Indoor Air Management of Airborne Pathogens: A Virtual Workshop Series

Committee

Linsey C. Marr

Co-Chair

Linsey C. Marr is the Charles P. Lunsford professor of Civil and Environmental Engineering at Virginia Tech. Dr. Marr's research interests include characterizing the emissions, fate, and transport of air pollutants in order to provide the scientific basis for improving air quality and health. Airborne transmission of infectious diseases is a major focus of her research. She is a member of the National Academies' Board on Environmental Science and Toxicology and has served on three committees for the Academies. She is a Fellow of the American Association for Aerosol Research and the International Society of Indoor Air Quality and Climate. In 2021, she received the Ut Prosim Scholar Award, Virginia Tech's highest honor for faculty, and in 2022, she was selected for an Outstanding Faculty Award by the Commonwealth of Virginia. Dr. Marr received a B.S. degree in engineering science from Harvard University and a Ph.D. degree in civil and environmental engineering from University of California, Berkeley.

Jonathan M. Samet

Co-Chair

Dr. Jonathan Samet, a pulmonary physician and epidemiologist, is Dean of the Colorado School of Public Health and Professor in the departments of Epidemiology and Environmental & Occupational Health. His research has focused on the health risks of inhaled pollutants in outdoor air and also indoor pollutants including secondhand smoke and radon. He has also investigated the occurrence and causes of cancer and respiratory diseases, emphasizing the risks of active and passive smoking. Currently, he leads the Colorado COVID-19 Modeling Group, which is modeling the epidemic in Colorado for public health purposes. He has served on and chaired numerous committees of the National Research Council and National Academy of Medicine, including chairing the Board on Environmental Studies and Toxicology. He serves on the Gulf Research Board. For several decades, he has been involved in global health, focusing on tobacco control, air pollution, and chronic disease prevention. He has been chair of the Clean Air Scientific Advisory Committee of the EPA and the FDA's Tobacco Products Scientific Advisory Committee. Dr. Samet has served as Editor and Author for Reports of the Surgeon General on Smoking and Health since 1984, receiving the Surgeon General's Medallion in 1990 and 2006 for these contributions. Dr. Samet received the 2004 Prince Mahidol Award for Global Health awarded by the King of Thailand, the Edward Livingston Trudeau Medal from the American Thoracic Society/American Lung Association, the Luther Terry Award for Distinguished Career from the American Cancer Society, and the Fries Prize for Health. He received the Alumni Award of Merit from the Harvard School of Public Health in 2001 and was named Distinguished Alumnus of the Year by the University of Rochester School of Medicine and Dentistry in 2006. He was elected to the National Academy of Medicine in 1997 and received the David Rall Medal in 2015.

Theresa Chapple-McGruder

Member

Dr. Theresa Chapple-McGruder is the director of the Oak Park Public Health Department. She is an epidemiologist who has served in varying capacities at the local, state, and federal level since receiving her doctorate in Maternal and Child Health and Epidemiology in 2009. Her research interest is in prevent adverse health outcomes in birthing people, fetuses, and young children, with a recent interest in the impacts of COVID-19 on these populations. She has worked with over 30 school districts to create policies for safe school return, and is conducting research on the impacts of removing mitigations on children's and community health. She also holds positions on the society for perinatal epidemiological research. Her PhDs are from the University of Illinois at Chicago, she holds a masters from University of North Carolina at Chapel Hill in Maternal and Child Health.

James W. Fox

Member

With over 32 years in the mass transit industry, Jim Fox is the current AGM of System Safety at the Southeastern Pennsylvania Transportation Authority (SEPTA). Jim grew up in the City of Philadelphia and is a graduate of Temple University with a BS degree in Civil/Construction Engineering. Jim's career at SEPTA started as a Project Engineer overseeing a variety of SEPTA's major capital construction projects. Jim then moved to the Safety department where he served 3 years as a Safety Officer and then was promoted to the Director of the department for 11 more years. After 14 years in the Safety department, Jim was promoted to Chief of Septa's multimodal Control Center. Jim was Chief of the Control Center for 5 years when the General Manager made some organizational changes, and asked Jim to return to the Safety division and run the division under the revised title of Assistant General Manager, System Safety. In addition to his work at SEPTA, Jim sits on several American Public Transportation Association (APTA) Safety Committees and the Standards Oversight Council. Jim is also a voting member of the Federal Railroad Administration's (FRA) Rail Safety Advisory Council and participates on the Federal Transit Administration's (FTA) Standards Development Working Group.

John McCarthy

Member

John F. McCarthy, Sc. D, C.I.H. is the CEO of Environmental Health & Engineering, Inc. to create innovative solutions, based on rigorous, sound science, to resolve the most challenging environmental and human health effects questions.

Dr. McCarthy is a recognized expert in exposure assessment, materials, and product evaluation, and health impacts of indoor environments. He has led large interdisciplinary teams for organizations such as the U.S. Consumer Product Safety Commission, U.S. EPA U.S. Army Criminal Investigation Division, the CDC, and has supported the U.S. Surgeon General's office. He has consulted for the Department of Environmental Health at the Harvard School of Public Health, the Energy Laboratory at MIT, the NIOSH, the WHO, and the U.S. EPA.

Dr. McCarthy has authored seventy plus technical papers and book chapters and co-edited the Indoor Air Quality Handbook (McGraw-Hill 2000). He is a member of the American Industrial Hygiene Association (sits on the board), International Society of Indoor Air Quality and Climate, American Society for Testing and Materials, American Conference of Governmental Industrial Hygienists, American Society of Healthcare Engineers.

Dr. McCarthy has an Sc.D. in Environmental Science and Physiology and an M.S. in Environmental Health Science from Harvard University and a B.S. in Biology from Boston College.

Catherine Noakes

Member

Cath Noakes is Professor of Environmental Engineering for Buildings in the School of Civil Engineering at the University of Leeds. She is currently Deputy Director of Leeds Institute for Fluid Dynamics and Co-Director for the EPSRC Centre for Doctoral Training in Fluid Dynamics. Cath is a chartered mechanical engineer, with a background in fluid dynamics. She leads research into ventilation, indoor air quality and infection control in the built environment. Her research group carry out experimental and modelling based studies, to explore the transport of airborne pathogens, the influence of indoor airflows and effectiveness of engineering approaches to controlling airborne disease transmission.
Since April 2020 she has been involved in the UK COVID-19 response, including co-chairing the Environment and Modelling sub-group of the UK Scientific Advisory Group for Emergencies (SAGE) focusing on the science underpinning environmental transmission of COVID-19. Cath is a Fellow of the Royal Academy of Engineering, Institution of Mechanical Engineers (IMechE), Institute of Healthcare Engineering and Estates Management (IHEEM) and Honorary Fellow of the Chartered Institution of Building Services Engineers (CIBSE). She was awarded an OBE in 2020 for services to the Covid-19 pandemic.

Lucas Rocha-Melogno

Member

Dr. Rocha Melogno is a Senior Health Scientist at ICF, currently aiding U.S. federal agencies in the development of guidelines to prevent the transmission of infectious diseases. Dr. Rocha Melogno began his career in global health at Duke University, working on novel sanitation systems piloted in India, Kenya, and the Philippines, with support from the Bill & Melinda Gates Foundation. He has worked in India, Bolivia, Honduras, and the U.S., developing scalable drinking water and bioaerosol monitoring methods. His training in aerosol science led him to conduct one of the first studies in 2020 investigating the aerosol transmission of COVID-19 with a team of scientists from Duke University School of Medicine. He also led the development of an open-access web application that has been used in more than 50 countries to estimate the risk of aerosol transmission of COVID-19 indoors. Dr. Rocha Melogno holds a PhD in Environmental Engineering from Duke University, where he was 1 out of 5 graduate recipients of the Forever Duke Leadership Award (0.1%).

Monica Schoch-Spana

Member

Dr. Monica Schoch-Spana is Senior Scholar with the Johns Hopkins Center for Health Security and Senior Scientist with the Department of Environmental Health and Engineering at the Johns Hopkins University Bloomberg School of Public Health. A medical anthropologist, she has worked as both researcher and policy analyst/advisor in public health emergency management for over 20 years. Her areas of expertise include community resilience to disaster, behaviorally realistic emergency plans, public engagement in policymaking, sociocultural dimensions of disasters, and crisis and emergency risk communication. National advisory roles include the Homeland Security Subcommittee of the Board of Scientific

Counselors for the US Environmental Protection Agency; the Resilient America Roundtable of the National Academies of Sciences, Engineering and Medicine, which she formerly co-chaired; and the National Research Council Committee on Increasing National Resilience to Hazards and Disasters. From 2003-2017, Dr. Schoch-Spana worked at the UPMC Center for Health Security, and prior to that, at the Johns Hopkins University Center for Civilian Biodefense Strategies, starting in 1998. She received her PhD in cultural anthropology from Johns Hopkins University.

Jeff Vincent

Member

Jeff Vincent is co-founder and Director of Public Infrastructure Initiatives of the Center for Cities + Schools (CC+S) at the University of California, Berkeley, a policy research and technical assistance center that promotes high quality education as an essential component of urban and metropolitan vitality to create equitable, healthy, and sustainable cities and schools for all (http://citiesandschools.berkeley.edu). Under Jeff’s leadership, CC+S is a national leader on public school facility planning policy and finance and works extensively with local, state, and federal agencies. Jeff’s policy-focused research sits at the intersection of land use planning and educational improvement, with a focus on how school facilities serve as educational and neighborhood assets. He has studied issues of public school facility planning, financing, and equity for nearly two decades. Jeff is also founding partner in the national [Re]Build America’s School Infrastructure Coalition (BASIC) a non-partisan coalition of civic, public sector, labor, and industry associations who support federal funding to help under-served public school districts modernize and build K-12 public school facilities (https://www.buildusschools.org). In 2020, Jeff served on the National Academies of Sciences, Engineering, and Medicine’s Committee on Guidance for K-12 Schools on COVID-19. Jeff has a PhD in City and Regional Planning from Berkeley.