

THE ASSEMBLY ON

Environmental, Occupational, and Population Health

NEWSLETTER



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PULMONARY • CRITICAL CARE • SLEEP

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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.

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

Also included in this **November 2020** newsletter are some of our members' recent and "epub ahead of print" articles.

If you have a recent publication or other items (available jobs, lectures/seminars) 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 postings 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.

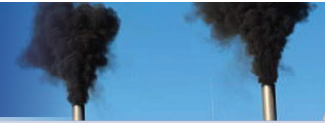
SARS-CoV-2 / COVID-19

[How I Do It: Restarting Respiratory Clinical Research in the Era of the COVID19 Pandemic.](#)

Taylor-Cousar JL, **Maier L**, Downey GP, Wechsler ME. *Chest*. 2020 Nov 13:S0012-3692(20)35140-0. doi: 10.1016/j.chest.2020.11.001. Online ahead of print. PMID: 33197402 **Free PMC article**. Review.

[Effect of Hydroxychloroquine on Clinical Status at 14 Days in Hospitalized Patients With COVID-19: A Randomized Clinical Trial.](#)

Self WH, Semler MW, Leither LM, Casey JD, Angus DC, Brower RG, Chang SY, Collins SP, Eppensteiner JC, Filbin MR, Files DC, Gibbs KW, Ginde AA, Gong MN, Harrell FE Jr, Hayden DL, Hough CL, Johnson NJ, Khan A, Lindsell CJ, Matthay MA, Moss M, Park PK, Rice TW, Robinson BRH, Schoenfeld DA, Shapiro NI, Steingrub JS, Ulysse CA, Weissman A, Yealy DM, Thompson BT, Brown SM; National Heart, Lung, and Blood Institute PETAL Clinical Trials Network, Steingrub J, Smithline H, Tiru B, Tidswell M, Kozikowski L, Thornton-Thompson S, De Souza L, Hou P, Baron R, Massaro A, Aisiku I, Fredenburgh L, Seethala R, Johnsky L, Riker R, Seder D, May T, Baumann M, Eldridge A, Shapiro N, Talmor D, O'Mara T, Kirk C, Harrison K, Kurt L, Schermerhorn M, Banner-Goodspeed V, Boyle K, Dubosh N, Filbin M, Hibbert K, Parry B, Lavin-Parsons K, Pulido N, Lilley B, Lodenstein C, Margolin J, Brait K, Jones A, Galbraith J, Peacock R, Nandi U, Wachs T, Matthay M, Liu K, Kangelaris K, Wang R, Calfee C, Yee K, Hendey G, Chang S, Lim G, Qadir N, Tam A, Beutler R, Levitt J, Wilson J, Rogers A, Vojnik R, Roque J, Albertson T, Chenoweth J, Adams J, Pearson S, Juarez M, Almasri E, Fayed M, Hughes A, Hillard S, Huebinger R, Wang H, Vidales E, Patel B, Ginde A, Moss M, Baduashvili A, McKeehan J, Finck L, Higgins C, Howell M, Douglas I, Haukoos J, Hiller T, Lyle C, Cupelo A, Caruso E, Camacho C, Gravitz S, Finigan J, Griesmer C, Park P, Hyzy R, Nelson K, McDonough K, Olbrich N, Williams M, Kapoor R, Nash J, Willig M, **Ford H**, Gardner-Gray J, Ramesh M, Moses M, Ng Gong M, Aboodi M, Asghar A, Amosu O, Torres M, Kaur S, Weiler M, Chen JT, Hope A, Lopez B, Rosales K, You JY, Mosier J, Hypes C, Natt B, Borg B, Salvagio E, Hite RD, Hudock K, Cresie A, Alhasan F, Gomez-Arroyo J, Duggal A, Mehkri O, Hastings A, Sahoo D, Abi Fadel F, Gole S, Shaner V, Wimer A, Meli Y, King A, Terndrup T, Exline M, Pannu S, Robart E, Karow S, Hough C, Robinson B, Johnson N, Henning D, Campo M, Gundel S, Seghal S, Katsandres S, **Dean S**, Khan A, Krol O, Jouzestani M, Huynh P, Weissman A, Yealy D, Scholl D, Adams P, McVerry B, Huang D, Angus D, Schooler J, Moore S, Files DC, Miller C, Gibbs K, LaRose M, Flores L, Koehler L, Morse C, Sanders J, Langford C, Nanney K, MdalaGausi M, Yeboah P, Morris P, Sturgill J, Seif S, Cassity E, Dhar S, de Wit M, Mason J, Goodwin A, Hall G, Grady A, Chamberlain A, Brown S, Bledsoe J, Leither L, Peltan I, Starr N, Fergus M, Aston V, Montgomery Q, Smith R, Merrill M, Brown K, Armbruster B, Harris E, Middleton E, Paine R, Johnson S, Barrios M, Eppensteiner J, Limkakeng A, McGowan L, Porter T, Bouffler A, Leahy JC, deBoisblanc B, Lammi M, Happel K, Lauto P, Self W, Case J, Semler M, Collins S, Harrell F, Lindsell C, Rice T, Stubblefield W, Gray C, Johnson J, Roth M, Hays M, Torr D, Zakaria A, Schoenfeld D, Thompson BT, Hayden D, Ringwood N, Oldmixon C, Ulysse C, Morse R, Muzikansky A, Fitzgerald L, Whitaker S, Lagakos A, Reineck L, Aggarwal N, Bienstock K, Freemer M,



Maclawiw M, Weinmann G, Morrison L, Gillespie M, Kryscio R, Brodie D, Zareba W, Rompalo A, Boeckh M, Parsons P, Christie J, Hall J, Horton N, Zoloth L, Dickert N, Diercks D. *JAMA*. 2020 Nov 9:e2022240. doi: 10.1001/jama.2020.22240. Online ahead of print. PMID: 33165621

Clinical Outcomes Of A COVID-19 Vaccine: Implementation Over Efficacy.

Paltiel AD, **Schwartz JL**, Zheng A, Walensky RP. *Health Aff (Millwood)*. 2020 Nov 19:101377hlthaff202002054. doi: 10.1377/hlthaff.2020.02054. Online ahead of print. PMID: 33211536

The use of nebulized pharmacotherapies during the COVID-19 pandemic.

Sethi S, Barjaktarevic IZ, **Tashkin DP**. *Ther Adv Respir Dis*. 2020 Jan-Dec;14:1753466620954366. doi: 10.1177/1753466620954366. PMID: 33167796 **Free article**. Review.

Pulmonary embolism rate in patients infected with SARS-CoV-2.

Capaccione KM, Li G, **Salvatore MM**. *Blood Res*. 2020 Nov 3. doi: 10.5045/br.2020.2020168. Online ahead of print. PMID: 33139587 No abstract available.

New Perspectives on Antimicrobial Agents: Remdesivir Treatment for COVID-19.

Aleissa MM, **Silverman EA**, Paredes Acosta LM, Nutt CT, Richterman AG, Marty FM. *Antimicrob Agents Chemother*. 2020 Nov 2:AAC.01814-20. doi: 10.1128/AAC.01814-20. Online ahead of print. PMID: 33139290

Spine Patient Satisfaction With Telemedicine During the COVID-19 Pandemic: A Cross-Sectional Study.

Satin AM, **Shenoy K**, Sheha ED, Basques B, Schroeder GD, Vaccaro AR, Lieberman IH, Guyer RD, Derman PB. *Global Spine J*. 2020 Oct 22:2192568220965521. doi: 10.1177/2192568220965521. Online ahead of print. PMID: 33089712 **Free article**.

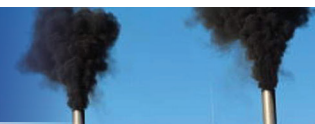
Asthma and Allergy

Prevalence and Population Attributable Risk for Chronic Airflow Obstruction in a Large Multinational Study.

Burney P, Patel J, Minelli C, Gnatiuc L, Amaral AFS, Kocabaş A, Cherkaski HH, Gulsvik A, Nielsen R, Bateman E, Jithoo A, Mortimer K, Sooronbaev TM, Lawin H, Nejari C, Elbiaze M, El Rhazi K, Zheng JP, Ran P, Welte T, Obaseki D, Erhabor G, Elsony A, Osman NB, Ahmed R, Nizankowska-Mogilnicka E, Mejza F, **Mannino DM**, Bárbara C, Wouters EFM, Idolor LF, Loh LC, Rashid A, Juvekar S, Gislason T, Al Ghobain M, Studnicka M, Harrabi I, Denguezli M, Koul PA, Jenkins C, Marks G, Jögi R, Hafizi H, Janson C, Tan WC, Aquart-Stewart A, Mbatchou B, Nafees A, Gunasekera K, Seemungal T, Padukudru Anand M, Enright P, Vollmer WM, Blangiardo M, Elfadaly FG, Buist AS. *Am J Respir Crit Care Med*. 2020 Nov 10. doi: 10.1164/rccm.202005-1990OC. Online ahead of print. PMID: 33171069

Altered transcriptional and chromatin responses to rhinovirus in bronchial epithelial cells from adults with asthma.

Helling BA, Sobreira DR, Hansen GT, Sakabe NJ, Luo K, Billstrand C, Laxman B, Nicolae RI, Nicolae DL, Bochkov YA, Gern JE, Nobrega MA, White SR, Ober C. *Commun Biol*. 2020 Nov 13;3(1):678. doi: 10.1038/s42003-020-01411-4. PMID: 33188283 **Free PMC article**.



COPD, Chronic Bronchitis

Protocol Summary of the CAPTURE Validation in Primary Care Study.

Yawn BP, Han M, Make BM, **Mannino D**, Brown RW, Meldrum C, Murray S, Spino C, Bronicki JS, Leidy N, **Tapp H**, Dolor RJ, Joo M, Knox L, Zittleman L, Thomashow BM, Martinez FJ. *Chronic Obstr Pulm Dis.* 2020 Nov 5. doi: 10.15326/jcopdf.2020.0155. Online ahead of print. PMID: 33156981 **Free article.**

Co-Morbidity Patterns Identified Using Latent Class Analysis of Medications Predict All-Cause Mortality Independent of Other Known Risk Factors: The COPDGene® Study.

Li Y, Ragland M, Austin E, Young K, Pratte K, Hokanson JE, Beaty TH, **Regan EA**, Rennard SI, Wern C, Jacobs MR, Tal-Singer R, Make BJ, Kinney GL; theCOPDGene investigators. *Clin Epidemiol.* 2020 Oct 27;12:1171-1181. doi: 10.2147/CLEP.S279075. eCollection 2020. PMID: 33149694 **Free PMC article.**

Prevalence and Population Attributable Risk for Chronic Airflow Obstruction in a Large Multinational Study.

Burney P, Patel J, Minelli C, Gnatiuc L, Amaral AFS, Kocabaş A, Cherkaski HH, Gulsvik A, Nielsen R, Bateman E, Jithoo A, Mortimer K, Sooronbaev TM, Lawin H, Nejari C, Elbiaze M, El Rhazi K, Zheng JP, Ran P, Welte T, Obaseki D, Erhabor G, Elsony A, Osman NB, Ahmed R, Nizankowska-Mogilnicka E, Mejza F, Mannino DM, Bárbara C, Wouters EFM, Idolor LF, Loh LC, Rashid A, Juvekar S, Gislason T, Al Ghobain M, Studnicka M, Harrabi I, Denguezli M, Koul PA, Jenkins C, Marks G, Jögi R, Hafizi H, Janson C, Tan WC, Aquart-Stewart A, Mbatchou B, Nafees A, Gunasekera K, Seemungal T, Padukudru Anand M, Enright P, Vollmer WM, Blangiardo M, Elfadaly FG, **Buist AS**. *Am J Respir Crit Care Med.* 2020 Nov 10. doi: 10.1164/rccm.202005-1990OC. Online ahead of print. PMID: 33171069

Occupational Injuries and Environmental Exposures

Short-term differences in cardiac function following controlled exposure to cookstove air pollution: The subclinical tests on volunteers exposed to smoke (STOVES) study.

Cole-Hunter T, Dhingra R, Fedak KM, Good N, L'Orange C, Luckasen G, Mehaffy J, Walker E, Wilson A, **Balmes J**, Brook RD, Clark ML, Devlin RB, Volckens J, Peel JL. *Environ Int.* 2020 Nov 19;146:106254. doi: 10.1016/j.envint.2020.106254. Online ahead of print. PMID: 33221594

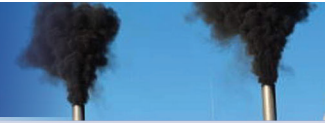
Air Pollution and the Dynamic Association Between Depressive Symptoms and Memory in Oldest-Old Women.

Petkus AJ, Younan D, Wang X, Beavers DP, Espeland MA, Gatz M, Gruenewald TL, **Kaufman JD**, Chui HC, Manson JE, Resnick SM, Wellenius GA, Whitsel EA, Widaman K, Chen JC. *J Am Geriatr Soc.* 2020 Nov 17. doi: 10.1111/jgs.16889. Online ahead of print. PMID: 33205418

Occupational Allergies to Cannabis.

Decuyper II, Green BJ, Sussman GL, Ebo DG, Silvers WS, **Pacheco K**, King BS, Cohn JR, Zeiger RS, Zeiger JS, Naimi DR, Beezhold DH, Nayak AP. *J Allergy Clin Immunol Pract.* 2020 Nov-Dec;8(10):3331-3338. doi: 10.1016/j.jaip.2020.09.003. PMID: 33161961

Breaking the Lead Floor; Protecting Workers and their Families.



Burton AD, **Rosenman KD**, Upfal MJ. *J Occup Environ Med.* 2020 Nov 4. doi: 10.1097/JOM.0000000000002078. Online ahead of print. PMID: 33156136 No abstract available.

[The adverse impact of cadmium on immune function and lung host defense.](#)

Knoell DL, **Wyatt TA**. *Semin Cell Dev Biol.* 2020 Nov 3:S1084-9521(20)30166-X. doi: 10.1016/j.semcdb.2020.10.007. Online ahead of print. PMID: 33158728

Liu X, Reeves AP, Antoniak K, San José Estépar R, Doucette JT, Weber J, Jeon Y, Xu D, Celedón JC, de la Hoz RE. Association of quantitative CT lung density measurements with divergent FEV1 trajectories in WTC workers. *Clin Respir J* 2020;[in press]. PMID 33244876, doi 10.1111/crj.13313.

[Black Carbon Content in Airway Macrophages is Associated with Reduced CD80 Expression and Increased Exacerbations in Former Smokers With COPD.](#)

Tejwani V, Moughames E, Suresh K, Tang SE, Mair LG, Romero K, **Putchu N**, Alexis NE, Woo H, D'Alessio FR, Hansel NN. *Chronic Obstr Pulm Dis.* 2020 Nov 6. doi: 10.15326/jcopdf.2020.0170. Online ahead of print. PMID: 33156984 **Free article.**

[Occupational and Environmental Contributions to Lung Disease.](#)

Cummings KJ, **Lai PS**, Redlich CA. *Clin Chest Med.* 2020 Dec;41(4):xiii-xv. doi: 10.1016/j.ccm.2020.09.001. PMID: 33153699 **Free PMC article.** No abstract available.

[Indoor Microbial Exposures and Chronic Lung Disease: From Microbial Toxins to the Microbiome.](#)

Wolf M, **Lai PS**. *Clin Chest Med.* 2020 Dec;41(4):777-796. doi: 10.1016/j.ccm.2020.08.005. PMID: 33153695 Review.

[Evaluating the U.S. Air Quality Index as a risk communication tool: Comparing associations of index values with respiratory morbidity among adults in California.](#)

Cromar KR, Ghazipura M, Gladson LA, **Perlmutter L**. *PLoS One.* 2020 Nov 17;15(11):e0242031. doi: 10.1371/journal.pone.0242031. eCollection 2020. PMID: 33201930 **Free PMC article.**

[Silicosis: An Update and Guide for Clinicians.](#)

Kreff S, Wolff J, **Rose C**. *Clin Chest Med.* 2020 Dec;41(4):709-722. doi: 10.1016/j.ccm.2020.08.012. PMID: 33153689 Review.

[Coal Workers' Pneumoconiosis and Other Mining-Related Lung Disease: New Manifestations of Illness in an Age-Old Occupation.](#)

Go LHT, **Cohen RA**. *Clin Chest Med.* 2020 Dec;41(4):687-696. doi: 10.1016/j.ccm.2020.08.002. PMID: 33153687 Review.

[Informatics Approaches for Recognition, Management, and Prevention of Occupational Respiratory Disease.](#)

Harber P, Leroy G. *Clin Chest Med.* 2020 Dec;41(4):605-621. doi: 10.1016/j.ccm.2020.08.008. PMID: 33153682 Review.

[Master Clinician and Public Health Practitioner: Selected Occupational and Environmental Pulmonary Cases.](#)

James E, Linde B, **Redlich CA**. *Clin Chest Med.* 2020 Dec;41(4):567-580. doi: 10.1016/j.ccm.2020.08.019. PMID: 33153680 Review.



Cumulative Occupational Exposures and Lung Function Decline in Two Large General Population Cohorts.

Lytras T, Beckmeyer-Borowko A, Kogevinas M, Kromhout H, Carsin AE, Antó JM, Bentouhami H, Weyler J, Heinrich J, Nowak D, Urrutia I, Martínez-Moratalla J, Gullón JA, Pereira Vega A, Raherison Semjen C, Pin I, Demoly P, Leynaert B, Villani S, Gislason T, Svanes Ø, Holm M, Forsberg B, Norbäck D, Mehta AJ, Keidel D, Vernez D, Benke G, Jögi R, Torén K, Sigsgaard T, Schlünssen V, Olivieri M, Blanc PD, Watkins J, Bono R, Squillacioti G, **Buist AS**, Vermeulen R, Jarvis D, Probst-Hensch N, Zock JP. *Ann Am Thorac Soc*. 2020 Oct 22. doi: 10.1513/AnnalsATS.202002-113OC. Online ahead of print. PMID: 33090904

Occupational and Environmental Contributions to Lung Disease.

Cummings KJ, Lai PS, **Redlich CA**. *Clin Chest Med*. 2020 Dec;41(4):xiii-xv. doi: 10.1016/j.ccm.2020.09.001. PMID: 33153699 **Free PMC article**. No abstract available

WORKING Racial/Ethnic Disparities Across Indicators of Cigarette Smoking in the Era of Increased Tobacco Control, 1992- 2019.

Sakuma KK, Pierce JP, Fagan P, T Nguyen-Grozavu F, Leas EC, Messer K, **White MM**, Tieu AS, Trinidad DR. *Nicotine Tob Res*. 2020 Nov 16:ntaa231. doi: 10.1093/ntr/ntaa231. Online ahead of print. PMID: 33196799

Differential inflammatory potential of particulate matter (PM) size fractions from Imperial Valley, CA.

D'Evelyn SM, Vogel C, Bein KJ, Lara B, Laing EA, Abarca RA, Zhang Q, Li L, Li J, Nguyen TB, **Pinkerton KE**. *Atmos Environ* (1994). 2021 Jan 1;244:117992. doi: 10.1016/j.atmosenv.2020.117992. Epub 2020 Oct 14. PMID: 33184556

Differences in the Estimation of Wildfire-Associated Air Pollution by Satellite Mapping of Smoke Plumes and Ground-Level Monitoring.

Fadadu RP, **Balmes JR**, Holm SM. *Int J Environ Res Public Health*. 2020 Nov 5;17(21):8164. doi: 10.3390/ijerph17218164. PMID: 33167314 **Free PMC article**.

Research Methods and Clinical Care

A scoring system to facilitate diagnosis of Gaucher disease.

Mehta A, Rivero-Arias O, Abdelwahab M, Campbell S, McMillan A, Rolfe MJ, Bright JR, Kuter DJ. *Intern Med J*. 2020 Nov 10. doi: 10.1111/imj.14942. Online ahead of print. PMID: 33174353

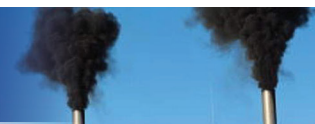
Pulmonary siRNA delivery for lung disease: Review of recent progress and challenges.

Ding L, Tang S, **Wyatt TA**, Knoell DL, Oupický D. *J Control Release*. 2020 Nov 9:S0168-3659(20)30654-4. doi: 10.1016/j.jconrel.2020.11.005. Online ahead of print. PMID: 33181203

Plasma insulin-like growth factor binding protein-7 (IGFBP-7) contributes causally to ARDS 28-day mortality: evidence from multi-stage Mendelian randomization.

Dong X, Zhu Z, Wei Y, Ngo D, Zhang R, Du M, Huang H, Lin L, Tejera P, **Su L**, Chen F, Ahasic AM, Thompson BT, Meyer NJ, **Christiani DC**. *Chest*. 2020 Nov 12:S0012-3692(20)35133-3. doi: 10.1016/j.chest.2020.10.074. Online ahead of print. PMID: 3318965

Tissue Inhibitor of Metalloproteinases-2 Mediates Kidney Injury during Sepsis.



Wen X, Zhang J, Wan X, **Frank AA**, Qu X, Kellum JA. *Nephron*. 2020 Oct 22;1-6. doi: 10.1159/000511165. Online ahead of print. PMID: 33091916 **Free article**.

Neonatal and Pediatric Disease

[Respiratory health, children's lung function, and air quality in four Chinese cities: two snapshots in 1993-1996 and 2017-2018.](#)

Zhang JJ, Kan H, **Kipen HM**. *J Thorac Dis*. 2020 Oct;12(10):6311-6314. doi: 10.21037/jtd-19-crh-aq-preface. PMID: 33209470 **Free PMC article**. No abstract available.

[Chemoradiation impairs myofiber hypertrophic growth in a pediatric tumor model.](#)

Paris ND, Kallenbach JG, Bachman JF, Blanc RS, **Johnston CJ**, Hernady E, Williams JP, Chakkalakal JV. *Sci Rep*. 2020 Nov 11;10(1):19501. doi: 10.1038/s41598-020-75913-w. PMID: 33177579 **Free PMC article**.

[Effect of Implementing the Out-of-Hospital Traumatic Brain Injury Treatment Guidelines: The Excellence in Prehospital Injury Care for Children Study \(EPIC4Kids\).](#)

Gaither JB, Spaite DW, Bobrow BJ, Keim SM, Barnhart BJ, Chikani V, **Sherrill D**, Denninghoff KR, Mullins T, Adelson PD, Rice AD, Viscusi C, Hu C. *Ann Emerg Med*. 2020 Nov 10:S0196-0644(20)31208-7. doi: 10.1016/j.annemergmed.2020.09.435. Online ahead of print. PMID: 33187749

[A genome-wide association study of severe asthma exacerbations in Latino children and adolescents.](#)

Yan Q, Forno E, Herrera-Luis E, Pino-Yanes M, Qi C, Rios R, Han YY, Kim S, Oh S, Acosta-Pérez E, Zhang R, Hu D, Eng C, Huntsman S, Avila L, Boutaoui N, Cloutier MM, Soto-Quiros ME, Xu CJ, Weiss ST, Lasky-Su J, Kiedrowski MR, Figueiredo C, Bomberger J, Barreto ML, Canino G, Chen W, Koppelman GH, Burchard EG, **Celedón JC**. *Eur Respir J*. 2020 Oct 22:2002693. doi: 10.1183/13993003.02693-2020. Online ahead of print. PMID: 33093117

[Maternal Depressive Symptoms, Lung Function, and Severe Asthma Exacerbations in Puerto Rican Children.](#)

Stevens EL, Han YY, **Rosser F**, Forno E, Acosta-Pérez E, Miller GE, Canino G, **Celedón JC**. *J Allergy Clin Immunol Pract*. 2020 Oct 28:S2213-2198(20)31134-X. doi: 10.1016/j.jaip.2020.10.023. Online ahead of print. PMID: 33127521

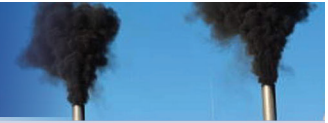
[Early Gestational Exposure to Inhaled Ozone Impairs Maternal Uterine Artery and Cardiac Function.](#)

Garcia M, Salazar R, Wilson T, Lucas S, Herbert G, Young T, Begay J, Denson JL, Zychowski K, Ashley R, Byrum S, Mackintosh S, Bleske BE, Ottens AK, **Campen MJ**. *Toxicol Sci*. 2020 Nov 4:kfaa164. doi: 10.1093/toxsci/kfaa164. Online ahead of print. PMID: 33146391

[Prenatal Metal Mixtures and Birth Weight for Gestational Age in a Predominately Lower-Income Hispanic Pregnancy Cohort in Los Angeles.](#)

Howe CG, Claus Henn B, **Eckel SP**, Farzan SF, Grubbs BH, Chavez TA, Hodes TL, Faham D, Al-Marayati L, Lerner D, Quimby A, Twogood S, Richards MJ, Meeker JD, Bastain TM, Breton CV. *Environ Health Perspect*. 2020 Nov;128(11):117001. doi: 10.1289/EHP7201. Epub 2020 Nov 3. PMID: 33141601 **Free PMC article**.

[Integrated-omics endotyping of infants with rhinovirus bronchiolitis and risk of childhood asthma.](#)



Raita Y, Camargo CA Jr, Bochkov YA, **Celedón JC**, Gern JE, Mansbach JM, Rhee EP, Freishtat RJ, Hasegawa K.J Allergy Clin Immunol. 2020 Nov 13:S0091-6749(20)31585-2. doi: 10.1016/j.jaci.2020.11.002. Online ahead of print.PMID: 33197460

Climate Change, Public Health and Policy

Update on Climate Change: Its Impact on Respiratory Health at Work, Home, and at Play.

Shankar HM, **Rice MB**. Clin Chest Med. 2020 Dec;41(4):753-761. doi: 10.1016/j.ccm.2020.08.004.PMID: 33153692 Review.

Guidelines for Modeling and Reporting Health Effects of Climate Change Mitigation Actions.

Hess JJ, Ranadive N, Boyer C, Aleksandrowicz L, Anenberg SC, Aunan K, Belesova K, Bell ML, Bickersteth S, Bowen K, Burden M, Campbell-Lendrum D, Carlton E, Cissé G, Cohen F, Dai H, Dangour AD, Dasgupta P, Frumkin H, Gong P, Gould RJ, Haines A, Hales S, Hamilton I, Hasegawa T, Hashizume M, Honda Y, Horton DE, Karambelas A, Kim H, Kim SE, Kinney PL, Kone I, Knowlton K, Lelieveld J, Limaye VS, Liu Q, Madaniyazi L, Martinez ME, Mauzerall DL, Milner J, Neville T, Nieuwenhuijsen M, Pachauri S, Perera F, Pineo H, Remais JV, Saari RK, Sampedro J, Scheelbeek P, **Schwartz J**, Shindell D, Shyamsundar P, Taylor TJ, Tonne C, Van Vuuren D, Wang C, Watts N, West JJ, Wilkinson P, Wood SA, Woodcock J, Woodward A, Xie Y, Zhang Y, Ebi KL. Environ Health Perspect. 2020 Nov;128(11):115001. doi: 10.1289/EHP6745. Epub 2020 Nov 10.PMID: 33170741 **Free PMC article.**

Election 2020: Comparison of the American College of Physicians' Vision for a Better U.S. Health Care System With the Presidential Candidates' Plans.

Gantzer HE, Fincher JW, Fox WE, **Kane GC**, Cooney TG, Abraham GM, Andrews R. Ann Intern Med. 2020 Oct 27. doi: 10.7326/M20-7089. Online ahead of print.PMID: 33105093 **Free article.** No abstract available.

The Changing Nature of Wildfires: Impacts on the Health of the Public.

Balmes JR. Clin Chest Med. 2020 Dec;41(4):771-776. doi: 10.1016/j.ccm.2020.08.006.PMID: 33153694 Review.

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

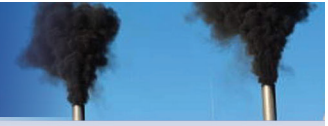
Dual Substance Use of Electronic Cigarettes and Alcohol.

Wetzel TJ, **Wyatt TA**. Front Physiol. 2020 Nov 2;11:593803. doi: 10.3389/fphys.2020.593803. eCollection 2020.PMID: 33224040 **Free PMC article.** Review.

E-cigarette Use and Respiratory Disorder: An Integrative Review of Converging Evidence from Epidemiological and Laboratory Studies.

Wills TA, Soneji SS, Choi K, **Jaspers I**, Tam EK. Eur Respir J. 2020 Nov 5:1901815. doi: 10.1183/13993003.01815-2019. Online ahead of print.PMID: 33154031

Sub-ohm vaping increases the levels of carbonyls, is cytotoxic, and alters gene expression in human bronchial epithelial cells exposed at the air-liquid interface.



Noël A, Hossain E, Perveen Z, Zaman H, Penn AL. *Respir Res.* 2020 Nov 19;21(1):305. doi: 10.1186/s12931-020-01571-1. PMID: 33213456 **Free PMC article.**

Clinical, Bronchoscopic, and Imaging Findings of e-Cigarette, or Vaping, Product Use-Associated Lung Injury Among Patients Treated at an Academic Medical Center.

Aberegg SK, Cirulis MM, Maddock SD, Freeman A, Keenan LM, **Pirozzi CS**, Raman SM, Schroeder J, Mann H, Callahan SJ. *JAMA Netw Open.* 2020 Nov 2;3(11):e2019176. doi: 10.1001/jamanetworkopen.2020.19176. PMID: 33156346 **Free PMC article.**

Cancer

Lower airway dysbiosis affects lung cancer progression.

Tsay JJ, Wu BG, Sulaiman I, Gershner K, Schluger R, Li Y, Yie TA, Meyn P, Olsen E, Perez L, Franca B, Carpenito J, Iizumi T, El-Ashmawy M, Badri M, Morton JT, Shen N, He L, Michaud G, Rafeq S, Bessich JL, Smith RL, Sauthoff H, Felner K, Pillai R, Zavitsanou AM, Koralov SB, Mezzano V, Loomis CA, Moreira AL, Moore W, Tsirigos A, Heguy A, **Rom WN**, Serman DH, Pass HI, Clemente JC, Li H, Bonneau R, Wong KK, Papagiannakopoulos T, Segal LN. *Cancer Discov.* 2020 Nov 11;CD-20-0263. doi: 10.1158/2159-8290.CD-20-0263. Online ahead of print. PMID: 33177060 **Free article.**

Plasma-derived extracellular vesicle analysis and deconvolution enable prediction and tracking of melanoma checkpoint blockade outcome.

Shi A, Kasumova GG, Michaud WA, Cintolo-Gonzalez J, Díaz-Martínez M, Ohmura J, **Mehta A**, Chien I, Frederick DT, Cohen S, Plana D, Johnson D, Flaherty KT, Sullivan RJ, Kellis M, Boland GM. *Sci Adv.* 2020 Nov 13;6(46):eabb3461. doi: 10.1126/sciadv.abb3461. Print 2020 Nov. PMID: 33188016 **Free article.**

Cellular Mechanisms and Extrapulmonary Medicine

PAP Adherence and Nasal Resistance: A Randomized Control Trial of CPAP_{Flex} vs CPAP.

Sunderram J, Ayappa I, Lu SE, Wang H, Black K, Twumasi A, Sanders H, Harrison D, Udasin I, Chitkara N, **de la Hoz RE**, Carson JL, Rapoport DM. *Ann Am Thorac Soc.* 2020 Nov 17. doi: 10.1513/AnnalsATS.202009-1161OC. Online ahead of print. PMID: 33202147



Updates from Terrorism and Inhalation Disasters (TID) Section

Potential phased COVID-19 vaccination strategy:

<https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2020-12/COVID-02-Dooling.pdf>

Funding opportunities

New BARDA DRIVE area of interest (AOI) #5 ReDIRECT (Repurposing Drugs In Response to Chemical Threats)

Under these Special Instructions 011, [BARDA DRIVE](#) is adding AOI #5 as part of its EZ-BAA ([BAA-20-100-SOL-0002](#)). BARDA is requesting abstract submissions for projects that repurpose existing therapeutics as medical countermeasures (MCMs) against chemical threats (cyanide, opioids, nerve agents, chlorine, sulfur mustard, etc.)

BARDA is requesting abstract submissions for projects that repurpose existing therapeutics as MCMs against chemical threats (cyanide, opioids, nerve agents, chlorine, sulfur mustard, etc.). These therapeutics should have a strong mechanistic justification for potential use as MCMs. Ideal candidates for MCMs should have a known safety profile from previous clinical indications or development and be safe and effective for the entire population, including at-risk populations such as pediatrics, geriatrics, pregnant women, and immunocompromised individuals.

MCM candidates should:

1. Already be approved or in late-stage clinical development for a conventional indication similar to the symptomology associated with exposure to a chemical agent; and
2. Utilize improved delivery routes or mechanisms that provide ease of administration (including, but not limited to, reformulation of existing products) to large numbers of exposed individuals during mass casualty situations.

Priority will be given to products manufactured in the United States.

Therapeutics that are eligible for drug repurposing may target any of the following:

1. **Pulmonary Agents:** Development of MCMs to prevent and treat lung damage (including pulmonary edema, pneumonitis, and fibrosis) resulting from exposure to agents such as chlorine, sulfur mustard and phosgene.
2. **Opioids:** Development of MCMs to treat life-threatening respiratory depression caused by opioid overdose. These post-exposure treatments should be quick-acting and effective against a variety of opioids, including synthetic opioids such as Fentanyl. Candidates should have a mechanism of action different from existing opioid receptor antagonists.



3. **Vesicants:** Development of MCMs that limit harmful aspects of exposure to vesicating agents such as sulfur mustard and Lewisite. Particular preference is given to drugs with potential to ameliorate the long term effects of exposure including Mustard Gas Keratopathy.
4. **Blood/Metabolic Agents:** Development of MCMs to treat acute poisoning from agents such as cyanides. Antidotes should be easily administered by first responders in personal protective equipment. Preference is given to those cyanide antidotes that are also effective against smoke inhalation-related exposure.
5. **Nerve Agents and Organophosphorus (OP) Pesticides:** Development of MCMs to treat life-threatening and long-term effects of nerve agents and OP pesticides. Antidotes should be easily administered by first responders in personal protective equipment.
6. Computational approaches to identify candidates for drug repurposing:
 - a. Development of improved methods to rapidly identify FDA approved or late stage candidate compounds that can be repurposed against any of the aforementioned chemical threats.

To be considered responsive under this AOI, respondents should have:

1. A drug that is a candidate for repurposing as a MCM against pulmonary agents, opioids, vesicants, blood/metabolic agents, nerve agents, or organophosphate pesticides; and
2. A FDA approved drug, or one that has completed Phase 2 trials as evidenced by a clinical study report; and
3. A clear rationale as to why the candidate would be efficacious as a chemical MCM.

Priority will be given to MCMs developed in the United States.

RESolution of Inflammation in Environmentally Related disease (RESTORE) (R01 Clinical Trial Not Allowed)
<https://grants.nih.gov/grants/guide/rfa-files/RFA-ES-20-013.html>

The purpose of the RESTORE program is to advance understanding of the role of inflammation resolution pathways at the cellular and molecular level and how exposure to environmental pollutants interferes with these pathways resulting in exposure-induced chronic systemic inflammation and ultimately chronic disease conditions. The initial phase of this program is focused on understanding how chronic exposure to air pollution interferes with resolution of inflammation in pulmonary, cardiovascular, and metabolic systems and diseases.



Save the date: May 14-19, 2021

<https://conference.thoracic.org/attendees/index.php>

The ATS is moving ahead with plans for a hybrid meeting for ATS 2021, May 14-19 in San Diego. The 2021 experience will deliver the science, education, and networking that the pulmonary, critical care, and sleep community has come to expect from the ATS International Conference.



<https://www.thoracic.org/covid/index.php>

Abstract and Case report submission deadline: **WEDNESDAY, DEC. 16, 2020 (5 p.m. ET)**

https://conference.thoracic.org/program/call_for_abstracts/index.php

*****Please choose EOPH Assembly as primary assembly so that your abstract/case report will be programmed appropriately*****

Featured publication of the month:

Association of quantitative CT lung density measurements and lung function decline in World Trade Center workers

Liu X, Reeves AP, Antoniak K, San José Estépar R, Doucette JT, Jeon Y, Weber J, Xu D, Celedón JC, de la Hoz RE. Association of quantitative CT lung density measurements and lung function decline in World Trade Center workers. Clin Respir J. 2020 Nov 26. doi: 10.1111/crj.13313. Epub ahead of print. PMID: 33244876.

Abstract:

Background: Occupational exposures at the WTC site after September 11, 2001 have been associated with presumably inflammatory chronic lower airway diseases.

Aims: In this study we describe the trajectories of expiratory air flow decline, identify subgroups with adverse progression, and investigate the association of those trajectories with quantitative computed tomography (QCT) imaging measurement of increased and decreased lung density.

Methods: We examined the trajectories of expiratory air flow decline in a group of 1,321 former WTC workers and volunteers with at least three periodic spirometries, and using QCT-measured low (LAV%, -950 HU) and high (HAV%, from -600 to -250 HU) attenuation volume percent. We calculated individual regression line slopes for first-second forced expiratory volume (FEV₁ slope), identified subjects with rapidly declining ("accelerated decliners") and increasing ("improved"), and compared them to subjects with "intermediate" (0 to -66.5 ml/year) FEV₁ slope. We then used multinomial logistic regression to model those three trajectories, and the two lung attenuation metrics.

Results: The mean longitudinal FEV₁ slopes for the entire study population, and its intermediate, decliner, and improved subgroups were, respectively, -40.4, -34.3, -106.5, and 37.6 ml/year. In unadjusted and adjusted analyses, LAV% and HAV% were both associated with "accelerated decliner" status (OR_{adj}, 95% CI 2.37, 1.41-3.97, and 1.77, 1.08-2.89, respectively) compared to intermediate decline.

Conclusions: Longitudinal FEV₁ decline in this cohort, known to be associated with QCT proximal airway inflammation metric, is also associated with QCT indicators of increased and decreased lung density. The improved FEV₁ trajectory did not seem to be associated with lung density metrics.

Congratulations to the authors of this publication!!!



Relevant publications for TID Section

Dr. Jeffrey D. Laskin, PhD, Rutgers State University edited a special issue on “Countermeasures Against Chemical Threats” in Annals of the New York Academy of Sciences.

Please see: <https://nyaspubs.onlinelibrary.wiley.com/toc/17496632/2020/1479/1>

Here are TID Section relevant publications from this special issue -

Lazrak A, Song W, Zhou T, Aggarwal S, Jilling T, Garantziotis S, Matalon S. Hyaluronan and halogen-induced airway hyperresponsiveness and lung injury. *Ann N Y Acad Sci.* 2020 Nov;1479(1):29-43. doi: 10.1111/nyas.14415. Epub 2020 Jun 23. PMID: 32578230; PMCID: PMC7680259.

Nick HJ, Rioux JS, Veress LA, Bratcher PE, Bloomquist LA, Anantharam P, Croutch CR, Tuttle RS, Peters E, Sosna W, White CW. Alleviation of methyl isocyanate-induced airway obstruction and mortality by tissue plasminogen activator. *Ann N Y Acad Sci.* 2020 Nov;1479(1):134-147. doi: 10.1111/nyas.14344. Epub 2020 Mar 31. PMID: 32233099; PMCID: PMC7529679.

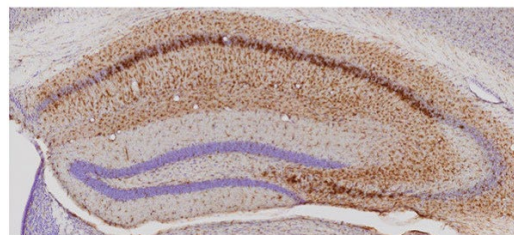
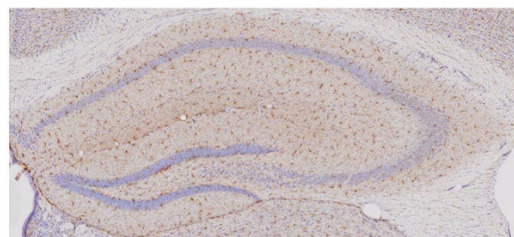
Rana T, Ahmad A, Zafar I, Mariappan N, Chandrashekar DS, Hamid T, Husain M, Varambally S, Ahmad S, Ahmad A. MicroRNA-mediated inflammation and coagulation effects in rats exposed to an inhaled analog of sulfur mustard. *Ann N Y Acad Sci.* 2020 Nov;1479(1):148-158. doi: 10.1111/nyas.14416. Epub 2020 Jun 29. PMID: 32602122.

Hendry-Hofer TB, Ng PC, McGrath AM, Mukai D, Brenner M, Mahon S, Maddry JK, Boss GR, Beberta VS. Intramuscular aminotetrazole cobinamide as a treatment for inhaled hydrogen sulfide poisoning in a large swine model. *Ann N Y Acad Sci.* 2020 Nov;1479(1):159-167. doi: 10.1111/nyas.14339. Epub 2020 Mar 31. PMID: 32233102.

Tuet WY, Racine MC, Jennings L, Pierce SA, Tressler J, McCranor BJ, Wong B. A sex-balanced rodent model for evaluating phosphine inhalation toxicity. *Ann N Y Acad Sci.* 2020 Nov;1479(1):168-179. doi: 10.1111/nyas.14343. Epub 2020 Apr 3. PMID: 32242940.

Manzoor S, Mariappan N, Zafar I, Wei CC, Ahmad A, Surolia R, Foote JB, Agarwal A, Ahmad S, Athar M, Antony VB, Ahmad A. Cutaneous lewisite exposure causes acute lung injury. *Ann N Y Acad Sci.* 2020 Nov;1479(1):210-222. doi: 10.1111/nyas.14346. Epub 2020 Apr 24. PMID: 32329907.

ANNALS of THE NEW YORK ACADEMY OF SCIENCES



VOLUME 1479, SPECIAL ISSUE

NOVEMBER 2020

Countermeasures Against Chemical Threats

McGraw MD, Kim SY, White CW, Veress LA. Acute cytotoxicity and increased vascular endothelial growth factor after in vitro nitrogen mustard vapor exposure. *Ann N Y Acad Sci.* 2020 Nov;1479(1):223-233. doi: 10.1111/nyas.14367. Epub 2020 May 14. PMID: 32408394; PMCID: PMC7666091.

Tidwell RD, Wills BK. Tear Gas and Pepper Spray Toxicity. 2020 Nov 4. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. PMID: 31334983.

Haller JA. Pepper Spray, Tear Gas, and Rubber Bullets: A Witches' Brew of Toil and Trouble. *JAMA Ophthalmol.* 2020 Oct 29. doi: 10.1001/jamaophthalmol.2020.4421. Epub ahead of print. PMID: 33119043.

Tsang ACO, Li LF, Tsang RKY. Health risks of exposure to CS gas (tear gas): an update for healthcare practitioners in Hong Kong. *Hong Kong Med J.* 2020 Apr;26(2):151-153. doi: 10.12809/hkmj198145. PMID: 32300079.

Jung Y, Park NK, Kang S, Huh Y, Jung J, Hur JK, Kim D. Latent turn-on fluorescent probe for the detection of toxic malononitrile in water and its practical applications. *Anal Chim Acta.* 2020 Jan 25;1095:154-161. doi: 10.1016/j.aca.2019.10.015. Epub 2019 Oct 11. PMID: 31864617.

Prescott T. Accidental sulfur mustard exposure from explosive ordnance in a UK military service person. *BMJ Mil Health.* 2020 Nov 26;bmjmilitary-2020-001687. doi: 10.1136/bmjmilitary-2020-001687. Epub ahead of print. PMID: 33243767.

Redy Keisar O, Pevzner A, Baheti A, Vigalok A, Ashkenazi N. Selective detection of chemical warfare agents VX and Sarin by the short wavelength inner filter technique (SWIFT). *Chem Commun (Camb).* 2020 Nov 16. doi: 10.1039/d0cc06948e. Epub ahead of print. PMID: 33196072.

He DK, Xu N, Shao YR, Shen J. NLRP3 gene silencing ameliorates phosgene-induced acute lung injury in rats by inhibiting NLRP3 inflammasome and proinflammatory factors, but not anti-inflammatory factors. *J Toxicol Sci.* 2020;45(10):625-637. doi: 10.2131/jts.45.625. PMID: 33012731.

Kuitunen ML, Altamirano JC, Siegenthaler P, Taure TH, Häkkinen VA, Vanninen PS. Derivatization and rapid GC-MS screening of chlorides relevant to the Chemical Weapons Convention in organic liquid samples. *Anal Methods.* 2020 May 21;12(19):2527-2535. doi: 10.1039/d0ay00263a. PMID: 32930243.

Qu Y, Zhang L, He D, Xu N, Tang Y, Shao Y, Shen J. Protective role of mesenchymal stem cells transfected with miRNA-378a-5p in phosgene inhalation lung injury. *Biochem Biophys Res Commun.* 2020 Sep 10;530(1):189-195. doi: 10.1016/j.bbrc.2020.06.112. Epub 2020 Jul 31. PMID: 32828284.

Qu Y, Zhang L, He D, Xu N, Tang Y, Shao Y, Shen J. Protective role of mesenchymal stem cells transfected with miRNA-378a-5p in phosgene inhalation lung injury. *Biochem Biophys Res Commun.* 2020 Sep 10;530(1):189-195. doi: 10.1016/j.bbrc.2020.06.112. Epub 2020 Jul 31. PMID: 32828284.

The link between CS gas exposure and menstrual cycle issues among female Yellow Vest protesters in France
Yara Mahfud, Alexander Samuel, Elif Çelebi, Jais Adam-Troian
medRxiv 2020.10.11.20210955; doi: <https://doi.org/10.1101/2020.10.11.20210955>

[Exposure to acute normobaric hypoxia results in adaptations of both the macro- and microcirculatory system.](#)

Mirna M, Bimpong-Buta NY, Hoffmann F, Abusamrah T, Knost T, Sander O, Hew YM, Lichtenauer M, Muessig JM, Bruno RR, Kelm M, Zange J, Wilhelm J, Limper U, Jordan J, Tank J, Jung C.
Sci Rep. 2020 Dec 1;10(1):20938. doi: 10.1038/s41598-020-77724-5.
PMID: 33262355

[Exposure Assessment Tools for Hypersensitivity Pneumonitis. An Official American Thoracic Society Workshop Report.](#)

Johannson KA, Barnes H, Bellanger AP, Dalphin JC, Fernández Pérez ER, Flaherty KR, Huang YT, Jones KD, Kawano-Dourado L, Kennedy K, Millerick-May M, Miyazaki Y, Morisset J, Morell F, Raghu GR, Robbins C, Sack CS, Salisbury ML, Selman M, Vasakova M, Walsh SLF, Rose CS.
Ann Am Thorac Soc. 2020 Dec;17(12):1501-1509. doi: 10.1513/AnnalsATS.202008-942ST.
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[Whole body electronic cigarette exposure system for efficient evaluation of diverse inhalation conditions and products.](#)

Zweier JL, Shalaan MT, Samouilov A, Saleh IG, El-Mahdy MA.
Inhal Toxicol. 2020 Nov 30;1-10. doi: 10.1080/08958378.2020.1850935. Online ahead of print.
PMID: 33256483

[Precision Medicine in House Dust Mite-Driven Allergic Asthma.](#)

Eguiluz-Gracia I, Palomares F, Salas M, Testera-Montes A, Ariza A, Davila I, Bartra J, Mayorga C, Torres MJ, Rondon C.
J Clin Med. 2020 Nov 26;9(12):E3827. doi: 10.3390/jcm9123827.
PMID: 33255966 Review.

[The Airway Epithelium-A Central Player in Asthma Pathogenesis.](#)

Calvén J, Ax E, Råding M.

Int J Mol Sci. 2020 Nov 24;21(23):E8907. doi: 10.3390/ijms21238907.

PMID: 33255348 Review.

[Fatal Brain Injury Following Carbon Dioxide Angiography.](#)

Hepburn M, Mullaguri N, Battineni A, Dani D, George P, Newey CR.

J Stroke Cerebrovasc Dis. 2020 Dec;29(12):105350. doi: 10.1016/j.jstrokecerebrovasdis.2020.105350. Epub 2020 Oct 22.

PMID: 33254372

[Evaluating Regional Pulmonary Deposition using Patient-Specific 3D Printed Lung Models.](#)

Peterman EL, Kolewe EL, Fromen CA.

J Vis Exp. 2020 Nov 11;(165). doi: 10.3791/61706.

PMID: 33252111

[Research progress on toxicity, function, and mechanism of metal oxide nanoparticles on vascular endothelial cells.](#)

Wang Z, Tang M.

J Appl Toxicol. 2020 Nov 26. doi: 10.1002/jat.4121. Online ahead of print.

PMID: 33244813 Review.

[Daily inhalation of hydrogen gas has a blood pressure-lowering effect in a rat model of hypertension.](#)

Sugai K, Tamura T, Sano M, Uemura S, Fujisawa M, Katsumata Y, Endo J, Yoshizawa J, Homma K, Suzuki M, Kobayashi E, Sasaki J, Hakamata Y.

Sci Rep. 2020 Nov 26;10(1):20173. doi: 10.1038/s41598-020-77349-8.

PMID: 33244027 **Free PMC article.**

[Persistent Tinnitus after Inhaled N,N-dimethyltryptamine \(DMT\).](#)

Diab H, Malcolm B.

J Psychoactive Drugs. 2020 Nov 26;1-6. doi: 10.1080/02791072.2020.1847366. Online ahead of print.

PMID: 33242285

[Cigarette Smoke Affects Dendritic Cell Populations, Epithelial Barrier Function, and the Immune Response to Viral Infection With H1N1.](#)

Danov O, Wolff M, Bartel S, Böhlen S, Obernolte H, Wronski S, Jonigk D, Hammer B, Kovacevic D, Reuter S, Krauss-Etschmann S, Sewald K.

Front Med (Lausanne). 2020 Nov 6;7:571003. doi: 10.3389/fmed.2020.571003. eCollection 2020.

PMID: 33240904 **Free PMC article.**

[Toxicity of humidifier disinfectant polyhexamethylene guanidine hydrochloride by two-week whole body-inhalation exposure in rats.](#)



Lee YH, Seo DS.

J Toxicol Pathol. 2020 Oct;33(4):265-277. doi: 10.1293/tox.2020-0043. Epub 2020 Aug 9.

PMID: 33239844 **Free PMC article.**

[Exosomes derived from three-dimensional cultured human umbilical cord mesenchymal stem cells ameliorate pulmonary fibrosis in a mouse silicosis model.](#)

Xu C, Zhao J, Li Q, Hou L, Wang Y, Li S, Jiang F, Zhu Z, Tian L.

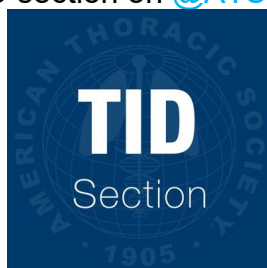
Stem Cell Res Ther. 2020 Nov 25;11(1):503. doi: 10.1186/s13287-020-02023-9.

PMID: 33239075 **Free PMC article.**

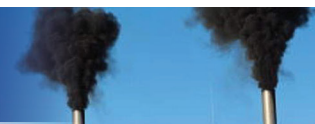


TID section is on **twitter**

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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.



Potential Faculty Positions

Division of Respiratory Medicine at the University of British Columbia (Vancouver, Canada). The career opportunities intersect in a new program on airways disease focused on translational research and implementation science. Find all the information here: <https://www.vchri.ca/legacyforairwayhealth>

Please email us with any additional positions you would like included

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.

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](#).

The ATS COVID-19 Resource Center provides free information to help healthcare providers, patients and their families manage a host of issues related to the COVID-19 pandemic. Content will be updated regularly.

If you have suggestions for resources or ideas for how ATS can best support the pulmonary, critical care, and sleep medicine community during this challenging time, please contact: covid19info@thoracic.org.

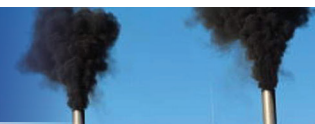
Which can be accessed [HERE](#)

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>

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>



The PhD, Basic and Translational Science Working Group within the American Thoracic Society is developing a **database of scientists** interested in giving virtual seminars during the ongoing COVID-19 pandemic. Our goal is to promote ongoing scientific networking for PhD and basic scientists with an emphasis on facilitating seminars by early career faculty. We would like to invite you to add yourself or share with / invite your colleagues to the database below. The compiled list will be distributed to Division Chiefs, T32 institutional training grant directors, and ATS Assemblies.

Thank you in advance for participation. If you have any questions, please contact Ciara Shaver (ciara.shaver@vumc.org), Alessandra Adami (aadami@uri.edu), or Bethany Moore (bmoore@med.umich.edu).

Volunteer using this link:

https://docs.google.com/spreadsheets/d/1luM1q0g6FciZpOqeI9xHCzeWdTDppvOpxTQ5-o_sDz4/edit?usp=sharing

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