOSURES AND THE AIRWAY MICROBIOME**

Chairs: Christopher Carlsten, MD and Ilona Jaspers Ph.D

Date & Time: pending

Room: **ATS 2020 Virtual**

ATS 2021 is calling for input: <https://conference.thoracic.org/program/call-for-input/session-types.php>



Recent publications from TID members and relevant to TID section:

Allergic contact dermatitis and tracheobronchitis associated with repeated exposure to tear gas, Rex Pui Kin Lam, MPH , [Kin Wa Wong, MBChB](#), [Chi Kin Wan, MBChB](#). July 13, 2020.

DOI:[https://doi.org/10.1016/S0140-6736\(20\)31560-9](https://doi.org/10.1016/S0140-6736(20)31560-9).

([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31560-9/fulltext#.XxHoXXefJ-4.twitter](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31560-9/fulltext#.XxHoXXefJ-4.twitter))

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[Impact of Local High Doses of Radiation by Neutron Activated Mn Dioxide Powder in Rat Lungs: Protracted Pathologic Damage Initiated by Internal Exposure.](#)

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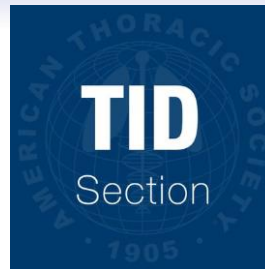
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TID section is soliciting ideas for putting together podcasts, webinars, and journal clubs. Please contact Satya Achanta, DVM, PhD, DABT (satya.achanta@duke.edu), Web Director of TID section, if you are interested to lead any of these activities. Also,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



COVID-19 RESOURCES

ATS Resources

The ATS Clinical Problems (CP) Assembly has a closed, internal Facebook page hosted by MeiLan Han that is being consistently updated with COVID-19 updates/resources for rapid dissemination among members. All ATS members may have access to this page—you will need to enter your ATS member number to join. The link to the Facebook page is [HERE](#). A major goal of this resource is to also add to knowledge by posting experiences with clinical care associated with COVID-19, as well as more general news regarding coronavirus.

Disclaimer: Staff will be monitoring postings but will not be able to judge content, and thus, these are simply platforms for exchange, with everyone understanding that nothing posted is official, ATS-vetted information. Also, please keep in mind HIPPA regulations when sharing information.

Other Resources

The New York Times has made their very extensive, frequently updated, coronavirus coverage freely available without a subscription. You can access this information by navigating from the [New York Times homepage](#), or click the link [HERE](#) to go directly to the resources.

The Center for Systems Science and Engineering at Johns Hopkins University is providing a map of the global spread of COVID-19 that updates regularly. You can access the site [HERE](#).

Advice for Pulmonary Function Testing

Very important PFT advice that you might have missed was issued late last month by members of the ATS Proficiency Standards for Pulmonary Function Testing Committee, called "Advice Regarding COVID 19 For Pulmonary Function Laboratories." Its link is here: [HERE](#) - you have to scroll to the bottom of the page.

<https://www.thoracic.org/professionals/clinical-resources/disease-related-resources/pulmonary-function-laboratories.php>

It states that:

“Concern has been raised that pulmonary function testing could represent a potential avenue for COVID 19 transmission due to the congregation of patients with lung disease and because of the potential for coughing and droplet formation surrounding pulmonary function testing procedures.”

The Committee recommends “that pulmonary function testing be limited to tests that are only essential for immediate treatment decisions, that the type of pulmonary function testing be limited to the most essential tests when possible, and that measures to protect both the staff and individuals being tested should be put in place.”

Based on ACOEM's and CAOHC's recommendations about postponing non-essential routine spirometry and hearing tests, OSHA issued an enforcement guidance on postponing various testing and training activities during the pandemic. News release here: <https://www.osha.gov/news/newsreleases/national/04162020-0>



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