Dear EOPH Members,

As we navigate through this pandemic and try to come to terms with our new normal, we have also decided to revamp how we communicate with the EOPH assembly. 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 Spring 2022 newsletter are some of our members’ recent articles.

We would also like to receive your feedback to identify strengths and areas of improvement for the newsletter going forward. Please participate in a 5-minute survey regarding your experience with the newsletter, and contribute to a word cloud to be published in the next edition of the newsletter. You can find the survey link at https://www.surveymonkey.com/r/CVYGJ8G.

This link will be open until May 18, 2022.

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.

Best,

EOPH Web Committee
Junior Member Highlight

For this edition of the newsletter, we would like to highlight Dr. Sophia Kwon, DO, MPH, from New York University Grossman School of Medicine. She has been working with the World Trade Center exposed Fire Department of New York City –NYU collaboration for the past 12 years focusing on longitudinal biomarkers of disease in this cohort of firefighters with exposure to World Trade Center particulate matter. Her recent work “Dynamic Metabolic Risk Profile of World Trade Center Lung Disease: A Longitudinal Cohort Study” published in the American Journal of Respiratory and Critical Care Medicine and was highlighted in an editorial by Dr. Fernando Holguin.

Metabolic syndrome, having at least three out of five conditions including obesity, hyperlipidemia, hypertension, and insulin resistance, had been previously shown to have increased risk of developing persistent obstructive airways disease after World Trade Center exposure in this cohort (N=16000). Dr. Kwon has since investigated serial, longitudinal measurements and used several important models to better understand the complex temporal relationship between lung disease, exposure, and traditionally cardiovascular risk factors. She also assessed the potential reversibility of these biomarkers and found that reduction in the risk factors could also risk of lung disease. Dr. Kwon and her group also further created an interactive risk assessment calculator that could predict the dynamic risk based on metabolic syndrome risk factors.

This field is of particular interest given the rising concerns of climate change, subsequent worsening ambient particulate matter exposure, and comorbid metabolic syndrome that could give rise to further inflammatory sequelae and pulmonary disease. The frameshift in investigating traditional markers of cardiovascular disease and investigating them as pulmonary ones gives interesting thought to multiple areas to mitigate disease after particulate matter exposure. This quarter’s newsletter also reflects this burgeoning interest in the field with multiple interesting publications investigating the often-comorbid detriments to respiratory health: metabolic health and particulate matter exposure. The contribution of socioeconomic status also overlaps heavily with metabolic risk factors and respiratory disease.

Dr. Kwon is finishing her critical care fellowship at NYU, and has accepted a position as junior faculty with the same institution for the upcoming academic year. On behalf of the EOPH Web Editorial Committee, we congratulate her for her achievements and look forward to more of her future work.

Please let us know if you have junior members whose work you would like to have highlighted in the next newsletter! Please contact anna.nolan@med.nyu.edu.
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


Asthma and Allergy


Diet, Asthma, and Severe Asthma Exacerbations in a Prospective Study of Puerto Rican Youth.

Persistent overweight or obesity, lung function, and asthma exacerbations in Puerto Rican youth.

Using Bayesian time-stratified case-crossover models to examine associations between air pollution and "asthma seasons" in a low air pollution environment.

HEPA filtration intervention in classrooms may improve some students' asthma.

COPD, Chronic Bronchitis

Household air pollution and COPD: cause and effect or confounding by other aspects of poverty?

Household air pollution and COPD: cause and effect or confounding by other aspects of poverty?

Forced Expiratory Flow at 25%-75% Links COPD Physiology to Emphysema and Disease Severity in the SPIROMICS Cohort.

Racial and Ethnic Minorities Have a Lower Prevalence of Airflow Obstruction than Non-Hispanic Whites.

Optimism is associated with respiratory symptoms and functional status in chronic obstructive pulmonary disease.

The Air We Breathe: Respiratory Impact of Indoor Air Quality in Chronic Obstructive Pulmonary Disease.
Chronic respiratory disease in adult outpatients in three African countries: a cross-sectional study.


Occupational Injuries and Environmental Exposures


Chemistry, lung toxicity and mutagenicity of burn pit smoke-related particulate matter.
Transcriptomics of single dose and repeated carbon black and ozone inhalation co-exposure highlight progressive pulmonary mitochondrial dysfunction.


Ambient ozone effects on respiratory outcomes among smokers modified by neighborhood poverty: An analysis of SPIROMICS AIR.


Acute air pollution exposure increases TETs in human PBMCs.


Controlled human exposure to diesel exhaust: a method for understanding health effects of traffic-related air pollution.


Effects of Traffic-Related Air Pollution on Exercise Endurance, Dyspnea, and Cardiorespiratory Responses in Health and COPD: A Randomized, Placebo-Controlled, Crossover Trial.


Lung cancer incidence among world trade center rescue and recovery workers.


Live cell imaging of oxidative stress in human airway epithelial cells exposed to isopropyl hydroxyhydroperoxide.

Neonatal and Pediatric Disease

Daily Associations of Air Pollution and Pediatric Asthma Risk Using the Biomedical REAL-Time Health Evaluation (BREATHE) Kit.

Quantification and Analysis of Micro-Level Activities Data from Children Aged 1-12 Years Old for Use in the Assessments of Exposure to Recycled Tire on Turf and Playgrounds.

Prenatal Exposure to Air Pollution and Autism Spectrum Disorder: Sensitive Windows of Exposure and Sex Differences.

The role of growth and nutrition in the early origins of spirometric restriction in adult life: a longitudinal, multicohort, population-based study.

Variability and predictors of urinary organophosphate ester concentrations among school-aged children.

Comparison of the Respiratory Resistomes and Microbiota in Children Receiving Short versus Standard Course Treatment for Community-Acquired Pneumonia.

Global Health


Effect of a solar lighting intervention on fuel-based lighting use and exposure to household air pollution in rural Uganda: A randomized controlled trial. Wallach ES, Lam NL, Nuwagira E, Muyanja
Climate Change, Public Health and Policy


Effects of short-term increases in personal and ambient pollutant concentrations on pulmonary and cardiovascular function: A panel study analysis of the Multicenter Ozone Study in older subjects (MOSES 2).


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

Spatial analysis of tobacco outlet density on secondhand smoke exposure and asthma health among...


### Cellular Mechanisms


### Sarcoidosis, Interstitial Lung Disease and Transplant


**Possible Alternate Explanation for Cases of Idiopathic Pulmonary Fibrosis.** Frank AL. Ann Am Thorac Soc. 2022 Mar 15. doi: 10.1513/AnnalsATS.202202-139LE. Online ahead of print. PMID: 35289726


Member Announcements

Overarching Goals of the Apprenticeship Program
The Environmental, Occupational and Population Health (EOPH) Assembly’s Apprenticeship Program is designed to provide early career EOPH Assembly members with an opportunity to be directly involved in guiding the future of ATS. For the purposes of this application, we define “early career” as senior fellows or early career faculty (i.e. less than 3 years from fellowship), though other applications will be considered. Apprentices may serve on the Program, Planning or Web Committee (descriptions below). Under the mentorship of a committee member, Apprentices will get a ‘behind the scenes’ look at the operations of the EOPH Assembly while developing skills for evaluation of committee applications and development of committee projects. This provides important networking opportunities with current Committee members.


Please email Alex Noel anoel@lsu.edu and Dan Croft daniel_croft@urmc.rochester.edu by May 13th (ATS 2022) if interested in the apprenticeship program.

Also, here is some mentoring info: We’ll have a mentoring meeting spot and mentoring reception at the convention center. The Mentoring meeting spot will be available on Sun, 5/15 and Mon, 5/16 from 7 am – 7 pm.

We’ll also have one mentoring reception after the membership meetings on Sun, 5/15 from 7 pm – 9 pm.

Potential Faculty Positions

Please email us with and potential job openings that you would like included.

Other RESOURCES

Are you interested in getting more involved with ATS and the EOPH assembly? Register to indicate your interest! https://www.thoracic.org/members/assemblies/get-involved-with-ats.php

San Francisco Conference 2022

Info

Below is a list of the EOPH Events. Hope you can join us.

EOPH Events at ATS2022

KEYNOTE
K2: CUTTING THROUGH THE SMOKE: CONFRONTING THE CLIMATE CRISIS THROUGH PATIENT CARE AND POLICY
MONDAY, MAY 16 – 8:15 AM – 9:00 AM

RAPID POSTER DISCUSSION
B25: ADVANCES IN OCCUPATIONAL LUNG DISEASE
MONDAY, MAY 16 - 9:30 AM-11:00 AM

MINI-SYMPOSIA
A14: INVESTIGATING COPD HEALTH INEQUITIES  
    SUNDAY, MAY 15 - 9:30 AM-11:00 AM

A95: THE IDEA GENERATOR: NOVEL RISK FACTORS AND FRESH APPROACHES TO DISEASE CHARACTERIZATION  
    SUNDAY, MAY 15 - 2:15 PM-3:45 PM

C95: WORLD TRADE CENTER 20TH ANNIVERSARY AND BEYOND  
    TUESDAY, MAY 17 - 2:15 PM-3:45 PM

D16: WILDFIRES AND WOODSMOKE  
    WEDNESDAY, MAY 18 - 8:15 AM-9:45 AM

THEMATIC POSTER

A48: SARS CoV-2: SURVEILLANCE, PREVENTION, AND IMPACT  
    SUNDAY, MAY 15 - 9:30 AM-3:45 PM

B48: OCCUPATIONAL AND EXPOSURE-RELATED CASE REPORTS  
    MONDAY, MAY 16 - 9:30 AM-3:45 PM

C50: EMERGING EPI IN OBSTRUCTIVE AND RESTRICTIVE LUNG DISEASE  
    TUESDAY, MAY 17 - 9:30 AM-3:45 PM

POSTER DISCUSSION

A25: TOBACCO AND THC HEALTH SCIENCE  
    SUNDAY, MAY 15 - 9:30-11:00 AM

B105: MORE CALLS TO ACTION: AIR POLLUTION EXPOSURES AND HEALTH  
    MONDAY, MAY 16 - 2:15-3:45 PM

C25: TERRORISM, INHALATIONAL DISASTERS, AND DEPLOYMENT-RELATED LUNG DISEASE  
    TUESDAY, MAY 17 - 9:30-11:00 AM

D15: THE VIEW AHEAD: EXPOSURE ASSESSMENT, COMMUNICATION, AND EARLY LIFE IMPACT  
    WEDNESDAY, MAY 18 - 8:15-9:45 AM

SCIENTIFIC SYMPOSIA

A12: (JOINT) THE FULL PICTURE: ASTHMA AS A CASE STUDY IN THE COMPLEXITIES OF EXPOSURE  
    SUNDAY, MAY 15 - 9:30-11:00AM

B9: COVID-19 PANDEMIC AND POST-PANDEMIC: DO AIR POLLUTION AND CLIMATE CHANGE HAVE A ROLE?  
    MONDAY, MAY 16 - 9:30-11:00AM

B92: (JOINT) THE PAST, PRESENT, AND FUTURE OF E-CIGARETTE OR VAPING ASSOCIATED LUNG ILLNESS (EVALI)  
    MONDAY, MAY 16 - 2:15-3:45 PM

C9: SEX, LUNGS, AND ENVIRONMENTAL EXPOSURES  
    TUESDAY, MAY 17 - 9:30-11:00AM

C12: (JOINT) ACHIEVING HEALTH EQUITY IN ASTHMA, LUNG CANCER, COPD, SLEEP, PULMONARY HYPERTENSION AND COVID-19  
    TUESDAY, MAY 17 - 9:30-11:00AM

D86: HEARTH OF THE MATTER: DO HOUSEHOLD AIR POLLUTION INTERVENTIONS IMPROVE HEALTH OUTCOMES  
    WEDNESDAY, MAY 18 - 12:45-2:15 PM

MEET THE EXPERT

ME31: MAPPING HEALTH AND EXPOSURE: GIS TO IMPRESS!  
    TUESDAY, MAY 17 - 7:00-8:00AM

ME41: UPDATE ON BURN PIT LEGISLATION AND ADVOCACY  
    TUESDAY, MAY 17 - 12:15-1:15PM

ME49: SLEEP HEALTH- A NEW FRONTIER OF HARM FROM AIR POLLUTION?  
    WEDNESDAY, MAY 18 - 10:00-11:00AM
Current Events

Dust storm from the Sahara Desert caused significant particulate deposits across Europe.

Storm Celia off the northwest coast of Africa helped bring dust from the Sahara Desert into the atmosphere. Winds then pushed the dust northward into Europe, creating haunting scenes across the region. Dust concentrations in Spain were over five times the European Union’s recommended threshold.

Climate change worsening Saharan dust being brought to areas of Europe is likely a contributor. Contributors include a change in wind and precipitation patterns and widespread desertification in Northern Africa.

We may likely see more of these events in the near future

Please send any future interesting photos and comments for future editions of the EOPH newsletter.

PhD and Basic/Translational Focused Events at ATS2022

Please see the below Brochure
Get your start at the Annual ATS International Conference!

Present your science and receive feedback from experts in respiratory, critical care and sleep medicine.

The Science and Innovation Center is a conference resource for PhDs and other basic and translational scientists to network and learn about emerging new technologies in the field. Programming includes:

- Scientific and career development sessions
- Showcases of the latest research from early career researchers
- Sessions exploring innovative methods and emerging technologies
- Meet and greets with NIH program officers and industry biotech leaders
- Join us at the PhD Reception

To learn more, visit conference.thoracic.org

Scan here for more information on the Science & Innovation Center:

PhDs
Supercharge Your Career

PhD researchers are an extremely important constituency for achieving the mission of the ATS. Become a member and enjoy the many opportunities for PhD researchers within the ATS and contribute to the cutting edge science in our Society!

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The ATS enables strong and productive collaborations

“The ATS improves global health by advancing research, patient care, and public health in pulmonary disease, critical illness, and sleep disorders. PhD researchers are essential members of our Society and engage at all levels of our organization. The close integration of researchers and clinicians is one of the aspects of the ATS that I find most valuable.”

-Lynn Schnapp, MD
ATS President 2021-2022
Updates from Terrorism and Inhalation Disasters (TID) Section

Registration is open for 2022 ATS International Conference: https://conference.thoracic.org/attendees/?_ga=2.208041300.737679429.1648001431-238064050.1634582619

Highlights of TID Section at 2022 ATS International Conference:

This year onwards, TID Section will award two awards!!!

1. Award for outstanding contributions to the mission of TID section
   The award will be given to an individual who has made outstanding scientific and scholarly contributions to areas related to the TID mission. Awardees will be presented with a framed certificate at the ATS International Conference.

   Eligibility and materials to be submitted
   - Associate or full professor (5 or more years from reaching the associate professor level or equivalent)
   - Outstanding contributions to basic or translational science research, education and/or training in areas broadly related to TID
   - Nominees must be an EOPH /TID member
   - Nominations must include a cover letter (<2 pages) from an assembly member describing candidate’s qualification and accomplishments and why the award is appropriate. Letters can be co-signed by more than one nominator. Members cannot self-nominate
   - Nominee’s curriculum vitae must be included in the submission.
   - Previous awardees are not eligible for the same award
   - Applications will be reviewed by the TID Executive Committee with members who are in conflict excluded.

2. Outstanding TID Abstract award
   This award recognizes a trainee (graduate student, post-doctoral fellow, clinical trainee) or early scientist/faculty (within 3 years of first faculty appointment) for their abstract at the ATS International Conference related to TID. Awardees will be presented with a framed certificate at the ATS International Conference.

   Eligibility and Evaluation Criteria
   - Nominees must be an EOPH/TID member
   - Previous awardees are not eligible for the same award
   - Judging will be conducted by the EOPH program committee including TID delegates.
• The award will be selected based on the highest ranking abstract related to the work of TID that is submitted to an EOPH abstract category

TID Section is coming with an exciting agenda for the annual meeting. Stay tuned on the website and social media for the updates...

In the news:

Dr. Sven-Eric Jordt, PhD, an expert in nicotine and tobacco products, interviewed by New York Times on Rising Use of Synthetic Nicotine

While the FDA has prohibited the sale of many electronic cigarette products, manufacturers have taken advantage of a loophole by selling e-cigarettes containing synthetic nicotine that the FDA wasn’t authorized to regulate. The issue became so urgent that Congress decided to include legislation in the omnibus budget bill signed by President Biden on Friday, bringing synthetic nicotine under the FDA’s authority. In this article, Dr. Sven-Eric Jordt raises concerns about the health effects of some forms of synthetic nicotine that differ from tobacco-derived nicotine.


COVID-19 Vaccination Materials

ATS COVID-19 Resources

COVID-19: The ATS Response (thoracic.org)

Funding opportunities
Notice of Intent to Publish a Funding Opportunity Announcement for Countermeasures Against Chemical Threats (CounterACT) Therapeutics Discovery and Early Stage Development (UG3/UH3 Clinical Trial Not Allowed)

Notice of Special Interest (NOSI): CCRP Administrative Supplement for Collaborative Science to Synergize Chemical Medical Countermeasures Discovery and Early Development


Countermeasures Against Chemical Threats (CounterACT) Exploratory/Developmental Projects (R21 Clinical Trial Not Allowed)


Relevant publications for TID Section


A note on TID Section website: Our TID Section website (https://www.thoracic.org/members/assemblies/sections/tid/) has many resources and exciting updates. Please check out it once and consider going through each and every link. If you have any suggestions to improve our website, please feel free to reach out to Web Director or any of the TID Section executive committee members.
Attention trainees and junior faculty: We are looking for someone who is interested to serve on the TID Section Web Editorial Committee. The incumbent will be actively involved in posting updates on social media, updating TID Section website, and assisting in generating content for the newsletters. If interested, please contact Satya Achanta (satya.achanta@duke.edu).

TID 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, 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.

EOPH Leadership

Ilona Jaspers, PhD Chair, Assembly on Environmental, Occupational and Population Health
Stephanie London, MD, DrPH -Past Chair, Assembly on Environmental, Occupational and Population Health

ATS Leadership

Lynn M. Schnapp, MD, ATSF, President
Gregory P. Downey, MD, ATSF, President-Elect
M. Patricia Rivera, MD, ATSF, Vice President
Irina Petrache, MD, ATSF, Secretary-Treasurer
Juan C. Celedón, MD, DrPH, ATSF, Immediate Past President
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