SCIENTIFIC PROGRAM
Monday, August 23, 2021

07:30 - 09:00 / STATUE OF LIBERTY HALL (HALL 1)

SYMPOSIUM 1
Health Effects of Traffic-Related Air Pollution: Assessing the Evidence in an Evolving and Complex World
Chairs: Barbara Hoffmann, Germany
Fred Lurmann, United States

Traffic-Related Air Pollution: A Moving Target, Jeffrey R Brook, Canada
Systematic Methods to Select and Review Epidemiological Literature on the Health Effects of Long-term Exposure to TRAP, Allison P Patton, United States
Results of an HEI Systematic Review on the Health Effects of Long-term Exposure to Traffic-Related Air Pollution, Hanna Boogaard, United States
Knowledge on adverse effects of traffic-related air pollution: have we filled the gap? What more do we need to know?, Francesco Forastiere, Italy
Key Policy Relevant Questions on Traffic and Health, Chad Richard Bailey, United States

Discussants: Daniel Greenbaum, United States
Haneen Khreis, United States
Annette Peters, Germany

07:30 - 08:30 / BROOKLYN BRIDGE HALL (HALL 2)

PANEL DISCUSSION 1
Conflict-of-Interest and Disclosure in Epidemiology
Chair: Colin Soskolne, Canada

Panelists: Juan Pablo Ramos-Bonilla, Colombia
Daniele Mandrioli, Italy
Lisa Bero, United States
Carl Crumro, United States

07:30 - 08:30 / TIMES SQUARE HALL (HALL 3)

E-POSTER DISCUSSION 1
Impacts of Climate-Related Exposures on Human Health
Chairs: Kate Burrows, United States
Daniel Carrión, United States

Long-term exposure to specific humidity and cardiovascular disease hospitalizations in the US Medicare population, Jochem O Klompmaker, United States
Spatio-temporal pattern and climatic determinants of Visceral Leishmaniasis in Italy, Giovenale Moirano, Italy
A cold-health watch and warning system, application to the province of Quebec, Bixun Yan, Canada
The Effect of Climate Variables on the Incidence of Cutaneous Leishmaniasis in Isfahan, Central Iran, Narges Khanjani, Iran
Differential Risk Factors of Climate Change, Health Vulnerabilities and Outreach Opportunities in the Eastern Caribbean, Netanya Greene, Saint Kitts and Nevis

07:30 - 08:30 / EMPIRE STATE BUILDING HALL (HALL 4)

E-POSTER DISCUSSION 2
Environmental Risk Factors for Chronic Kidney Disease
Chairs: Xu Gao, China
Emile Whaibeh, Lebanon

Exposure to non-essential metals and albuminuria: exploring causal associations under a Mendelian randomization framework, Maria Grau Perez, Spain
Association between blood and urine manganese levels and cardiorenal outcomes in adolescents: NHANES 2013-2018, Maria D Politis, United States
Effects of hot weather on kidney disease morbidity and mortality: A systematic review and meta-analysis of epidemiological evidence, Jingwen Liu, Australia
Short-term Exposure to Air pollution and the Attributable Risk of Emergency Room Visits for Kidney Diseases, Whanhee Lee, United States
The association between Air Pollution and Kidney Function: results from the Korea National Health and Nutrition Examination Survey, Eunhee Ha, South Korea
**SCIENTIFIC PROGRAM**
**Monday, August 23, 2021**

07:30 - 08:30 / GRAND CENTRAL HALL (HALL 5)

**MEET THE ISEE PRESIDENT 1**
Led by: ISEE President, Mark Nieuwenhuijsen, Spain
ISEE President-Elect, Andrea Baccarelli, United States

08:30 - 09:30 / E-POSTER GALLERY & NETWORKING LOUNGE

**MORNING NETWORK & E-POSTER VIEWING**
08:30 – 09:00  Display of posters at the E-poster gallery. Questions & answers over the posters
09:00 – 09:30  Poster Viewing Group discussions in the public chat channels in Networking Lounge

09:30 - 11:00 / STATUE OF LIBERTY HALL (HALL 1)

**KEYNOTE SESSION 1**
Chairs: Joan Casey, United States
Marianthi-Anna Klimourtzoglou, United States

When epidemiology meets climate science: new paths to address current and future challenges in climate change research
Ana Maria Vicedo-Cabrera, Switzerland
Advancing Environmental Epidemiology through Data Science Innovations: Current State and Future Challenges
Kiros Berhane, United States

11:00 - 11:30 / BREAK

11:30 - 13:00 / STATUE OF LIBERTY HALL (HALL 1)

**SYMPOSIUM 2**
Environmental Health Inequalities in Indigenous Communities: Lessons and Opportunities
Chairs: Joseph Siragusa Yracheta, United States
Jada L. Brooks, United States

Gene-environmental research in Indigenous communities: sovereignty, data sharing, and community-relevant research, Joseph Siragusa Yracheta, United States
Regional and temporal trends in exposure to ambient air pollution: Findings from the Strong Heart Study, Jada L. Brooks, United States
Metals and cardiometabolic disease in American Indian communities: from observations to interventions, Ana Navas-Acien, United States

11:30 - 13:00 / BROOKLYN BRIDGE HALL (HALL 2)

**SYMPOSIUM 3**
Maximizing the Contributions of Epidemiologic Research to Policy: Selecting, Designing, and Analyzing Influential Studies
Chairs: Kurt Straif, Spain
David A Savitz, United States

Planning Epidemiologic Research in Anticipation of Future Evaluations, Kurt Straif, Spain
Design Strategies for Generating Highly Influential Studies, David A Savitz, United States
What Characteristics of Epidemiologic Evidence Correlate with Study Usefulness or Influence? Experiences in Three Settings, Irva Hertz-Picciotto, United States
Characteristics of Studies that have influence in policy – examples from PFAS epidemiology, Tony Fletcher, United Kingdom
Replay Sessions of Daily Highlights
Pecha Kucha
ISEE Society Sessions
Traditional Oral Sessions
Panel Discussions
E-Poster Discussions
E-Poster Viewing Slots
SNRN & Networking Sessions
Keynote Sessions
Symposia
Lightning Talks

11:30 - 13:00 / TIMES SQUARE HALL (HALL 3)

SYMPOSIUM 4
Hallmarks of Environmental Insults
Chairs: Annette Peters, Germany
Andrea A Baccarelli, United States

Hallmarks of Environmental Insults, Annette Peters, Germany
The Hallmarks of Aging and Environmental Insults: Molecular Mechanisms, Andrea A Baccarelli, United States
The Hallmarks of Environmental Insults and early childhood development, Tim Nawrot, Belgium
The hallmarks of environmental issues and the brain, Jordi Sunyer, Spain

Discussant: Philippe Grandjean, Denmark

11:30 - 13:00 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 2
Climate and Health: Co-benefits
Chairs: Kristie Ebi, United States
Lara Cushing, United States

Heat alerts associated with higher rates of cause-specific hospital admissions but not lower mortality among older adults in the US, Kate R. Weinberger, Canada
Impacts of climate change mitigation and clean cooking access on future childhood stunting in India, Asya Dimitrova, Spain
Climate action for health and wellbeing in cities: systematic development of a database of peer-reviewed studies using machine learning methods, Kristine Belesova, United Kingdom
Air quality-related health co-benefits from Pennsylvania’s entry into the Regional Greenhouse Gas Initiative (RGGI), Hui Yang, United States
Urban resilience: assessing climate vulnerabilities and risk perceptions in the city of Haifa, Israel, Maya Negev, Israel
Policy implications of research on “Climate and health: Co-benefits”. Discussion by Audrey J de Nazelle, UK & Gudrun Weinmayr, Germany

13:00 - 14:00 / E-POSTER GALLERY & NETWORKING LOUNGE

NETWORKING & E-POSTER VIEWING SLOT
13:00 – 13:30 Display of posters at the E-poster gallery. Questions & answers over the posters
13:30 – 14:00 Poster Viewing Group discussions in the public chat channels in Networking Lounge

Poster Viewing Groups (PVG): PVG 6 / PVG 7 / PVG 8 / PVG 9 / PVG 10

13:00 - 14:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 1
Air Pollution and Cardiometabolic Health
Chairs: Barbara Hoffman, Germany
Laura Corlin, United States

Long-term air pollution exposure and sex-specific cardiometabolic health trajectories: the Framingham Offspring Study, Laura Corlin, United States
Association Between Long-Term Exposure to Ambient Air Pollution and Lesion Ischemia in Atherosclerotic Patients, Meng Wang, United States
Habitual Physical Activity Is Associated with Reduced Risk of Cardiovascular Mortality Regardless of Ambient PM2.5 Exposure, Xiang Qian Lao, China
Long-term exposure to ambient PM2.5 leads to increased risk of Type 2 diabetes in urban Delhi and Chennai, India, Siddhartha Mandal, India
Short-term joint effects of multiple air pollutants on cardio-respiratory disease hospital admissions in Cape Town, 2011 – 2016, Temitope Christina Adebayo Ojo, Switzerland
Associations between air pollution and temperature on glycated hemoglobin levels in women of child bearing age, Mike Z. He, United States
14:00 - 15:00 / STATUE OF LIBERTY HALL (HALL 1)

LIGHTNING TALKS 1
Air Pollution and Adverse Health Outcomes

Chairs: Adetoun Mustapha, Nigeria
Imane Sekmoudi, Morocco

Ambient air pollution and academic achievements among US children: a panel study, Wexin Lu, United States
Associations between chronic air pollution and COVID-19 mortality: A patient-level analysis from New York City, Darby Jack, United States
Long-term air pollution exposure and diabetes incidence in two prospective cohorts of U.S. women, Melissa R Fiffer, United States

Long-term exposure to low concentrations of air pollution and cause-specific mortality beyond cardiorespiratory disease: A Danish nationwide cohort study, Rina So, Denmark
Long-term exposure to ambient air pollution and bladder cancer incidence in a pooled European cohort: the ELAPSE project, Jie Chen, Netherlands
Positive attitude, low level of knowledge and inappropriate practices towards air pollution: CAP study in Colombian children and adolescents, Nicolás Calle, Colombia
Using Satellite Data for Environmental Justice Efforts in California, Laura Gladson, United States
Developing an air pollution exposure surveillance system in England, a new national vulnerability indicator, Helen Crabbe, United Kingdom

14:00 - 15:00 / BROOKLYN BRIDGE HALL (HALL 2)

LIGHTNING TALKS 2
Air Pollution and Cardiovascular Outcomes

Chairs: Annette Peters, Germany
Leonard Stockfelt, Sweden

Long-term air pollution exposure and incident stroke in American elderly population: a national cohort study, Tszshan Ma, United States
Quantile regression to examine the association of air pollution with subclinical atherosclerosis in an adolescent population, Adjani Antonela Peralta, United States
Associations between long-term fine particulate matter exposure and hospital procedures in heart failure patients, Cavin Ward-Caviness, United States
The Effects of Short- and Long-term Exposures to Air Pollution on microRNA in Participants of the Normative Aging Study (NAS), Mahdieh Danesh Yazdi, United States
The Association Between PM2.5 and Blood Pressure in Indonesia, Jaime Madrigano, United States
Associations between long-term exposure to UFP and certain inflammatory biomarkers and blood lipid indicators: An Analysis Featuring Peak Exposure Metrics, Cheng Lin, United States
Associations between Air Pollution and County Level Cardiovascular Mortality in the United States by Ecoregions, Daniel W Riggs, United States
Methylation markers associated with air pollution exposure and cardiometabolic health in the Framingham Offspring Study, Laura Corlin, United States
Critical windows of perinatal particulate matter (PM2.5) exposure and preadolescent kidney function, Maria José Rosa, United States

14:00 - 15:00 / TIMES SQUARE HALL (HALL 3)

PANEL DISCUSSION 2
Reflections on Academic Freedom, Scientific Controversy and Consensus Building in Environmental Health

Chairs: Tony Fletcher, United Kingdom
Mildred Maisonet Nogueras, United States

Panelists: Agnes Soares da Silva, USA
Barbara Hoffmann, Germany
David Michaels, USA
Maya Negev, Israel
Monday, August 23, 2021

14:00 - 15:00 / EMPIRE STATE BUILDING HALL (HALL 4)

LIGHTNING TALKS 3
Climate-Related Exposures and Adverse Health Outcomes
Chairs: Turik Benmarhnia, United States
Kate Burrows, United States
The association between postnatal exposure to ambient temperature and rapid infant weight gain, Raanan Raz, Israel
Effect modification of omega-3 fatty acids on short-term associations between ambient air temperature and heart rate variability, Alexandra Schneider, Germany
Environmental quality characterization of public schools transformed into climate shelters in Barcelona: A pilot innovative study, Mónica Ubalde López, Spain
Local mortality impacts due to future air pollution under climate change scenarios in Mozambique, India, and Spain, Vijendra Ingle, Spain
The missing exposure-outcome link: “equivalent” outdoor ambient temperatures for assigning heat-health effects to individual-level temperature exposures in three U.S. cities, Carina J. Gronlund, United States
Wildfire smoke as a driver of covid-19 fatality rates? A synthetic control analysis of San Francisco Bay Area Counties, Lara Schwarz, United States
Local mortality impacts due to future air pollution under climate change scenarios in Mozambique, India, and Spain, Vijendra Ingle, Spain
The missing exposure-outcome link: “equivalent” outdoor ambient temperatures for assigning heat-health effects to individual-level temperature exposures in three U.S. cities, Carina J. Gronlund, United States
Wildfire smoke as a driver of covid-19 fatality rates? A synthetic control analysis of San Francisco Bay Area Counties, Lara Schwarz, United States

14:00 - 15:00 / GRAND CENTRAL HALL (HALL 5)

PANEL DISCUSSION 3
The Critical Role Science-based, Validated Systematic Review Methods Lay to Inform Policy and Decision-Making to Protect Communities Disproportionately Impacted by Harmful Environmental Exposures
Chair: Nicholas Chartres, United States
Panelists: Juleen Lam, United States
Lisa Bero, United States
Tracey Woodruff, United States
Susan L Norris, United States

15:00 - 15:30 / BREAK

15:30 - 17:00 / STATUE OF LIBERTY HALL (HALL 1)

SYMPOSIUM 5
Climate Change, Pollen Exposure Dynamics and Burden of Allergic Disease in North America
Chairs: Lew H Ziska, United States
Amir Sapkota, United States
Evidence for recent climate change and carbon dioxide influence on plant based aero-allergens in the Northern Hemisphere, Lew H Ziska, United States
Recent advancements in the use of remote sensing observations to inform ground level pollen dynamics, Yuyu Zhou, United States
Changes in Timing of Spring Onset, Pollen Exposure, and Burden of Allergic Disease in the Northeastern United States, Amir Sapkota, United States
A machine-learning Strategy for Generating Pollen Estimates and Forecasts in North America, Fiona Lo, United States

15:30 - 17:00 / BROOKLYN BRIDGE HALL (HALL 2)

SYMPOSIUM 6
How will the Covid-19 Pandemic Change Environmental Epidemiology Research?
Chairs: David A Savitz, United States
Manolis Kogevinas, Spain
Changes in the research scope of environmental epidemiology, David A Savitz, United States
Changes in environmental epidemiology research methods due to COVID-19, Cathryn Tonne, Spain
New directions in global environmental health, Manolis Kogevinas, Spain
Discussants: Brooke Anderson, United States
Andrea Baccarelli, United States
Mauricio Barreto, Brazil
Thomas Clasen, United States
Maureen Lichtveld, United States
Gregory Wellenius, United States
SCIENTIFIC PROGRAM
Monday, August 23, 2021

15:30 - 17:00 / TIMES SQUARE HALL (HALL 3)

TRADITIONAL ORAL SESSION 3
Air Pollution and Neurodegeneration

Chairs: Sara Adar, United States
       Aisha Dickerson, United States

Multi-air pollutant exposure and amyotrophic lateral sclerosis (ALS) diagnosis in Denmark, Robbie M Parks, United States
Long-term exposure to ambient air pollution is associated with neuropathologic change of Alzheimer’s Disease at Autopsy, Zhenjiang Li, United States
Air pollution and plasma amyloid beta: Evidence from the Ginkgo Evaluation of Memory Study, Anjum Hajat, United States
The Effect of Ultrafine Particles (PM0.1) on Neurological Disorders in New York State, Ian Ryan, United States
Associations of Long-Term Air Pollution Exposure with Incident Dementia among Older U.S. Adults: The Health and Retirement Study, Boya Zhang, United States
Annual dementia incidence and socioeconomic costs attributable to fine particulate matter (PM2.5) exposure in Sweden, Hedi Krift, Sweden

15:30 - 17:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 4
Causal Inference, Novel Analysis Approaches, and Their Potential Role in Evidence Syntheses in Environmental Epidemiology

Chairs: Andreas Neophytou, United States
       Mary Willis, United States

Maternal exposure to traffic-related pollutants during pregnancy and birth weight: using machine-learning methods to achieve balance in inverse-probability weights, Shuxin Dong, United States
Long-term Exposure to Fine Particulate Matter is Causally Linked to Mortality Among the Elderly, Francesca Dominici, United States
Perinatal health impacts of air pollution mitigation policies: applying g formula to preterm birth in Temuco/Padre Las Casas, Chile, Estela Blanco, Chile
Risk of bias assessments and evidence syntheses for observational epidemiologic studies of environmental and occupational exposures: strengths and limitations, Kyle Steenland, United States

Policy implications of research on “Causal inference, novel analysis approaches, and their potential role in evidence syntheses in environmental epidemiology”. Discussion by Hanna Boogaard, United States

17:00 - 17:30 / BREAK

15:30 - 17:00 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 5
Climate and Health: Planetary Health

Chairs: Joan A Casey, United States
        Amruta Nori-Sarma, United States

Long-term impacts of Atlantic hurricanes on asthma exacerbations among children with asthma in the eastern United States, Kate R. Weinberger, Canada
Strategies for reducing the burden of climate-sensitive diarrheal infections on young children, Anna Dimitrova, United States
The association of childhood exposure to crop yield variation and survival in a subsistence farming population in Burkina Faso, Kristine Belesova, United Kingdom
Extreme Precipitation and Legionnaires Disease Hospitalizations in Boston, Massachusetts from 2002-2012, Timothy J Wade, United States
Tropical cyclones and mortality in the United States, Robbie M Parks, United States

Ethical implications of research on “Climate and health: Planetary health”. Discussion by Tim Takaro, Canada & Laura Geer, United States
17:30 - 18:30 / STATUE OF LIBERTY HALL (HALL 1)

LIGHTNING TALKS 4
The Role of Built Environment on Health
Chairs: Audrey de Nazelle, United Kingdom
Rena Jones, United States

Associations of urban environment features with hypertension and blood pressure across 230 Latin American cities, Ione Avila-Palencia, United States
Socioeconomic disadvantage is associated with increased risk of mortality from COVID-19, Timothy J Wade, United States

Impacts of green space on mental health during the COVID-19 pandemic in Denver, Colleen E Reid, United States
Time for ‘Green’ during COVID-19? A nationally-representative study of nature, connectedness and coping in Australia during the COVID-19 pandemic, Xiaoqi Feng, Australia
A systematic review of studies on the role of age and gender in associations between greenspace and mental health, Tafzila Akter Mouly, Australia

Green walkability and physical activity in UK Biobank, Charlotte J Roscoe, United States
The impact of greenspace and air pollution exposure on incident dementia in the Ginkgo Evaluation of Memory Study, Cindy S. Leary, United States

Outdoor artificial light at night, air pollution, and childhood acute lymphoblastic leukemia, Charlie Zhong, United States
Social Determinants of Housing Quality for U.S. Immigrants: Intersections of Nativity, Race, and Socioeconomic Status, MyDzung T Chu, United States

17:30 - 18:30 / BROOKLYN BRIDGE HALL (HALL 2)

E-POSTER DISCUSSION 3
Climate and Disparities
Chairs: Bruna Koné, Ivory Coast
Jenni Shearston, United States

Are Cooling Centers Optimally Placed to Serve Vulnerable Populations? An analysis of 77 US Cities, Quinn Adams, United States
Social and spatial variation in heatwave-related emergency department visits in Australia, Robert Matthew Beaty, Australia
Exposure to heat during pregnancy and preterm birth in North Carolina: disparities by residential greenness, urbanicity, and socioeconomic status, Ji-Young Son, United States
Socioeconomic level and associations between heat exposure and all-cause and cause-specific hospitalization in 1,814 Brazilian cities: A nationwide case-crossover study, Rongbin Xu, Australia
Extreme temperature, health, and disability: A comparison of health effects between people with and without disabilities, Sera Kim, South Korea
Health Disparities Among Older Adults Following Tropical Cyclone Exposure in Florida, USA, 1999-2016, Kate Burrows, United States

17:30 - 18:30 / TIMES SQUARE HALL (HALL 3)

E-POSTER DISCUSSION 4
Environmental Justice - Disparities
Chairs: Miranda Jones, United States
Estela Blanco, Chile

Environmental health, racial/ethnic health-disparity, and climate impacts of freight transport in the United States, Maninder P.S. Thind, United States
Racial-ethnic Disparities in PM2.5 Exposure in California: Differences by Season and Daily Pollution Level, Tianjun Lu, United States
Health and equity opportunities of commercial corridors revitalization in Colorado, David Rojas, United States
Assessing how students’ respiratory health mediate socioeconomic status and school building conditions’ effects on students’ performance, Yi Lu, United States
Racial-ethnic disparities in exposure to NO2 and PM2.5 in the United States: Insights from spatial decomposition of ambient concentrations, Jiawen Liu, United States
Forty years of road transport NOx emissions reductions in the contiguous United States: an environmental justice analysis, Jaime Benavides, United States
17:30 - 18:30 / EMPIRE STATE BUILDING HALL (HALL 4)

E-POSTER DISCUSSION 5
The Role of Diet in Ameliorating/Exacerbating Environmental Exposure Adverse Health Impacts

Chairs: Chris Lim, United States
Eleni Papadopoulou, Norway

Vitamin D intake modifies the association of household air pollution exposure with maternal disorders of pregnancy, A Kofi Amegah, Ghana
Dietary predictors of prenatal per- and poly-fluoroalkyl substances (PFAS) exposure, Stephanie Eick, United States
Nutritional modulation of fetal susceptibility to iAs-associated gene expression underlying oxidative stress and inflammation in cord blood, Jelili Clark, United States
Dietary intake and blood concentrations of folate and folic acid in relation to serum per- and polyfluoroalkyl substances (PFAS) concentrations, Yu Zhang, United States
Hair mercury levels, dietary intake of omega-3 fatty acids and ovarian reserve among women attending a fertility center, Lidia Minguez Alarcon, United States
HBM4EU-MOM: intervene to raise awareness to specific dietary recommendations and reduce prenatal exposure to mercury, Sónia Namorado, Portugal

17:30 - 18:30 / GRAND CENTRAL HALL (HALL 5)

MEET THE ISEE PRESIDENT 2

Led by: ISEE President, Mark Nieuwenhuijsen, Spain
ISEE President-Elect, Andrea Baccarelli, United States

18:30 - 19:00 / BREAK

19:00 - 20:30 / STATUE OF LIBERTY HALL (HALL 1)

TRADITIONAL ORAL SESSION 6
Bringing It All Back Home: Cancer and the Residential Environment

Chairs: Julia Heck, United States
Mary Ward, United States

Neighborhood socioeconomic status and biomarkers among participants in the US-based Health Professionals’ Follow-Up Study and Nurses’ Health Study, Hari S Iyer, United States
Screening-level assessment of cancer risk associated with ambient air exposure in Aamjiwnaang First Nation, Kristian Larsen, Canada
Ethylene oxide emissions and risk of breast cancer and Non-Hodgkin lymphoma in a large U.S. cohort, Rena R. Jones, United States
Air pollution and breast cancer: an examination of modification by familial breast cancer risk, Nicole M Niehoff, United States
Environmental and social risk factors in association with spatial clustering of childhood cancer incidence, Anke Huels, United States
Residential proximity to animal feeding operations and risk of lymphohematopoietic cancers in the Iowa Women’s Health Study, Jared A Fisher, United States

19:00 - 20:30 / BROOKLYN BRIDGE HALL (HALL 2)

TRADITIONAL ORAL SESSION 7
Built Environment and Health

Chairs: Keren Agayshay, Israel
Richard Remigio, United States

Urban Environment and Growth and Obesity in Preschool Children from Six European Birth Cohorts, Serena Fossati, Spain
A Cross-sectional Study of Brownfields and Birth Defects, Kristen M Rappazzo, United States
Associations of greenspace and cardiorespiratory mortality are driven by private residential gardens: observational evidence from UK Biobank, Charlotte J Roscoe, United States
Assessing the Effect of Ultraviolet Radiation, Residential Greenness and Air Pollution on Vitamin D Levels: A Cohort Study in China, Haofan Zhang, China
More green, less lonely? A longitudinal cohort study, Thomas Astell Burt, Australia

Ethical implications of research on “Built environment and health”. Discussion by Carl Grimes, United States & Miguel Ángel Karam, Mexico
19:00 - 20:30 / TIMES SQUARE HALL (HALL 3)

TRADITIONAL ORAL SESSION 8
Exposure Assessment: Air Pollution
Chairs: Yuming Guo, Australia
Rachel Tham, Australia

New monitoring paradigms and designs for air pollution assessment in epidemiologic cohorts, Sun Young Kim, South Korea
A Random Forest Model for PM2.5 Personal Exposure Assessment for a Chinese Cohort, Yanwen Wang, China
Personal exposure to particulate matter in various modes of transport in Kathmandu, Nepal, Binaya Kc, Nepal
Predictors of indoor PM2.5 and CO in an urban slum settlement in Fort Portal city, Uganda, Winnifred Kansime, Uganda
A Deep Learning Approach for Meter-Scale Air Quality Estimation in Urban Environments Using Very High-Resolution Satellite Imagery, Ata Akbari Asanjan, United States

19:00 - 20:30 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 10
Women’s Environmental Health
Chairs: Lauren Wise, United States
Traci Bethea, United States

Multiple exposures to persistent organic pollutants and diminished ovarian reserve: findings from a French case-control study, Maximilien Génard Walton, France
Associations of pregnancy per- and polyfluoroalkyl substance concentrations and fibroid changes across pregnancy: NICHD Fetal Growth Studies - Singletons cohort, Susanna D Miro, United States
Associations of Phthalates and Phenols, Telomere Length, and Breast Cancer in the Long Island Breast Cancer Study Project, Xueying Zhang, United States
Exposure to particle radioactivity and breast cancer risk in a US-wide prospective cohort, Alexandra J White, United States
Urinary Metals and Metal Mixtures and Incident Natural Menopause in Midlife Women: the Study of Women’s Health Across the Nation, Xin Wang, United States
Long-term particulate matter exposure and bone mineral density in the Women’s Health Initiative, Diddier Prada, United States

19:00 - 20:30 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 9
Phthalate Exposures and Health
Chairs: Nan Li, United States
Nikolas Stratakis, United States

Association between urinary concentration of phthalate metabolites and allergic disorders in Korean children: Korean National Environmental Health Survey (KoNEHS) 2015-2017, Ja Yeon Lee, South Korea
Prenatal Maternal Phthalate Exposures and Trajectories of Childhood Adiposity from Four to Twelve Years, Allison Kupsco, United States
Association of phthalate replacement DINCH metabolite concentrations with adiposity in a multi-site, multi-racial cohort of children, Pamela L Ferguson, United States
The association of gestational and childhood phthalate exposure with adolescent hair cortisol: The HOME Study, Joseph M Braun, United States
Assessment of metabolic perturbations associated with prenatal phthalate exposure among pregnant African American women, Donghai Liang, United States
Pregnancy exposure to phthalates and placental DNA methylation in the French EDEN cohort, Paulina Jedynak, France

20:30 - 21:30 / E-POSTER GALLERY & NETWORKING LOUNGE

NETWORKING & E-POSTER VIEWING SLOT
20:30 – 21:00  Display of posters at the E-poster gallery, Questions & answers over the posters
21:00 – 21:30 Poster Viewing Group discussions in the public chat channels in Networking Lounge

Poster Viewing Groups (PVG): PVG 11 / PVG 12 / PVG 13 / PVG 14 / PVG 15
07:30 - 08:30 / STATUE OF LIBERTY HALL (HALL 1)

LIGHTNING TALKS 5
Epidemiology of PFAS or Heavy Metals
Chairs: Tony Fletcher, United Kingdom
Temitope Ayodeji Laniyan, Nigeria

Cadmium exposure and coronary artery atherosclerosis, Lars Barregard, Sweden
Association between cadmium and genotoxicity and oxidative stress risk biomarkers in a population of Northern Italy, Teresa Urbano, Italy
Arsenic Methylation and Body Composition among Pregnant Women in Rural Northern Bangladesh: The Pregnancy, Arsenic, and Immune Response (PAIR) Study, Tyler J S Smith, United States
Association between heavy metal exposure and liver function markers among Korean adults: Korean National Environmental Health Survey 2015 - 2017, Kim Do Won, South Korea
Association of childhood and perinatal blood metals with children gut microbiome in a Canadian gestation cohort, Yike Shen, United States
Poly- and perfluoroalkyl substances (PFASs) and lipidomics and inflammatory proteomics in the human EuroMix study, Eleni Papadopoulou, Norway
Physical activity modifies the association between prenatal perfluorooctanoic acid exposure and adolescent cardiometabolic risk, Joseph M Braun, United States
COVID-19 and perfluoroalkyl substances (PFAS) from contaminated drinking water in the Veneto Region (Italy): a spatial ecological analysis, Tony Fletcher, United Kingdom
Maternal levels of perfluoroalkyl substances (PFAS) during early pregnancy in relation to pre eclampsia subtypes, Paige Bommarito, United States
Identifying periods of susceptibility to perfluoroalkyl substances and bone mineral density in early adolescence: the HOME Study, Jessie P. Buckley, United States

07:30 - 08:30 / BROOKLYN BRIDGE HALL (HALL 2)

LIGHTNING TALKS 6
Exposure to Fine Particles and Adverse Health Outcomes
Chairs: Haidong Kan, China
Sara Kress, Germany

Associations between Reduced PM2.5 and Improved Health during China’s Clean Air Actions since 2013, Tao Xue, China
Long-term exposure to ambient particulate matter components and mortality: results from six European administrative cohorts within the ELAPSE project, Sophia Rodopoulou, Greece
Long-term air pollution exposure and incident dementia in American elderly population: a national cohort study, Liuhua Shi, United States
Exposure to particulate matter air pollution and age of menarche in a nationwide cohort of US girls, Robert B Hood, United States
Prenatal exposure to PM2.5 constituents and children’s growth trajectory in the first two years: a birth cohort study, Shuang Zhou, China
Short-Term PM2.5 Exposure Impacts Cognitive Performance: A Longitudinal Repeated Measures Study of the Western US 2017-2018, Stephanie E Cleland, United States
Prenatal Air Pollution, Maternal Immune Activation, and Autism Spectrum Disorders, Xin Yu, United States
Long-term ambient PM2.5 and O3 reduced cognitive function in young adults as measured through the Lumosity brain training platform, Lauren H Wyatt, United States
Association between air pollution exposure and handgrip strength as a marker of frailty: findings from the French CONSTANCES cohort, Bénédicte Jacquemin, France

07:30 - 08:30 / TIMES SQUARE HALL (HALL 3)

PANEL DISCUSSION 4
Advancing Environmental Health Equity through Implementation Science
Chair: Gwen Collman, United States
Panelists: Lindsey Ann Martin, United States
Gila Neta, United States
Aruni Bhatnagar, United States
Tamarra James-Todd, United States
Lisa M. Thompson, United States
**SCIENTIFIC PROGRAM**  
**Tuesday, August 24, 2021**

**07:30 - 09:00 / EMPIRE STATE BUILDING HALL (HALL 4)**

**TRADITIONAL ORAL SESSION 11**

*Source-specific Air Pollution and Health*

*Chairs: George Thurston, United States*  
*Xueying Zhang, United States*

Cardio-respiratory disease with contrasted air pollution levels in three municipalities of Abidjan district hospitals, Côte d’Ivoire, *Kouamé Kouadio, Côte d’Ivoire*

Replacing wood with charcoal fuel prevents 1.7 million acute respiratory infections worldwide; evidence from 360,000 children in 30 low- and middle-income countries, *Katherine E. Woolley, United Kingdom*

Health Impact Assessment of PM2.5 control legislation in Korea, *Eunjin Oh, South Korea*

Global health burden of PM2.5, black and organic carbon aerosols, *Sourangsu Chowdhury, Germany*

Source-specific fine particulate matter and hospitalization due to myocardial infarction, *Rachel H. Tao, United States*

**08:30 – 09:30 / E-POSTER GALLERY & NETWORKING LOUNGE**

**MORNING NETWORK & E-POSTER VIEWING**

*08:30 – 09:00*  
Display of posters at the E-poster gallery, Questions & answers over the posters

*09:00 – 09:30*  
Poster Viewing Group discussions in the public chat channels in Networking Lounge

**09:30 - 11:00 / STATUE OF LIBERTY HALL (HALL 1)**

**KEYNOTE SESSION 2**

*Chairs: Chung-Chuan Chan, Taiwan*  
*Andrea Baccarelli, United States*

COVID-19 Containment and Reform for Health and Development Resilience: Taiwan Experiences  
*Chein-Jen Chen, Taiwan*

Omics in Environmental Epidemiology  
*Cavin Ward-Caviness, United States*

**11:00 - 11:30 / BREAK**

**07:30 - 08:30 / GRAND CENTRAL HALL (HALL 5)**

**E-POSTER DISCUSSION 6**

*Household Air Pollution*

*Chairs: Pallavi Pant, United States*  
*Ya-Yun Cheng, United States*

Constructing clean cookstove stack in Ghana, *Theresa Afua Serwaan Tawiah, Ghana*

Estimation of long-term exposure to PM2.5 based on short-term personal measurements in mother-child pairs in rural Ghana, *Misbah Daouda, United States*

Maternal exposure to biomass fuel and birthweight in Kaduna, Northwestern Nigeria: Results from the Child Electronic Growth Monitoring System (CEGROMS), *Musa Abubakar Kuna, United States*

Effects of an LPG stove intervention on gestational blood pressure: findings from Household Air Pollution Intervention Network randomized controlled trial, *Wenlu Ye, United States*

High Fidelity: Delivery and use of an LPG stove intervention during pregnancy in the HAPIN trial, *Ashlinn K Quinn, United States*

Household air pollution and personal CO:PM2.5 relationships during cooking in the GRAPHS cohort: important covariates include wearing compliance, *Mohammed Mujtaba, Ghana*
SYMPOSIUM 7
Presentation and Discussion of ISEE Principles for Evidence Synthesis and Evaluation in Environmental Health with Invited Feedback from Speakers of Major National and International Agencies Relying on Evidence Synthesis in Environmental Health - an ISEE Policy Committee Symposium
Chairs: Jonathan M Samet, United States
Kurt Straif, Spain
ISEE principles for evidence synthesis and evaluation in environmental health, Kurt Straif, Spain
Comments from the perspective of pertinent committees of the US National Academies of Sciences, Jonathan M Samet, United States
Evidence Synthesis and Integration Methods used in the US Environmental Protection Agency’s (EPA) Integrated Risk Information System (IRIS) Program, Kristina Thayer, United States
Approach to assessing the certainty of evidence in environment and health - the case of WHO global air quality guidelines, Dorota Jarosinska, Germany
ISEE principles for evidence synthesis and evaluation in environmental health - Perspectives from HEI, Daniel Greenbaum, United States
ISEE principles for evidence synthesis and evaluation in environmental health: comments from experience on advisory and regulatory committees, Neil Pearce, United Kingdom
ISEE principles for evidence synthesis and evaluation in environmental health: comments from the perspective of the Cochrane Collaboration, Lisa Bero, United States
Fifty years of comprehensive cancer hazard identification: the IARC {Monographs} Programme’s systematic review and synthesis across multiple evidence streams, Mary K Schubauer Berigan, France

SYMPOSIUM 8
Air pollution and Climate impacts in the Eastern Mediterranean Region
Chairs: Narges Khanjani, Iran
Wael Al-delaimy, United States
Concurrent heatwaves and extreme Ozone (O3) episodes: combined atmospheric patterns and impact on human health, Kenza Khomsi, Morocco
Machine-learning regression for forecasting air pollution, Oumaima Bouakline, Morocco
Multiple Air pollutant exposure and lung cancer in Tehran, Iran, Narges Khanjani, Iran Potential health and economic benefits of air quality improvements in Morocco: A simulation based on particles during the COVID19 lockdown, Imane Sekmoudi, Morocco
Environmental Exposure in Lebanese Infants (EELI): A Longitudinal Birth Cohort- Pilot Study, Myriam Mrad Nakhlé, Lebanon
Health Hazards of occupational exposure to airborne biological pollutants on workers in Wastewater treatment plant, Amal Saud Hussein, Egypt

SYMPOSIUM 9
Air Pollution Assessment in a Resource Constrained World
Chairs: Adetoun Mustapha, Nigeria
Eric Coker, United States
Leveraging low-cost air quality sensors and machine learning techniques for air pollution assessment and prediction in urban Ghana, A Kofi Amegah, Ghana
Application of an ultra-low-cost passive sampler for light-absorbing carbon in India and Mongolia, Bujin Bekbulat, United States
Particulate matter measurement in South Africa: are the right questions being asked?, Oyewale Mayowa Morakinyo, Nigeria
Lessons learnt on air pollution assessment around schools in Warri, Nigeria and the policy implications, Adetoun Mustapha, Nigeria
Local design and development of low-cost air sensing and data science methods in sub-Saharan Africa – lessons learnt from Uganda, Engineer Bainomugisha, Uganda
Satellites, mobile-monitoring, and fixed-site measurements to understand local variations in air pollution, globally: the view from Google, Karin Tuxen Bettman, United States
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### 11:30 - 13:00 / EMPIRE STATE BUILDING HALL (HALL 4)

#### SYMPOSIUM 10

**Climate and Health: From Research to Policy in the Context of EU and Belmont Forum Funded Projects**

**Chairs:** Matthew Chersich, South Africa  
Vlatka Matkovic, Belgium

A decade of EU funded Research in Climate, Environment and Health: a review and future perspectives under Horizon Europe, **Richard Tavares, Belgium**

Belmont Forum Climate, Environment and Health Collaborative Research Action: current projects and future perspectives, **Caroline Calshaw, United Kingdom**

The ENBEL project: From research findings to policy, **Kristin Aunan, Norway**

The CHAMNHA project: defining heat impacts on maternal and neonatal health and testing adaptive interventions in Burkina Faso and Kenya, **Adelaide M Lusambili, Kenya**

{Protection, Resilience, Efficiency and Prevention} (PREP), preparing workers and employers for a changing climate, **Jason Glaser, United States**

The role of adaptation measures in contrasting heat-related health effects among vulnerable groups: a review from the EXHAUSTION European project, **Francesca de Donato, Italy**

### 13:00 - 14:00 / GRAND CENTRAL HALL (HALL 5)

#### TRADITIONAL ORAL SESSION 12

**Environmental Exposures and Neurodevelopment**

**Chairs:** Youssef Oulhote, United States  
Raanan Raz, Israel

Prenatal Triclosan Exposure and Neurodevelopment of 2-Year-Old Children in Shangdong, China, **Yunjie Ren, China**

Systematic Review and Meta-analysis on Association Between Air Pollutants and Hippocampal Volume from Magnetic Resonance Imaging in Adults, **Erica Balboni, Italy**

Sex-specific associations of prenatal metal exposures with longitudinal child behavior in the New Hampshire Birth Cohort Study, **Julia Anglen Bauer, United States**

Neurodevelopmental effects of prenatal co-exposure to heavy metals and phthalates, **Ourania Anesti, Greece**

Building blocks of executive function as mediators of the association of prenatal manganese exposure with problem-solving skills among adolescents, **Anna Oppenheimer, United States**

In-utero exposure to indoor air pollution or tobacco smoke and cognitive development in a South African birth cohort study, **Anke Huels, United States**

#### 13:00 - 14:00 / E-POSTER GALLERY & NETWORKING LOUNGE

**NETWORKING & E-POSTER VIEWING SLOT**

13:00 – 13:30  Display of posters at the E-poster gallery, Questions & answers over the posters

13:30 – 14:00  Poster Viewing Group discussions in the public chat channels in Networking Lounge

**Poster Viewing Groups (PVG):**  
PVG 21 / PVG 22 / PVG 23 / PVG 24 / PVG 25

### 14:00 - 15:00 / STATUE OF LIBERTY HALL (HALL 1)

#### LIGHTNING TALKS 7

**Environmental Racism and Inequities**

**Chairs:** Ami Zota, United States  
Yanelli Nunez, United States

Environmental Racism: The Relationship Between Historical Residential Redlining and Current Environmental Hazards, **Jaime Madrigano, United States**

The “cost” of noise at work: an occupational injustice among low wage workers and communities, **Abas Shkembi, United States**

COVID-19 Highlights an Environmental Injustice: Influence of Energy Insecurity on Urban Outdoor Air Pollution during Community Lockdown in South-Central Chile, **Matthew Shupler, United Kingdom**

Exposure to per and polyfluoroalkyl acids (PFAs) from diet and lifestyle factors among Inuit adults of Nunavik, Canada, **Amira M Aker, Canada**

Is the installation of stormwater control measures (i.e., green infrastructure) associated with racial and ethnic minority displacement?, **Alisha Yee Chan, United States**

Exploring the connection between air pollution and COVID-19 in Louisiana, **Pornpimol Kodsup, United States**

Experiences of female agricultural workers in Michigan: Perspectives from the Michigan Farmworker Project, **Alexis J Handal, United States**

Women’s empowerment as a pathway to sustainable and modern energy for all: evidence from the Demographic and Health Surveys, **Daniel Bogale Odo, Ethiopia**

Ambient air pollution and socioeconomic status in China, **Yuzhou Wang, United States**
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13:45 - 15:15 / BROOKLYN BRIDGE HALL (HALL 2)

PECHA KUCHA SESSION
Chair: Ulrike Gehring, Netherlands
Youn-Iee Lim, Denmark

Cardiovascular disease mortality and transportation noise: relative and absolute excess risk by age and gender, Danielle Vienneau, Switzerland
Can Weather Help Explain 'Why Now?': The Potential Role of Hourly Temperature as a Stroke Trigger, Sebastian Thonet Rowland, United States
Urban heat islands and heat health warning systems in Mediterranean cities. Results from the Life ASTI project, Francesca De Donato, Italy
Climate justice and California’s methane super-emitters: An environmental equity assessment of community proximity and exposure intensity, Joan A Casey, United States
The Environmental Injustice of Beauty: an intersectional analysis of vaginal care products by race/ethnicity and socioeconomic status, Greta K. Martin, United States
Association between county-level coal-fired power plant pollution and racial disparities in preterm births from 2000 to 2018, Misbah Daouda, United States
Air Pollution and environmental justice in Latin America: where are we and how can we move forward?, Nelson Gouveia, Brazil
The role of long-term air pollution for COVID-19 infection and severity during pregnancy, Joan A Casey, United States
A cluster analysis of the social and environmental health impacts of the COVID-19 pandemic among low-income youth, Nadav Lev-Sprague, United States

14:00 - 15:00 / TIMES SQUARE HALL (HALL 3)

PANEL DISCUSSION 5
Revolutionary Air Quality Observations from the NASA TEMPO Mission for the Environmental Epidemiology Community
Chair: Aaron Naeger, United States
Michael Newchurch, United States
Allan Just, United States
Elena Colicino, United States
Iván Gutiérrez Avila, United States

14:00 - 15:00 / TIMES SQUARE HALL (HALL 3)

NEW MEMBERS’ MEETING
Led by Beate Ritz, United States
Musa Kana, United States
Michelle Turner, Spain

14:00 - 15:00 / EMPIRE STATE BUILDING HALL (HALL 4)

LIGHTNING TALKS 8
Environmental Exposures and Mental Health
Chair: Rupa Basu, United States
Cole Brokamp, United States

Long-Term Air Pollution Exposures and Major Depression in Older U.S. Adults: The Health and Retirement Study, Rachel S Bergmans, United States
Early life air pollution exposure elevates general psychopathology risk at the transition to adulthood, Aaron Reuben, United States
Associations of Short-term Exposure to Air Pollution and Ambient Temperature Increase with Psychiatric Admissions in Elderly Adults, Xinye Qiu, United States
Early pregnancy exposure to metals and maternal depressive symptom trajectories in Project Viva, Lisa B Rakoff, United States
The association between fine particulate matter exposure and anxiety in US-based cohort Nurses’ Health Study II, Unnati V Mehta, United States
Prenatal Exposure to Perfluoroalkyl Substances and Mental Health in Childhood, Jiajun Luo, United States
Air pollution exposure and different dimensions of depression: findings from the French CONSTANCES cohort, Bénédicte Jacquemin, France
Ambient Heat and Risk of Emergency Department Visits for Mental Health among Adults in the United States, Amiratul Nori Sarma, United States
Association of neighborhood greenness with depressive symptoms in elderly women, Hicran Altug, Germany

15:00 - 15:30 / BREAK
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15:30 - 17:00 / STATUE OF LIBERTY HALL (HALL 1)

SYMPOSIUM 11
Advancing Racial Health Equity through Studies of the Environment and Epigenetic Aging
Chairs: Jamaji C Nwanaji Enwerem, United States
Kristen Malecki, United States

Embracing a “Compound” Exposome Approach to Better Understand Environment and DNA Methylation Age Relationships, Jamaji C Nwanaji Enwerem, United States
Neighborhood deprivation and epigenetic aging, Kathryn G Lawrence, United States
Epigenetic Predictors of Mortality and Neighborhood Disadvantage, Cavin K Ward Caviness, United States
Nasal DNA Methylation Architecture of the ACE2 gene and Epigenetic Aging, Andres Cardenas, United States
Shift Work, DNA methylation and Epigenetic Age, Alexandra J White, United States
Neighborhood Disadvantage, Environmental Justice, Mental Well-Being and Epigenetic Markers of Biological Aging Across Urban and Rural Context, Kristen Malecki, United States

15:30 - 17:00 / BROOKLYN BRIDGE HALL (HALL 2)

SYMPOSIUM 12
Public Health Emergency Response During COVID-19 and Beyond: Empowering Epidemiologic Science Through Data Coordination, Funding, Academic Networks, and Implementation Science
Chairs: Richard Kwok, United States
Aubrey Miller, United States

NIH DR2: Facilitating Harmonization of COVID-19 Epidemiologic Research Through the Availability of Research Tools and Common Measures, Richard Kwok, United States & Aubrey Miller, United States
Leveraging the Fire Fighter Cancer Cohort Study: Evaluating the association of per- and polyfluoroalkyl substances (PFAS) exposures with COVID-19 symptoms and antibody response, Jeff Burgess, United States
COVID-19 Testing for Underserved and Vulnerable Populations: The NIH Rapid Acceleration Of Diagnostics (RADx) Initiative, Experiences from the field, Ivra Hercz, Piccotto, United States
The NIEHS DR2 Network: Addressing COVID-19 Environmental Health Issues Through A Multidisciplinary, Multi-Institution Academic Community of Practice, Erin Haynes, United States
Implementation challenges of a climate-disease monitoring system in the Amazon, William Pan, United States

15:30 - 17:00 / TIMES SQUARE HALL (HALL 3)

SYMPOSIUM 13
The Dual Bottom Line: Case Studies of the Health and Climate Benefits of Active Mobility
Chairs: Matthew Raifman, United States
Patrick Kinney, United States

Health impacts of electric micro-mobility transitions in Barcelona: a scenario analysis, Natalie Mueller, Spain
Mortality Implications of Increased Active Mobility for a Proposed Regional Transportation Emission Cap-and-Invest Program, Matthew Raifman, United States
The effect of super-sized passenger vehicles on walking and cycling, Alistair Woodward, New Zealand
Early results from Te Ara Mua Future Streets: an equity-focused active travel intervention study, Alexandra Kathryn Macmillan, New Zealand

15:30 - 17:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 13
Endocrine Disrupting Chemicals and Cardiometabolic Health across the Life Course
Chairs: Tamarra James-Todd, United States
Barrett Welch, United States

Chlorinated persistent organic pollutants in plasma and risk of cardiovascular disease: a prospective nested case-control study in two Swedish cohorts, Carolina Donat Vargas, Sweden
Per- and polyfluoroalkyl substances and sleep quality among reproductive-aged Black women, Chad Matthew Coleman, United States
Early-life associations between per- and polyfluoroalkyl substances and serum lipids in a longitudinal birth cohort, Annelise Jayne Blomberg, United States
Perfluoroalkyl and polyfluoroalkyl substances (PFAS) and PFAS Mixtures with Incident Hypertension: the Study of Women’s Health Across the Nation 1999-2017, Ning Ding, United States
Racial/ethnic-specific associations of urinary phenols and parabens with adipokines in midlife women: The Study of Women’s Health Across the Nation, Seulbi Lee, United States
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15:30 - 17:00 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 14
Water Exposures and Adverse Health Outcomes

Chairs: Agneta Akesson, Sweden
Elise Elliott, United States

Breastfeeding Initiation and Duration after High Exposure to Perfluoroalkyl Substances through Contaminated Drinking Water: A Cohort Study from Ronneby, Sweden, Christel Nielsen, Sweden
Nitrate in drinking water and risk of birth defects: Findings from a study of over one million births in Denmark, Leslie Thomas Stauyaner, United States
Drinking water disinfection byproducts and ingested nitrate with the risk of endometrial cancer in postmenopausal women, Danielle N Medgyesi, United States
Associations between exposure to drinking water chlorination by-products and congenital malformations—a nation-wide register-based prospective study including 600,000 births, Melle Säve Söderbergh, Sweden
Chlorination by-products in drinking water and risk of bladder cancer – a population-based cohort study, Emilie Helte, Sweden

Ethical implications of research on “Water exposures and adverse health outcomes”. Discussion by Atanu Sarkar, Canada & Katarzyna Kordas, United States

17:00 - 17:30 / BREAK

17:30 - 18:30 / STATUE OF LIBERTY HALL (HALL 1)

E-POSTER DISCUSSION 7
Use of (Low-Cost) Sensors in Environmental Epidemiology - Opportunities and Challenges

Chairs: Darby Jack, United States
Jianzhuo Bi, United States

Particulate Matter Air Pollution in Kolkata, India: Trends and application of Low Cost Sensors, V. Faye Mceull, United States
Impact of Spatiotemporal Factors on Exposure to PM2.5 as Residents move between Residential, Commercial and Recreational areas, Sakshi Jain, Canada
A Longitudinal Study on the Impact of Indoor Temperature on Proximal Heat-Related Symptoms in Older Adults Living in Non-Air-Conditioned Households, Anais Teytou, United States
Wearable sensor-based air and skin temperature (micro)environments during summer: a post hoc randomized 2x2 cross-over trial analysis, Andria Constantinou, Cyprus
Living Labs and other participatory approaches applied to research on multiple environmental exposures and chronic risks, Olivier Laurent, France

17:30 - 18:30 / BROOKLYN BRIDGE HALL (HALL 2)

E-POSTER DISCUSSION 8
Using Administrative Data for Env Epi Studies Beyond Mortality and Cardio-respiratory Morbidity: Opportunities and Challenges

Chairs: Michelle Bell, United States
Maria José Rosa, United States

Association between exposure to PM2.5 components and disease aggravation in Parkinson’s disease: an analysis in New York State, Yanelli Nunez, United States
The impact of air pollution on mortality risk in the older adults with Alzheimer’s disease and related dementias (ADRD), Shuxin Dong, United States
Short-term associations between ground-level ozone exposure and urinary system disease hospital admissions through the emergency room in Beijing, China, Lingzhi Chu, United States
Exposure to Industrial Hog Operations and Gastrointestinal Illness in North Carolina, USA, Arbor J. Quist, United States
Air pollution and emergency department visits for diseases of the musculoskeletal system, Toronto, Canada, Mieczyslaw Szszkowicz, Canada

17:30 - 18:30 / TIMES SQUARE HALL (HALL 3)

E-POSTER DISCUSSION 9
Fossil Fuels: Exposure Assessment and Related Adverse Health Outcomes

Chairs: Nicole Deziel, United States
Ian Tang, United States

Exposure to Spill-related Chemicals and Incident Myocardial Infarction among Deepwater Horizon Response and Cleanup Workers, Dazhe Chen, United States
North Carolina’s Changing Energy Generation Profile and Reductions in Key Air Pollutants, 2000-2019, Adrien A Wilkie, United States
The Government-led initiative for increased LPG adoption in Rwanda: modelling demand scenarios and corresponding health impacts, Jva Ćučić, United Kingdom
Environmental inequality of personal exposure to PM2.5 and black carbon (BC) within- and between-communities in rural Beijing, China, Xiaoying Li, Canada
Decrease in airborne PAH concentrations in Krakow after intensified actions aiming to ban use of solid fuels for domestic heating, Renata Majewska, Poland
Cumulative Lead Exposure Resulting from Coal Power Plants in India, Aaron J Specht, United States
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17:30 - 18:30 / EMPIRE STATE BUILDING HALL (HALL 4)

WOMEN'S NETWORKING SESSION
Chairs: Joan Casey, United States
Marianthi-Anna Kioumourtzoglou, United States

17:30 - 18:30 / GRAND CENTRAL HALL (HALL 5)

SNRN 1: PHD to POSTDOC SESSION
Chairs: Amira Aker, Canada
Max Aung, United States
Panelists: Apolline Saucy, Spain
Blesson Varghese, Australia
Tanya Alderete, United States
Daniel Carrion, United States

18:30 - 19:00 / BREAK

19:00 - 20:30 / STATUE OF LIBERTY HALL (HALL 1)

TRADITIONAL ORAL SESSION 15
Environmental Exposure Impacts on Reproductive Outcomes
Chairs: Mildred Maisonet, United States
Musa Kana, United States

Prenatal exposure to toxic and essential metal/metalloid mixtures is associated with placental genomic signatures, Lauren A Eaves, United States
Increased arsenic levels in both environmental measurements and biomonitoring results are associated with elevated risk of spina bifida, Chihfu Wei, United States
Performance of Urine, Blood, and Integrated Metal Biomarkers in Relation to Birth Outcomes in a Mixture Setting, Pahriya Ashrap, United States
Association between Urinary Phthalate Metabolites and Biomarkers of Oxidative Stress in Pregnant Women - Tainan Birth Cohort Study (TBCS), Po Chin Huang, Taiwan
Prenatal phthalate exposure in relation to placental corticotropin releasing hormone (pCRH) concentrations in the CANDLE study, Emily S Barrett, United States
Ultraviolet radiation and age at natural menopause in a nationwide, prospective US cohort, Huichu Li, United States

19:00 - 20:30 / BROOKLYN BRIDGE HALL (HALL 2)

SYMPOSIUM 14
Innovative Methods for Identifying Perinatal Critical Windows with Mixtures
Chairs: Ander Wilson, United States
Marianthi-Anna Kioumourtzoglou, United States

Critical Windows of Exposure: why do they exist and what do they tell us?, Robert O. Wright, United States
Bayesian Kernel Machine Regression Distributed Lag Models, Ander Wilson, United States
Bayesian distributed lag interaction models using spike and slab priors, Joseph Antonelli, United States
Estimating Perinatal Critical Windows to Environmental Mixtures via Structured Bayesian Regression Tree Pairs, Daniel Carrion, United States
Critical Window Variable Selection for Mixtures: Estimating the Impact of Multiple Air Pollutants on Stillbirth, Joshua Warren, United States
Lagged Weighted Quantile Sum Regression, Chris Gennings, United States

19:00 - 20:30 / TIMES SQUARE HALL (HALL 3)

SYMPOSIUM 15
Pathways to Healthy and More Equitable Cities: Results from Vancouver, London, Accra, and Beijing
Chairs: Jill Baumgartner, Canada
Raphael Arku, United States

Spatial modelling and inequalities in community noise in Accra, Ghana, Sierra N Clark, United Kingdom
Identifying vulnerable urban neighbourhoods and their environmental, density, and housing characteristics in Accra, Ghana using census and remote sensing data, Robert Charles MacTavish, Canada
The change in life expectancy inequality in London, Theo Rashid, United Kingdom
Geographic variation of life expectancy and all-cause mortality in Beijing, Qiuju Deng, China
Quantifying within-city inequalities in child mortality across neighbourhoods in Accra, Ghana, Honor Bischy, Canada
A spatiotemporal analysis of inequalities in life expectancy and 20 causes of mortality in sub-neighbourhoods of Metro Vancouver, Canada, 1990-2016, Jessica Yu, Canada
Land use regression modelling of ambient PM2.5 air pollution in Accra, Ghana, Abosede S Alli, United States
LIGHTNING TALKS 9
Environmental Exposures and Child Neurodevelopment

**Chairs:** Marc Weisskopf, United States
Hannah Laue, United States

Early-life exposure to lead and antisocial behaviors during childhood and adolescence, *Jaime D. Reyes Sánchez*, Mexico
Fluoride exposure and internalizing symptoms in adolescents in a United States cohort, *Emily A. Adkins*, United States
Residential greenspace and internalizing behaviors in early childhood, *Marnie F Hazlehurst*, United States
Does Early Life Phthalate Exposure Mediate Racial Disparities in Children’s Cognitive Abilities?, *Marisa A Patti*, United States
Effects of prenatal exposure to air pollution on toddler neurodevelopment and effect modification by ambient temperature, *Ting Yu*, China
Prenatal PM2.5 and subcortical volumes in children with neurodevelopmental disorders, *Elza Rechtman*, United States
Fine particulate matter relates to white matter microstructure alterations in U.S. children, *Megan M. Herting*, United States
Portable HEPA Filter Air Cleaner Use During Pregnancy and Children’s Behavior Problem Scores: The UGAAR Randomized Controlled Trial, *Undarmaa Enkhbat*, Canada

20:30 - 21:30 / E-POSTER GALLERY & NETWORKING LOUNGE

NETWORKING & E-POSTER VIEWING SLOT
20:30 – 21:00 Display of posters at the E-poster gallery. Questions & answers over the posters
21:00 – 21:30 Poster Viewing Group discussions in the public chat channels in Networking Lounge

Poster Viewing Groups (PVG): PVG 26 / PVG 27 / PVG 28 / PVG 29
07:30 - 08:30 / STATUE OF LIBERTY HALL (HALL 1)

E-POSTER DISCUSSION 10
COVID-19
Chairs: Kai Chen, United States
Mahnaz Badpa, Germany

Air quality changed disproportionately across the world urban agglomerations, countries, and regions due to COVID-19 lockdown measures, Jiawei Zhang, Denmark
Social-distancing Fatigue: Evidence from Real-time Crowd-sourced Traffic Data, Jenni A Shearston, United States
Effects of the COVID-19 shutdown on spatial and temporal patterns of air pollution in New York City, Masha Pitiranggon, United States
Household air pollution and associated risk factors before and during COVID-19 Hard Lockdown in South Africa, Joshua D Vande Hey, United Kingdom
Association between air quality and COVID-19 infection case numbers, Wei Jie Seow, Singapore

07:30 - 08:30 / BROOKLYN BRIDGE HALL (HALL 2)

PANEL DISCUSSION 6
SNRN/CAPE
We Want to Hear From You: Why and How to Write an Environmental Epidemiology Commentary
Chairs: Laura Corlin, United States
Mary Willis, United States

Panelists: Laura Corlin, United States
Mary Willis, United States
Manolis Kogevinas, Spain
Keeve Nachman, United States
Haneen Khreis, United States

07:30 - 08:30 / TIMES SQUARE HALL (HALL 3)

PANEL DISCUSSION 7
Building the Evidence Base to Advance Climate And Health Practice: Lessons Learned from Ongoing Translational Research Projects at the Centers for Disease Control and Prevention (CDC) and Its Partners
Chair: Ambarish Vaidyanathan, United States

Panelists: Paul Schramm, United States
Jesse Bell, United States
Arie Manangan, United States
Shubhayu Saha, United States
Matthew Roach, United States
Erin Lipp, United States

07:30 - 08:30 / EMPIRE STATE BUILDING HALL (HALL 4)

E-POSTER DISCUSSION 11
Emerging Topics
Chairs: Beate Ritz, United States
Efisama B. Yomi-Agbajor, Nigeria

A geospatial modeling approach to quantifying risk of exposure to environmental chemical mixtures via a common molecular initiating event, Kristin M Eccles, United States
Collaborative Research: Partnering with the community to improve the science and its impact, Melanie Pearson, United States
Estimating the relative contribution of environmental and genetic factors to different aging traits by comprising correlated variables into risk scores, Claudia Wigmann, Germany
The climate exposome: a new tool for addressing the health impacts of climate change, Denis A. Sarigiannis, Greece
Personal External Exposomes from Around the World, Krystal J Godri Pollitt, United States

08:30 – 09:30 / E-POSTER GALLERY & NETWORKING LOUNGE

MORNING NETWORK & E-POSTER VIEWING
08:30 – 09:00 Display of posters at the E-poster gallery. Questions & answers over the posters
09:00 – 09:30 Poster Viewing Group discussions in the public chat channels in Networking Lounge

Poster Viewing Groups (PVG): PVG 30 / PVG 31 / PVG 32 / PVG 33 / PVG 34
KEYNOTE SESSION 3
Slow Violence: Place, Race, and Local Environmental Inequity
Chairs: Devon Corcia Payne-Sturges, United States
Margaret Hicken, United States

In Pursuit of Environmental and Climate Justice
Catherine Coleman Flowers, United States

Critical Infrastructures and the Fight for Environmental Justice
Danielle Purifoy, United States

SYMPOSIUM 16
Health Effects of Glyphosate Herbicide Exposure: Experimental and Epidemiologic Evidence Across the Lifespan
Chairs: Paul J Mills, United States
Jose Ricardo Suarez Lopez, United States

The Ramazzini Institute studies on Glyphosate based herbicides: pilot phase results and state of the art of Global Glyphosate study, Daniele Mandrioli, Italy
Associations of Glyphosate with Testosterone, Cortisol, DHEA, and Estradiol in Ecuadorian Adolescents, Briana Nadine Cortez Chronister, United States
Human glyphosate exposure changes over 25 years and implications for liver health, Paul J Mills, United States
Residential proximity to agricultural glyphosate use and neurobehavior in the CHAMACOS study, Robert B. Gunier, United States
Glyphosate exposure and neurobehavioral outcomes in farmworkers from Zarcero County, Costa Rica, Carly Hyland, United States
Associations of herbicides and DEET repellent metabolites with neurobehavioral performance in adolescents, Jose Ricardo Suarez Lopez, United States

SYMPOSIUM 17
Pathway to Equity in Water, Sanitation and Hygiene (WASH) in Africa Challenges and Opportunities
Chairs: Firdu Zawide, United States
Adetoun Mustapha, Nigeria

Pathway to equity in water, sanitation and hygiene (WASH) in Africa challenges and opportunities, Firdu Zawide, United States
Innovative Approach in Response to the Challenges of Equity to Water, Sanitation and Hygiene (WASH) in Ethiopia, Wondwossen Birke Esthete, Ethiopia
Environmental pollution and water sanitation and hygiene challenges in Nigeria: can it be solved?, Temitope Ayodeji Laniyan, Nigeria
Overview of Regional and International Collaboration on Water, Sanitation and Hygiene in Africa, Andrew Noah Reigns, Nigeria
Pathway to equity in water, sanitation and hygiene (WASH) in Africa: Ethical Implications, Adetoun Mustapha, Nigeria

SYMPOSIUM 18
Climate Change and Maternal and Neonatal Health Outcomes: New Methods to Address Heat Impacts in Vulnerable Populations
Chairs: Kristie Ebi, United States
Anthony Ngugi, Kenya

Systematic review of the effect of ambient heat on maternal health outcomes, Matthew Chersich, South Africa
Effects of ambient temperature on maternal behaviour and health-related functioning in Burkina Faso, Cherrie Part, United Kingdom
Heat stress and risk of preterm birth: A case-crossover study from Sweden 2014 to 2019, Massimo Stafoggia, Italy
Extreme heat experienced by pregnant subsistence farmers in The Gambia: impact on maternal physiology and fetal distress, Ana Bonell, United Kingdom
Association between maternal exposure to extreme heat and the risk of preterm birth in China: a sibling-matched study, Qiong Wang, China
### SCIENTIFIC PROGRAM
**Wednesday, August 25, 2021**

#### 11:30 - 13:00 / EMPIRE STATE BUILDING HALL (HALL 4)

**TRADITIONAL ORAL SESSION 16**
Air Pollution and Respiratory Health
*Chairs: Michelle Turner, Spain  
Ashtyn Areal, Germany*

- Modification of Asthma Clinical Trial Treatment Efficacy by Social and Environmental Exposures, *Lizbeth Gomez, United States*
- Association between prenatal and early life household air pollution exposure and child lung function in rural Ghana, *Prince Darko Agyapong, Ghana*
- The Breathe Easy Study: Impacts of Ventilation Improvements on IAQ and Adult Asthma in 40 Existing Homes in Chicago, IL, *Insung Kang, United States*
- Comparing types of exposure metrics for identifying the effects of air pollution: an application in a panel of COPD patients, *Dimitris Evangelopoulos, United Kingdom*
- Genetic susceptibility in air pollution-induced airway inflammation in elderly women, *Sara Kress, Germany*
- Is respiratory care carbon conscious? Rationale and future implications for the CARBON respiratory program, *John Bell, United Kingdom*

#### 11:30 - 13:00 / GRAND CENTRAL HALL (HALL 5)

**TRADITIONAL ORAL SESSION 17**
Exposure to Pesticides and Adverse Health Outcomes
*Chairs: Jonathan Chevrier, Canada  
Yun-Hee Choi, South Korea*

- Associations between 3-phenoxymethoxybenzoic acid levels and hematological measures in adults: Korean National Environmental Health Survey 2012–2014, *Yun Hee Choi, South Korea*
- Residential Proximity and Cumulative Risk Assessment of Agricultural Pesticide Applications in California, *Alexis Temkin, United States*
- Gestational Exposure to Toxicants and Autistic Behaviors using Bayesian Quantile Regression, *Joshua D. Alampi, Canada*
- Residential proximity to agricultural crops and adaptive behaviors in children with autism spectrum disorder from the French ELENA cohort, *Jeanne Sandrine Ongono, France*
- Metabolomic profiles associated with an organic diet intervention in school children in Limassol, Cyprus: A cluster-randomized cross-over trial, *Corina Konstantinou, Cyprus*
- Combined exposure to low level neurotoxic chemicals and child’s neuropsychological performance, *Janja Snoj Tratnik, Slovenia*

#### 13:00 - 14:00 / E-POSTER GALLERY & NETWORKING LOUNGE

**NETWORKING & E-POSTER VIEWING SLOT**
13:00 – 14:00 Poster Viewing Group discussions in the public chat channels in Networking Lounge

*Poster Viewing Groups (PVG): PVG 35 / PVG 36 / PVG 37 / PVG 38 / PVG 39*

#### 13:00 - 14:00 / STATUE OF LIBERTY HALL (HALL 1)

**ISEE GENERAL BUSINESS MEETING**
*Led by: ISEE Treasurer, Michelle Turner, Spain  
ISEE President, Mark Nieuwenhuijsen, Spain  
ISEE President-Elect, Andrea Baccarelli, United States*

#### 14:00 - 15:00 / STATUE OF LIBERTY HALL (HALL 1)

**SYMPOSIUM 19**
What Does It Mean to Think Causally About Mixtures Epidemiology?
*Chairs: Thomas F Webster, United States  
Marc G Weisskopf, United States*

- Mixtures and the Table Two Problem, *Thomas F Webster, United States*
- What do we mean by the effect of a mixture as a whole?, *Marc G Weisskopf, United States*
- Models are a nuisance, *Alexander P Keil, United States*
- Applying a potential outcomes framework to estimate policy-relevant effects of exposure mixtures, *Jessie P Buckley, United States*

#### 15:00 - 15:30 / BREAK

#### 15:30 - 17:00 / STATUE OF LIBERTY HALL (HALL 1)

**SYMPOSIUM 19**
What Does It Mean to Think Causally About Mixtures Epidemiology?
*Chairs: Thomas F Webster, United States  
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- Mixtures and the Table Two Problem, *Thomas F Webster, United States*
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- Applying a potential outcomes framework to estimate policy-relevant effects of exposure mixtures, *Jessie P Buckley, United States*
SCIENTIFIC PROGRAM
Wednesday, August 25, 2021

15:30 - 17:00 / BROOKLYN BRIDGE HALL (HALL 2)

SYMPOSIUM 20
Civic Engagement by Scientists in North America: Experiences and Opportunities
Chairs: George D Thurston, United States
Paul Villeneuve, Canada

Scientist Civic Engagement and the US Ozone Standards in 2020, Kelvin C Fong, United States
Scientist Civic Engagement and the US 2020 Fine Particulate Matter Standards, Joan A Casey, United States
Scientist Civic Engagement and the US EPA’s “Strengthening Transparency in Regulatory Science” Rule, George D Thurston, United States

Indoor radon regulation in Canada: Civic engagement of concerned scientists, Atanu Sarkar, Canada & Anne Marie Nicol, Canada
Stepping Out Of The Lab: Civic Engagement Across Scientific Societies and the Broader Scientific Community in Recent Years, Fernando Tormos Aponte, United States

15:30 - 17:00 / TIMES SQUARE HALL (HALL 3)

TRADITIONAL ORAL SESSION 18
Short-term Air Pollution Exposures and Adverse Health Outcomes
Chairs: Evangelia Samoli, Greece
Chen Chen, United States

Air pollution and hospitalization of patients with idiopathic pulmonary fibrosis in Beijing: a time-series study, Samuel Cai, United Kingdom
Recent exposure to air pollution and its effect on cognitive and mental health: A citizen science panel study in Barcelona, Florence Gignac, Spain
Air Pollution Exposure is Associated with Cognitive Performance: Results from the Einstein Aging Study, Nelson Arley Rogue, United States
Personal exposure to outdoor particulate matter and greenspace in Delhi, India, William Mueller, United Kingdom
Cumulative joint effects of air pollution and extreme heat events among hemodialysis patients, Richard V Remigio, United States
Daily levels of coarse inhalable particles and sick leaves, Timo Lanki, Finland

15:30 - 17:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 19
Exposure Assessment: Biomarkers
Chair: Douglas Walker, United States
Huotian Wu, United States

Central Nervous System (CNS)-Derived Extracellular Vesicles (EVs) as Novel Biomarkers for Environmental Exposure and Disease Progression in ALS, Nicole Comfort, United States
Determinants for serum halflives for linear and branched perfluoroalkyl substances after long-term, high exposure — a study in Romneby, Sweden, Axel Andersson, Sweden
Widespread Exposure to Emerging and Previously Unmeasured Chemicals in Commerce in Pregnant women Across the US, Tracey Woodruff, United States
Combination of multi-residue methods for organic pollutant(s) and metal(s) analysis in hair - Towards a comprehensive assessment of population exposure, Alba Iglesias González, Luxembourg
Assessing the Effects of Metal Mixtures in Urine and Blood on Kidney Function, Maria D. Politis, United States

15:30 - 17:00 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 20
Exposures Mixtures: An Exposome Approach
Chairs: Lida Chatzi, United States
Lea Maitre, Spain

Non-linear and non-additive associations between the pregnancy exposure and birthweight, Elena Colicino, United States
Urban environment and childhood obesity outcomes and weight-related behaviours in primary school children, Jeroen De Bont, Sweden
Prenatal exposure to lipophilic endocrine-disrupting chemicals and liver injury in children using chemical mixture approaches, Vishal Midya, United States
Phenols, phthalates and thyroid hormone levels during pregnancy; relying on toxicological data and Adverse Outcome Pathways to inform epidemiological analysis, Claire Philippat, France
Associations of prenatal exposure to a mixture of EDCs with child social responsiveness in a pooled cohort study, Ghassan B Hamra, United States
Environmental chemicals and cross-sectional cognition among adults in the National Health and Nutrition Examination Survey, Kelly M Bakulski, United States

17:00 - 17:30 / BREAK
E-POSTER DISCUSSION 12
Methodological Advances and Considerations in Environmental Epidemiology

Chairs: Jessie Buckley, United States
Max Aung, United States

Emulating causal dose-response relations between air pollutants and mortality in elders, Yaguang Wei, United States
Spatiotemporal characterization of urban activity and environment with imagery and deep learning, Ricky Nathvani, United Kingdom
Knot placement in the Distributed non-linear lag models (DNLM) framework, Alison M Rector, United States
Seasonal Confounding in Studies of Temperature and Preterm Birth: A Simulation Study, Mengjiao Huang, United States
Mortality displacement as a type of selection bias: consequences and causal perspectives, Hongyok Kim, United States
The Impact of Sample Timing and Study Confidence on Mean Birth Weight Differences Detected in a Meta-analysis of PFHxS, Alexandra Larsen, United States

E-POSTER DISCUSSION 13
Molecular Environmental Epidemiology

Chairs: Carmen Marsit, United States
Susanna Mitro, United States

Gene-Environment Joint Linkage and Association Analysis of Arsenic Exposure and Diabetes-Related Traits in the Strong Heart Family Study, Matthew O. Gribble, United States
Towards epigenomic and metabolomic profiles of chronic organophosphate exposure in residents of California’s Central Valley, Qi Yan, United States
Associations between maternal asthma and atopy and breast milk-derived extracellular vesicle microRNA profiles in the PRISM pregnancy cohort, Anne K. Beach, United States
Bacterial modification of the association between arsenic and autism-related social behavior scores, Hannah E Lue, United States
Ambient Air Pollution Exposure is Associated with the Infant Gut Microbiota, Maximilian J. Bailey, United States
Duration of PM2.5 exposure and alterations in the serum metabolome, Robert B Hood, United States

E-POSTER DISCUSSION 14
Obesogenic Environmental Exposures

Chairs: Damaskini Valvi, United States
Mike He, United States

Associations of neonicotinoids with insulin and glucose homeostasis parameters in US adults: NHANES 2015-2016, Ann M Vuong, United States
Impact of maternal nutritional status during pregnancy on the associations between persistent organic pollutants and childhood overweight, German Cano Sancho, France
Exposure to Phthalates May Accelerate Body Fat Gain in Midlife Women: The Study of Women’s Health Across the Nation (SWAN), Mia Q. Peng, United States
Neighborhood drivability and diabetes incidence in Toronto, Canada, Nicole R Den Braver, Netherlands
The Impact of Long-Term Air Pollution Exposure on Type 1 Diabetes Mellitus-Related Mortality among U.S. Medicare Beneficiaries, Trenton Honda, United States

GENERAL NETWORKING SESSION
Chairs: Jaime Hart, United States
Kate Weinberger, Canada

SNRN 2: NON ACADEMIC JOBS SESSION
Chairs: Temitope Adebayo, Switzerland
Musa Kana, United States
Panelists: Cavin Ward-Caviness, United States
Jaime Madrigano, United States
Veena Singla, United States

18:30 - 19:00 / BREAK
SCIENTIFIC PROGRAM
Wednesday, August 25, 2021

19:00 - 20:30 / STATUE OF LIBERTY HALL (HALL 1)
TRADITIONAL ORAL SESSION 21
Environmental Exposure Impacts on Respiratory Outcomes and Allergies
Chairs: Kate Weinberger, Canada  
Radhika Dhingra, United States

Measuring the Association Between Thunderstorms in the Presence of High Pollen and Risk of Severe Asthma,  
Morrison Luke Smith, United States
Association of blood trihalomethane concentrations with asthma among U.S. Children: NHANES 2005-2012,  
Xinyang Wang, United States
Cockroach exposure and perceived stress interact to predict clinical outcomes in childhood asthma,  
Felicia A Rabito, United States
The influence of the urban forest on the association between fine particulate air pollution and onset of childhood asthma,  
Louise Duquesne, Canada
Changes in asthma and general health after Hurricane Harvey: A natural experiment utilizing an asthma clinical trial, Harris County, TX,  
Abiodun Olayiomi, United States
Impact of vehicular pollution on carboxyhemoglobin levels and respiratory response in urban cyclists,  
Oscar David Diaz, Colombia

19:00 - 20:30 / BROOKLYN BRIDGE HALL (HALL 2)
SYMPOSIUM 21
Inferential Challenges and Methodological Solutions in Air Pollution Epidemiology Studies
Chair: Tarik Benmarhnia, United States

Estimating the effect of long-term exposure to PM2.5 on mortality in Canadian Community Health Survey Cohort using parametric g-computation,  
Chen Chen, United States
A discussion of competing events in epidemiologic studies of air pollution,  
Sindana Ilango, United States
Causal Inference and Machine Learning approaches to discover de novo sub-populations with heterogeneous air pollution health effects,  
Francesca Dominici, United States
Changes in residential exposure to ambient fine particulate matter due to relocation and long-term survival in Canada: a quasi-experimental study,  
Tarik Benmarhnia, United States

19:00 - 20:30 / TIMES SQUARE HALL (HALL 3)
JUNIOR INVESTIGATORS’ NETWORKING SESSION
Chairs: Kate Burrows, United States  
Mary Willis, United States

19:00 - 20:30 / EMPIRE STATE BUILDING HALL (HALL 4)
TRADITIONAL ORAL SESSION 22
Traffic-related Air Pollution and Adverse Health Outcomes
Chairs: Perry Hystad, United States  
Masna Rai, Germany

Long-term exposure to air pollution, road traffic noise, and heart failure incidence: the Danish Nurse Cohort,  
Youn Hee Lim, Denmark
Environmental Exposure to Traffic Pollution and Motor Function in Adolescence,  
Kelly Brunst, United States
Prenatal exposure to near-roadway air pollution and autism spectrum disorders in children, Sarah J Carter,  
United States
Traffic-related air pollution and olfactory impairment among women in a nationwide US cohort, Emily J Werder, United States
Roadway Proximity and Lung Cancer Risk in NIH-AARP Diet and Health Study Participants, Ian D Buller,  
United States
Urban Policy Interventions to Reduce Traffic Emissions and Traffic-Related Air Pollution: A Systematic Evidence Map,  
Kristen A. Sanchez, United States

19:00 - 20:30 / GRAND CENTRAL HALL (HALL 5)
SYMPOSIUM 22
Air Pollution and Human Reproduction: What Do We Know and Where Do We Go From Here?
Chairs: Amelia Wieseling, United States  
Sabah Quraishi, United States

Air Pollution and Reproduction: A focus on the clinical perspective,  
Shruthi Mahalingaiah, United States
Air pollution and fecundability in two preconception cohort studies, Elizabeth E Hatch, United States
Opportunities and challenges in studying air pollution and pregnancy loss, Sandie Ha, United States
The unique opportunities and obstacles when integrating personal air pollution monitoring into studies of human fertility,  
Audrey J Gaskins, United States
Air pollution and environmental health disparities: how disadvantaged communities may be particularly susceptible to poor reproductive outcomes,  
Anjum Hajat, United States
### SCIENTIFIC PROGRAM
**Wednesday, August 25, 2021**

#### 20:30 - 21:30 / E-POSTER GALLERY & NETWORKING LOUNGE

**NETWORKING & E-POSTER VIEWING SLOT**
- 20:30 – 21:00  Display of posters at the E-poster gallery, Questions & answers over the posters
- 21:00 – 21:30  Poster Viewing Group discussions in the public chat channels in Networking Lounge

**Poster Viewing Groups (PVG):**  
PVG 40 / PVG 41 / PVG 42

#### 21:30 - 23:00 / STATUE OF LIBERTY HALL (HALL 1)

**REPLAY OF SESSION: SYMPOSIUM 11**
**Advancing Racial Health Equity through Studies of the Environment and Epigenetic Aging**
**Chairs:** Jamaji C Nwanaji Enwerem, United States  
Kristen Malecki, United States

- Embracing a “Compound” Exposome Approach to Better Understand Environment and DNA Methylation Age Relationships, Jamaji C Nwanaji Enwerem, United States
- Neighborhood deprivation and epigenetic aging, Kaitlyn G Lawrence, United States
- Epigenetic Predictors of Mortality and Neighborhood Disadvantage, Cavin K Ward Caviness, United States
- Nasal DNA Methylation Architecture of the \{ACE2\} gene and Epigenetic Aging, Andres Cardenas, United States
- Shift Work, DNA methylation and Epigenetic Age, Alexandra J White, United States
- Neighborhood Disadvantage, Environmental Justice, Mental Well-Being and Epigenetic Markers of Biological Aging Across Urban and Rural Context, Kristen Malecki, United States

#### 21:30 - 23:00 / BROOKLYN BRIDGE HALL (HALL 2)

**REPLAY OF SESSION: SYMPOSIUM 15**
**Pathways to Healthy and More Equitable Cities: Results from Vancouver, London, Accra, and Beijing**
**Chairs:** Jill Baumgartner, Canada  
Raphael Arku, United States

Spatial modelling and inequalities in community noise in Accra, Ghana, **Sierra N Clark, United Kingdom**
Identifying vulnerable urban neighbourhoods and their environmental, density, and housing characteristics in Accra, Ghana using census and remote sensing data, **Robert Charles MacTavish, Canada**
The change in life expectancy inequality in London, **Theo Rashid, United Kingdom**
Geographic variation of life expectancy and all-cause mortality in Beijing, **Qiuju Deng, China**
Quantifying within-city inequalities in child mortality across neighbourhoods in Accra, Ghana, **Honor Bitch, Canada**
A spatiotemporal analysis of inequalities in life expectancy and 20 causes of mortality in sub-neighbourhoods of Metro Vancouver, Canada, 1990-2016, **Jessica Yu, Canada**
Land use regression modelling of ambient PM2.5 air pollution in Accra, Ghana, **Abosede S Alli, United States**
07:30 - 08:30 / STATUE OF LIBERTY HALL (HALL 1)

E-POSTER DISCUSSION 15
New Evidence for Air Pollution-related Adverse Health Effects from Asia
Chairs: Poornima Prabhakaran, India
Shu-Li Wang, Taiwan

Association between air pollution and hospital admissions for upper respiratory tract infection among children in urban area, Malaysia, Mohd Faiz Ibrahim, Malaysia
The Effects of Ambient Air Pollution and Residential Greenness on Metabolic Disease Biomarkers in China, John S. Ji, China
Association between Specific PM2.5 Chemical Constituents and Preterm Birth in China: A National Birth Cohort Study, Qin Li, China
Mortality burden attributable to long-term exposure to ambient PM2.5: a systematic subnational analysis in 296 Chinese cities, Chunlei Han, Australia
Spatial variation of outdoor and indoor NO2 in metropolitan cities in India, Prince Vijay, India

07:30 - 08:30 / BROOKLYN BRIDGE HALL (HALL 2)

PANEL DISCUSSION 8
Air Pollution and Dementia: Understanding the Underlying Biological Mechanisms
Chair: Anna Oudin, Sweden

Panelists: Anna Oudin, Sweden
Lilian Calderón-Garcidueñas, United States
Zorana Jovanović Andersen, Denmark
Kaija Kanninen, Finland
Pavel Rössner, Czech Republic

07:30 - 09:00 / TIMES SQUARE HALL (HALL 3)

TRADITIONAL ORAL SESSION 23
Ultrafine Particles and Health
Chairs: Scott Weichenthal, Canada
Dimitris Evangelopoulos, United Kingdom

Transcriptomics reveals the mechanisms of population susceptibility to blood glucose associated with short-term exposure to ambient fine and ultrafine particles, Yuan Yao, China
Associations between Short-Term Exposure to Particulate Matter and Ultrafine Particles with Lung Function in Schoolchildren from the German CorPuScula Study, Lina Glaubitz, Germany
Short-term risk effects of exposure to ultrafine particles on emergency department visits of renal diseases in New York State, 2013-2017, Xinlei Deng, United States
Short-Term Particulate Matter, Ultrafine Particles, and Blood Pressure among Children of the CorPuScula Study in Munich, Germany, Sarah Lucht, Germany
Predicting Within-City Variations in Ultrafine Particle and Black Carbon Concentrations in Bucaramanga, Columbia Using Open Source Data and Images, Marshall Lloyd, Canada

07:30 - 09:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 24
Urban Living and Ageing and Longevity
Chairs: Payam Dadvand, Spain
Cuicui Wang, United States

Developing robust indicators of age-friendly neighborhood environments across urban-rural and socioeconomic gradients in 20 countries from five continents, Emily J Rugel, Australia
Urban active living environments and cardiovascular disease mortality: a Canadian national cohort study, Paul Villeneuve, Canada
Exposure to air pollution, blue and green spaces and cause-specific mortality in Greece: An ecological study, Maria Iosifina Kasdagli, Greece
Effect of heatwaves and greenness on mortality among Chinese elderly people, Haojun Zhang, China
Green spaces and risk of dementia-related mortality among the elderly in urban areas in Belgium: a 13-year follow-up census-based study, Lucia Rodríguez Loureiro, Belgium
Does urban greenspace reduce racial and socioeconomic disparities in mortality in Philadelphia, PA?, Leah H Schinasi, United States
SCIENTIFIC PROGRAM
Thursday, August 26, 2021

07:30 - 09:00 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 25
Perfluoroalkyl Substances and Health Across the Life Course
Chairs: Atsuko Araki, Japan
Zeyan Liew, United States

Perfluoroalkyl and Polyfluoroalkyl Substances and Body Size and Composition Trajectories: the Study of Women’s Health Across the Nation 1999-2018, Ning Ding, United States
Perfluoroalkyl substances and risk of myocardial infarction and stroke, Tessa Schillemans, Sweden
Perfluoroalkyl and Polyfluoroalkyl Substances and Body Size and Composition Trajectories: the Study of Women’s Health Across the Nation 1999-2018, Ning Ding, United States
Perfluoroalkyl substances and risk of myocardial infarction and stroke, Tessa Schillemans, Sweden

08:30 – 09:30 / E-POSTER GALLERY & NETWORKING LOUNGE

MORNING NETWORK & E-POSTER VIEWING
08:30 – 09:00  Display of posters at the E-poster gallery. Questions & answers over the posters
09:00 – 09:30  Poster Viewing Group discussions in the public chat channels in Networking Lounge

Poster Viewing Groups (PVG):  PVG 43 / PVG 44 / PVG 45 / PVG 46

09:30 - 11:00 / STATUE OF LIBERTY HALL (HALL 1)

KEYNOTE SESSION 4
Chairs: Beate Ritz, United States
Joel Kaufman, United States

Breaking the impasse in pesticide and health research risk reduction effectiveness in Africa
Andrea Rother, South Africa

Impacts of Developmental Exposure to Environmental Chemicals on Human Health: The Hokkaido Birth Cohort Study with Global Perspectives
ISEE John Goldsmith Awardee: Reiko Kishi, Japan

11:00 - 11:30 / BREAK

11:30 - 13:00 / STATUE OF LIBERTY HALL (HALL 1)

TRADITIONAL ORAL SESSION 26
Occupational Exposures and Health
Chairs: Yue-Liang Guo, Australia
Huichu Li, United States

Low-level radon exposure and lung cancer in the Pooled Uranium Miners Analysis (PUMA), David B Richardson, United States
Health Services Use and Health Outcomes among Informal Economy Workers Compared with Formal Economy Workers: A Systematic Review and Meta-Analysis, Nisha Naicker, South Africa
Canadian Aquaculture: Supporting the need to develop sentinel surveillance programs for antimicrobial resistance among Canadian marine aquaculture facilities, Cory Ochs, Canada
Impact of chronic exposure to naphthalene on physical disorders and neurasthenic symptoms among petrol station workers, Luqman Riaz, Pakistan
SARS-CoV-2 pandemic among Mexico’s private sector workforce: using short-term disability claims to analyze impact and response, Marcella Tamayo, Mexico

11:30 - 13:00 / BROOKLYN BRIDGE HALL (HALL 2)

SYMPOSIUM 23
Coordination and Harmonisation of Occupational Cohorts, the international OMEGA-NET Network
Chairs: Ingrid Sivesind Mehlum, Norway
Michelle Turner, Spain

Network on the Coordination and Harmonisation of European Occupational Cohorts (OMEGA-NET), Ingrid Sivesind Mehlum, Norway
OMEGA-NET Inventory of Occupational Cohorts, Manolis Kogeannis, Spain
Precarious employment - a theoretical framework for research in occupational health, Theo Bodin, Sweden
COVID-19 and the Workplace, Lode Godderis, Belgium
What is needed for federated learning in occupational cohorts’, Roel Vermeulen, Netherlands
Occupational Cohort Studies in North America: Opportunities for Collaboration with OMEGA-NET partners, Kaitlin Kelly Reif, United States
11:30 - 13:00 / TIMES SQUARE HALL (HALL 3)

SYMPOSIUM 24
Towards ‘Pesticidovigilance’: Do We Have the Tools to Monitor Pesticide Exposures Related Health Outcomes in Vulnerable Populations?
Chairs: Roel Vermeulen, Netherlands
Beate Ritz, United States
Roel Vermeulen, Switzerland
Kimberly Paul, United States
Beate Ritz, United States
Pesticide Exposure, Systems Biology, and Parkinson’s disease, Kimberly Paul, United States
Pesticide monitoring of vulnerable populations in Uganda and South Africa, Samuel Fuhrlmann, Switzerland
From modeling, measuring, to exposomics - a Roadmap to pesticidovigilance, Roel Vermeulen, Netherlands
Linking Pesticide Use Records and Birth Certificates in Arizona, Melissa Furlong, United States

11:30 - 13:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 27
Links between Air Pollution and Children’s and Reproductive Outcomes
Chairs: Marie Pedersen, Denmark
Carmen Messerlian, United States
Sabah M. Quraishi, United States
Donghai Liang, United States
Chloe Friedman, United States
Jiawen Liao, United States

13:00 - 14:00 / E-POSTER GALLERY & NETWORKING LOUNGE

NETWORKING & E-POSTER VIEWING SLOT
13:00 – 13:30 Display of posters at the E-poster gallery. Questions & answers over the posters
13:30 – 14:00 Poster Viewing Group discussions in the public chat channels in Networking Lounge
Poster Viewing Groups (PVG): PVG 47 / PVG 48 / PVG 49 / PVG 50

14:00 - 15:00 / STATUE OF LIBERTY HALL (HALL 1)

PANEL DISCUSSION 9
The Next Climate Horizon: Training Health Professionals Globally for 1.5 Degrees and Beyond
Chair: Cecilia Sorensen, United States
Panelists: John Balbus, United States
Jay Lomery, United States
Brittany Shea, United States
Michael Schmetz, United States
LIGHTNING TALKS 10
Biomarkers in Human Studies

Chairs: Allison Kupsco, United States
Anne Bozack, United States

Prenatal metal exposure, cord blood DNA methylation and persistence in childhood: epigenome-wide association study of twelve metals, Anne K. Bozack, United States
Epigenome-wide DNA Methylation in Leukocyte and Toe nail Metals: the Normative Aging Study, Cuicui Wang, United States
Effect of metal co-exposures on DNA methylation age in Bangladeshi children, Maria Argos, United States
Short-term Exposure to PM2.5 and Epigenetic Aging: A Quasi-Experimental Study, Xu Gao, China
Exposure to Air Pollutants, Circulating miRNAs, and Cardiometabolic Health among Young Adults, William B Patterson, United States

An environment wide association study on body mass index in adolescents using 2003-2004 and 2013-2014 NHANES data, Nadine Haddad, Cyprus
Arsenic concentrations in the placenta are associated with dysregulation of placental microRNA expression, Jesse M. Tehrani, United States
The Oxidative Potential of Fine Particulate Matter and Metabolic Perturbations in Plasma and Saliva, Ziyin Tang, United States
Effects of prenatal exposure to phthalates and Hexamoll® DINCH derived from urinary untargeted metabolomics analysis, Nafsika Papaioannou, Greece
Metabolic signatures of youth exposure to per- and polyfluoroalkyl substances, Jesse A. Goodrich, United States

LIGHTNING TALKS 11
Exposure Assessment for Environmental Epidemiology

Chairs: Jesse Berman, United States
Apolline Saucy, Spain

Uncertainty Characterization in PM2.5 Estimates Across the Contiguous US, Sebastian Thonet Rowland, United States
Using a mobile monitoring campaign to characterize average exposures to ultrafine particulate matter and black carbon for a Seattle-based cohort, Magali N Blanco, United States
Design and evaluation of mobile monitoring campaigns for exposure assessment in epidemiologic cohorts, Lianne Sheppard, United States
Real-time characterization of personalized air pollution exposure in pregnant women participating in a birth cohort study, Akhgar Ghassabian, United States
Integrating monitor wearing to estimate household air pollution exposure parameters in the Ghana Randomized Air Pollution and Health Study (GRAPHS), Carlos F Gould, United States
50 chemical exposures of concern discovered using wearable passive samplers and gas chromatography-high-resolution mass spectrometry in South African children, Krystal J Godri Pollitt, United States
Contributions of nearby agricultural insecticide applications to indoor residential exposures, Jessica M. Madrigal, United States
Exposure to Unconventional Oil and Gas Development and All-cause Mortality in Medicare Beneficiaries, Longxiang Li, United States
Openly accessible low-cost measurements in PM2.5 exposure modeling: guidance for monitor deployment, Jianzhao Bi, United States
TRADITIONAL ORAL SESSION 29
Environmental Policy-relevant Research

Chairs: Martin Tondel, Sweden
Melissa Fiffer, United States

Economic cost of local attributable burden disease to PM2.5 ambient air pollution in Medellin, Colombia, 2010-2016, Juan Gabriel Piñeros Jiménez, Colombia
Health Burden Attributable to Increased PM2.5 Exposures and Potential Exposure Reductions during the 2020 Washington State Wildfire Smoke Episode, Yisi Liu, United States
Health Effects of Hydrogen Sulfide Exposures: A Review of the Evidence Pertaining to Low Level Exposures, Amelia Grant Alfieri, United States
GFR decline and prior dysuria among Nicaraguan sugarcane workers, Zsuzsanna Jeney, United States
The global distribution of pesticide poisoning: Implications for vulnerable populations, environmental health and equality in a shifting global policy climate, Emily Marquez, United States

Policy implications of research on “Environmental Policy-relevant Research”. Discussion by Adetoun Mustapha, Nigeria

E-POSTER DISCUSSION 16
Extreme Weather Events (Wildfires, Tropical Cyclones, Droughts, etc) - Exposure Assessment & Related Adverse Health Outcomes

Chairs: Brooke Anderson, United States
Aina Roca Barcelo, United Kingdom

Applications of Synthetic Tracks for North Atlantic Tropical Cyclone Health Impact Assessment, Daniel Dean, United States
Excess mortality in the Colorado Front Range during the COVID-19 pandemic and a concurrent intense wildfire season, Sheena E. Martenius, United States
Effect of Wildland Fire Smoke Exposure on Acute Cardiovascular Responses among Wildland Firefighters Working at Prescribed Burns, Chieh-Ming Wu, United States
Chronic obstructive pulmonary disease (COPD) attributable to ozone in Germany: Burden of disease estimates for the years 2007-2016, Susanne Breitner, Germany
Sixteen years analysis of PM2.5 and mortality in Kuwait, Barak Alahmad, Kuwait
Predicting high-resolution spatial and temporal variations in summer air temperatures and its effect on asthma and myocardial-infarctions in Montreal, Canada, Tashiire Onookome Okome, Canada

SYMPOSIUM 25
The European Human Exposome Network

Chairs: Roel Vermeulen, Netherlands
Joakim Dillner, Sweden

Decoding our environment: The European Human Exposome Network, Roel Vermeulen, Netherlands
Decoding our environment: The European Human Exposome Network, Joakim Dillner, Sweden
FAIRification of data: Great but how?, Morris Swertz, Netherlands
Ethics by Design in Exposome Research, Caspar Willem Safarlou, Netherlands & Evert-Ben van Veen, Netherlands
Big data does not equal big knowledge. A need for causal insights, Sylvain Sebert, Finland

TRADITIONAL ORAL SESSION 30
Temperature and Health

Chairs: Ana Maria Vicedo-Cabrera, Switzerland
Robbie Parks, United States

Ambient warming and human sleep duration and timing: a worldwide case-crossover study using big data from wearable devices, Kelton Minor, United States
Urbanization and Heat-mortality risk in Korea and Japan, Whanhee Lee, United States
Vulnerability factors driving differential patterns in the heat-related mortality between rural and urban areas in Switzerland, Evan De Schrijver, Switzerland
Effects of long-term average temperature and temperature variability on cardiovascular disease hospitalizations in the US Medicare population, Jochen O Klompmaker, United States
Adapting to the heat? Extreme temperature and birth outcomes over time in Spain, 1985-2016, Risto Conte Keivabu, Italy
Changing heat impacts on mortality and implications for mitigation planning in New York City, Kazuhiko Ito, United States
SCIENTIFIC PROGRAM
Thursday, August 26, 2021

15:30 - 17:00 / TIMES SQUARE HALL (HALL 3)

SYMPOSIUM 26
Diet as Complementary Opportunity to Mitigate Effects of Environmental Pollutants on Health Outcomes

Chairs: Nasser Laouali, United States
Youssef Oulhote, United States

Maternal diet as a modifier of environmental risk factors for child neurodevelopmental outcomes: Existing evidence and future directions, Kristen Lyall, United States

Antioxidant intake and the Relationship between Air Pollution and Birth Defects: A comparison of approaches for effect modification, Jeanette A Stigmon, United States

Opportunities and challenges when modelling heterogeneous effects with high-dimensional data, Tarik Benmarhnia, United States

15:30 - 17:00 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 31
Exposure to Metals and Adverse Health Outcomes

Chairs: Tiffany Sanchez, United States
Meghan Tipre, United States

Association between prenatal metals exposure and childhood lung function, Cecilia Sara Alcala, United States

Prenatal Exposure to Toxic Metal Mixtures and Risk of Bacterial Sepsis in Extremely Low Gestational Age Newborns, Catherine M Bulka, United States

Urinary Metal Mixtures and Incident Metabolic Syndrome in Midlife Women: the Study of Women’s Health Across the Nation (SWAN), Xin Wang, United States

Environmental metals and metal mixtures and renal disease in an adult population from Spain: the Aragon Workers Health Study, Maria Grau Perez, Spain

Cadmium and lead exposure and risk of dementia in a Swedish population-based cohort: The Malmö Diet and Cancer Study, Florencia Harari, Sweden

15:30 - 17:00 / GRAND CENTRAL HALL (HALL 5)

TRADITIONAL ORAL SESSION 32
Infections (including COVID-19) and the Environment

Chairs: Manolis Kogevinas, Spain
Olayinka Osuolale, Nigeria

Applying a multiple exposures framework to explore complex spatial inequalities of Covid-19-related excess mortality in Lombardy region of Northern Italy, Eric S Coker, United States

Impact of the COVID-19 lockdown policies on reducing air pollution levels and related deaths in Europe, Rochelle Schneider, Italy

Longer- and Shorter-term Air Pollution Exposure Associated with COVID-19 Severity and Mortality: A Large Cohort Study in Southern California, Zhanghua Chen, United States

Impact of COVID-19 on household energy use in Ghana, Theresa Afi Serwaaw Tawiah, Ghana

17:00 - 17:30 / BREAK

17:30 - 18:30 / STATUE OF LIBERTY HALL (HALL 1)

E-POSTER DISCUSSION 17
Methods to Assess Exposure to Environmental Mixtures

Chairs: Tom Webster, United States
Anke Huels, United States

Principal component pursuit for exposure pattern recognition: an application to persistent organic pollutants and leukocyte telomere length, Lawrence Gardner Chillrud, United States

Machine Learning Approaches for Environmental Mixtures Studies with Time-to-Event Outcomes and their Application to the Strong Heart Study, Melanie Mayer, United States

Hormone concentrations mediate the associations between exposure to phthalate mixtures and preterm birth, Amber L Cathey, United States

Environmental Mixture Methods: Recommendations to Promote Robust Results in the Presence of Random Sampling, Elizabeth A Gibson, United States

Having your cake (mix) and eating it too: Independent, interaction, and group effects of mixtures using Bayesian Hierarchical Regression Modelling, Erika Garcia, United States

Mixture effects of prenatal exposure to per- and polyfluoroalkyl substances and polybrominated diphenyl ethers on maternal and newborn telomere length, Stephanie Eck, United States
17:30 - 18:30 / BROOKLYN BRIDGE HALL (HALL 2)

E-POSTER DISCUSSION 18
Climate and Temperature and Health
Chairs: Allan Just, United States
Josiah Kephart, United States

Ambient temperature from satellite-hybrid models and preterm birth: A time-stratified case-crossover analysis of 70,000+ preterm births in Central Mexico, Daniel Carrión, United States
Modeling complex effects of exposure to particulate matter and extreme heat during pregnancy on congenital heart defects, Will Simmons, United States
Short-term effects of temperature on cardiovascular and respiratory mortality and its modification by air pollution in German cities, Masna Rai, Germany
Long-term Exposure to Air Pollution and Temperature and Hospital Admissions with Cardiovascular Disease in the United States, Mahdieh Danesh Yazdi, United States
Ambient Heat and Risks of Emergency Department Visits among Adults in the United States, Shengzhi Sun, United States
Associations between PM2.5 and term low birth weight in a North Carolina cohort and effect modification by extreme heat events, Thomas Luben, United States

17:30 - 18:30 / EMPIRE STATE BUILDING HALL (HALL 4)

SNRN 3: MEET THE EDITORS SESSION
Chairs: Agatha Ihekopobaoku, Nigeria
Yanelli Nunez, United States

Editors of Environmental Health Perspectives: Joel D Kaufman, United States
Epidemiology: Stephanie London, United States

18:30 – 19:00 / BREAK

19:00 – 20:30 / STATUE OF LIBERTY HALL (HALL 1)

TRADITIONAL ORAL SESSION 33
Environmental Health Disparities
Chairs: Rachel Morello-Frosch, United States
Kelvin Fong, United States

Modification by Multiple Social Stressors in Air Pollution-CVD Associations, Jane E. Clougherty, United States
Characterizing the spatial variability and vulnerability of heatwaves on ambulance callouts in Adelaide, Blesson Mathew Varghese, Australia
Immigrant Disparities in Estimated Effects of Fine Particulate Matter on Birth Weight, Kelvin C Fong, United States
The effects of historical residential redlining on temporal trends of air pollution levels measured near New York City schools, Stephanie Lovinsky Desir, United States
Prenatal per- and polyfluoroalkyl substance (PFAS) exposure, metabolomic perturbation, and lower birth weight in African American women: a meet-in-the-middle approach, Che Jung Chang, United States
Residential segregation, air temperature, and circulatory mortality: Exposure model choice matters for disparities analyses, Daniel Carrión, United States

19:00 – 20:30 / BROOKLYN BRIDGE HALL (HALL 2)

SYMPOSIUM 27
Environmental Health, Research and Civil Society – Discussing health promotion and environmental equity in the countryside and in cities in Latin America
Chairs: Rogerio Araujo Christensen, Brazil
Telma De Cassia Dos Santos Nery, Brazil

The agrotoxic theme in institutional documents of movement for the fight for agrarian reform, Luis Do Nascimento Carvalho, Brazil
Science allied with Society and Public Policies, Monica Valdyrce Lopes Ferreire, Brazil
Overview of the Impacts of Pesticides on Human Health in Municipalities with high use and consumption in SPs - Brazil, Paolo Junior Pa De Lima, Brazil
Civil Society activity model together with researchers - Popular Forum of Nature, Glaucia Moraes, Brazil
Fighting for human rights to water in times of sanitary crisis: social pricing for affordable water in Brazil, Alexandre Da Silva Faustino, Australia
Epidemiological Research in Environmental Health in Latin America - How to consider inequalities?, Sandra Cortés, Chile
Thursday, August 26, 2021

19:00 - 20:30 / EMPIRE STATE BUILDING HALL (HALL 4)

TRADITIONAL ORAL SESSION 34
Machine Learning and Data Science to Enhance Environmental Health Research
Chairs: Jeanette Stingone, United States
Honghyok Kim, United States

The intersection of climate-related health outcomes and urban environmental characteristics using spatiotemporal data science, Charlene C Nielsen, Canada
Predicting spatiotemporally-resolved air temperature over Sweden from satellite data using an ensemble model, Zhihao Jin, United States
Predicting residential exposure to allergens in an electronic health record cohort of children with asthma in Massachusetts, USA, Matthew Bozigar, United States
Use of a LASSO approach to identify ambient volatile organic compounds associated with emergency admissions for lower respiratory tract infection, Chen Chen, China
Exposure to ambient air pollution and fetal cerebellar transverse diameter: a longitudinal study, Deniz Cataltepe, United States

Ethical implications of research on “Machine learning and data science to enhance environmental health research”. Discussion by Lori Hoepner, United States

19:00 - 20:30 / GRAND CENTRAL HALL (HALL 5)

SYMPOSIUM 28
Protecting Workers in the Face of Climate Change
Chairs: Jaime Butler Dawson, United States
Katherine James, United States

Improving Kidney Health Among Workers in Guatemala, Jaime Butler Dawson, United States
Worker protection at the intersection of the COVID-19 pandemic and climate change: lessons learned through industry partnership, Lyndsay Krisher, United States
Cooling Interventions Among Agricultural Workers: A Pilot Study, Roxana C Chicas, United States
Wildfire-related PM₂.₅ and Intensive Care Unit Admissions and Bed Utilization in the United States, 2006-2015, James L Crooks, United States

20:30 - 21:30 / E-POSTER GALLERY & NETWORKING LOUNGE

NETWORKING & E-POSTER VIEWING SLOT
20:30 – 21:00  Display of posters at the E-poster gallery, Questions & answers over the posters
21:00 – 21:30  Poster Viewing Group discussions in the public chat channels in Networking Lounge

Poster Viewing Groups (PVG):  PVG 51 / PVG 52 / PVG 53 / PVG 54 / PVG 55 / PVG 56

21:30 - 23:00 / STATUE OF LIBERTY HALL (HALL 1)

REPLAY OF SESSION: SYMPOSIUM 21
Inferential Challenges and Methodological Solutions in Air Pollution Epidemiology Studies
Chair: Tarik Benmarhnia, United States

Estimating the effect of long-term exposure to PM2.5 on mortality in Canadian Community Health Survey Cohort using parametric g-computation, Chen Chen, United States
A discussion of competing events in epidemiologic studies of air pollution, Sindana Ilango, United States
Causal Inference and Machine Learning approaches to discover de novo sub-populations with heterogeneous air pollution health effects, Francesca Dominici, United States
Changes in residential exposure to ambient fine particulate matter due to relocation and long-term survival in Canada: a quasi-experimental study, Tarik Benmarhnia, United States

21:30 - 23:00 / BROOKLYN BRIDGE HALL (HALL 2)

REPLAY OF SESSION: TRADITIONAL ORAL SESSION 19
Exposure Assessment: Biomarkers
Chair: Douglas Walker, United States
Haotian Wu, United States

Central Nervous System (CNS)-Derived Extracellular Vesicles (EVs) as Novel Biomarkers for Environmental Exposure and Disease Progression in ALS, Nicole Comfort, United States
Determinants for serum half-lives for linear and branched perfluoroalkyl substances after long-term, high exposure — a study in Ronneby, Sweden, Axel Andersson, Sweden
Widespread Exposure to Emerging and Previously Unmeasured Chemicals in Commerce in Pregnant women Across the US, Tracey Woodruff, United States
Combination of multi-residue methods for organic pollutant(s) and metal(s) analysis in hair - Towards a comprehensive assessment of population exposome, Alba Iglesias González, Luxembourg
Assessing the Effects of Metal Mixtures in Urine and Blood on Kidney Function, Maria D. Politis, United States