

Standing Committee on Personal Protective Equipment for Workplace Safety and Health

**November 18-19, 2025 Meeting
Speaker Biosketches**

NPPTL Staff

Maryann D'Alessandro, Ph.D., M.S., has served as the Director of the National Institute for Occupational Safety and Health (NIOSH) National Personal Protective Technology Laboratory (NPPTL) since March 2012. She also served as the Associate Director for Science for NPPTL from 2003-2012. Dr. D'Alessandro provides leadership to the NIOSH Personal Protective Technology (PPT) Core and Specialty Program and the Public Safety Program where she serves as the Manager leading the effort to align PPT initiatives with user needs across all workplace industry sectors. Within the PPT Program, Dr. D'Alessandro has served as the catalyst for aligning surveillance, research, standards, certification, outreach and intervention activities to improve workplace safety and health. Prior to joining NIOSH in 2003, she had a short academic career at the University of Pennsylvania's Department of Bioengineering and served in various U.S. Army research and development organizations for 15 years. Dr. D'Alessandro holds Electrical Engineering degrees from the Florida Institute of Technology (B.S.), Fairleigh Dickinson University (M.S.), and Georgia Institute of Technology (Ph.D.).

Adam Smith, Ph.D., M.S., is currently the Deputy Director at the National Personal Protective Technology Laboratory (NPPTL) at the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. Prior to his current position, Dr. Smith served as a Senior Scientist at NPPTL where he provided senior-level, strategic and operational planning, scientific guidance, and engineering consultation to a national conformity assessment infrastructure (CA Infrastructure). He also managed (1) the strategic development and implementation of NPPTL research, standards development, and post market activities with an emphasis on respiratory protection, sensors, and emerging technologies assuring that worker protection needs are met; and (2) the design and implementation of projects or strategic planning initiatives to meet short-term and long-term executive goals. He leads the development and execution of research and learning agendas to address high priority worker safety and health issues associated with personal protective equipment, especially where policy and science intersect. Dr. Smith was also the Deputy Director of the Pittsburgh Mining Research Division at NPPTL where he directed and coordinated the full range of supervisory and management duties over subordinate supervisors across the mining program. Dr. Smith earned his Master of Science in Mechanical Engineering from the University of Pittsburgh and a Ph.D. in Mechanical Engineering from Michigan Technological University.

Susan M. Moore, Ph.D., is currently the Associate Director for Science at the National Institute for Occupational Safety and Health (NIOSH). At her current position, Dr. Moore directs scientific and strategic priorities, develops division-wide SOPs and governance structures that advance scientific excellence, and leads cross-divisional strategic planning. Prior to her current role, Dr. Moore was a Senior Scientist for NIOSH, where she advised division leadership on technical, managerial and organizational strategy that guided workforce planning. Before joining NIOSH in 2000, Dr. Moore was a Graduate Student Researcher at the Musculoskeletal Research Center at the

University of Pittsburgh. Dr. Moore earned her Doctor of Philosophy in Bioengineering and Biomedical Engineering from the University of Pittsburgh.

Jeff Peterson has more than 30 years of technical expertise in the area of respiratory protection. He began his career with the National Institute for Occupational Safety and Health (NIOSH) in 1991 where he performed testing and research in support of standards development efforts for Title 42, Code of Federal Regulation, Part 84 (42 CFR 84). After the implementation of 42 CFR 84 in 1995, Mr. Peterson remained with the respirator certification program as a general engineer where he used his knowledge and skills to address and resolve technical issues and customer concerns related to approving and testing respiratory protection equipment. He became the team lead for respirator certification in 2006, coordinating technical and policy reviews for certification projects. In 2010, Mr. Peterson became the deputy branch chief for the branch that administers the NIOSH Respirator Approval Program, and he currently serves as the branch chief, providing technical leadership, project management, and administrative support for all projects related to respirator certification activities mandated by 42 CFR 84.

Session II Speakers: An AI-Enhanced Respirator Approval Program (RAP)

Benny Budiman, Sc.D., is the Director of Research Data Analytics in the Office of Research Informatics, Data and AI at the Emory University Woodruff Health Sciences Center. He has a Doctor of Science (Sc.D.) degree in mechanical engineering with a minor in business dynamics / operations research from MIT. Dr. Budiman has over two decades of experience in delivering over \$1B in quantifiable impacts from analytics solutions using data and AI in industry and consulting. During his 7.3 years in consulting with McKinsey and Accenture, Dr. Budiman designed data and AI solutions and led teams to develop and deliver the data, analytics, and AI-based solutions in several industrial sectors (e.g., oil & gas, petrochemical, pulp & paper, electric & gas utilities, industrial manufacturing, apparels, high tech equipment, and retails) & functions (manufacturing & supply chain; product marketing & distribution; and retail inventory positioning & management). In addition to expertise in data quality, he has expertise in digital twins for optimal decision making and decision experimentation. His data, analytics, and AI-based solutions included, but were not limited to: (i) longer-term hospital capacity planning in a province in North America (POC), (ii) optimal service vehicle decarbonization for minimizing emissions into disadvantaged communities (deployed & awarded a 2022 CIO 100), and (iii) optimal grid management to reduce risk of wildfire ignition from the operation of electric transmission and distribution network (deployed & awarded a 2023 Chartwell Best Practices).

David Danks, Ph.D., A.B., is Professor of Data Science & Philosophy and affiliate faculty in Computer Science & Engineering at the University of California, San Diego. Dr. Danks has examined the ethical, psychological, and policy issues around AI and robotics in transportation, healthcare, privacy, and security. He has also done significant research in computational cognitive science, and developed multiple novel causal discovery algorithms for complex types of observational and experimental data. Dr. Danks is the recipient of a James S. McDonnell Foundation Scholar Award, as well as an Andrew Carnegie Fellowship. He received an A.B. in Philosophy from Princeton University, and a Ph.D. in Philosophy from University of California, San Diego. He was previously the L.L. Thurstone Professor of Philosophy & Psychology at Carnegie Mellon University.

Aaron Davis, M.P.A., M.B.A., is Director of the Center for Public Health Initiatives at the Community Engagement Institute, Wichita State University, where he specializes in strategic operations and systems thinking to strengthen public health in Kansas. With dual master's degrees in public administration (MPA) and business administration (MBA), Mr. Davis approaches public health challenges with a blend of business insight and empathy for local government complexities. A key leader in the Kansas Public Health Collaborative, Mr. Davis has been instrumental in initiatives to support the public health workforce. Notably, he led the implementation of electronic health records (EHR) across 11 local health departments, enhancing their service delivery and revenue. He supports public health informatics through helping launch and facilitate the Kansas Association of Local Health Departments Informatics Subcommittee to advance data-driven decision-making. Mr. Davis, in collaboration with Tatiana Lin, has delivered numerous workshops on helping public health and other organizations explore how to responsibly use Generative AI in their operations. He co-hosts an AI in Public Health Community of Practice for local health departments in Kansas. Lastly, Mr. Davis was the contributor to the publication *Developing AI Policies for Public Health Organizations: A Template and Guidance*. Recognized by the de Beaumont Foundation as a "40 under 40" leader in Public Health, Mr. Davis envisions strong public health systems partnering with communities to foster meaningful change. His work is driven by the belief that building healthier communities creates a better future for the next generation.

Lauren Goodwin, Ph.D., M.S., has held various C-Level roles including Chief Information Security Officer, Chief Technology Officer, and Chief Information Officer for NASA's Johnson Space Center, JP Morgan, and other Fortune 100 companies. She is currently the CEO of Mission Ops, a digital engineering and AI company she founded. With over 20 years of experience leading technology, data, and cybersecurity organizations in space and energy, she was named a 2023 Top 100 Technology Executive and recently in 2025 Houston's Most Admired CEO. She streamlined a \$3.4 trillion organization's 60,000 engineers to improve their product delivery on time and on budget from a production rate of 48 weeks to 2 weeks. She is certified in Lean Six Sigma where she streamlined operations for \$130 Billion of global energy assets. She is a professor at Columbia University where she teaches Cybersecurity and Artificial Intelligence courses. She earned her doctorate performing groundbreaking research leveraging artificial intelligence to map the neural patterns of the brain's learning process to improve access to education in STEM fields. She founded Mission Ops to be able to serve her country best by offering mission driven, practical technology modernization and differentiation to the U.S. Federal Government with the same speed, agility, and cost-effective models she has deployed in industry. She is mission-driven in all she does.

Fazle (Mahi) Karim, Ph.D., M.S., is currently a Chief Scientist and the Co-Founder at TwinMind. Prior to his current position, Dr. Karim was the Head of Machine Learning and Data Science at Know Labs where he focused on transforming non-invasive medical diagnostics. Dr. Karim was also a Principal Machine Learning Scientist at United Healthcare. Dr. Karim earned his Ph.D. in Artificial Intelligence and a Master's Degree in Data Science at the University of Illinois Chicago.

Tatiana Y. Lin, M.A., is currently the Director of Business Strategy and Innovation at Kansas Health Institute. With more than a decade of public health experience, Ms. Lin has advanced Health in All Policies (HiAP), conducted health impact assessments, facilitated state-level task forces on behavioral health and crisis standards of care, and led research on key public health and health policy issues. She is nationally recognized for her leadership at the intersection of public health and artificial intelligence. Ms. Lin led the development of *Developing AI Policies for Public*

Health Organizations: A Template and Guidance, supported by the CDC's Public Health Infrastructure Grant, and has delivered more than 50 AI workshops and technical assistance efforts in collaboration with Aaron Davis and the Wichita State University Community Engagement Institute. She also supports AI communities of practice in Kansas and the National Network of Public Health Institutes, contributes thought leadership on AI through blogs and other publications, and is a co-author of the American Public Health Association's policy on AI in the workforce. In 2025, she received the Public Health Innovation Award from the National Network of Public Health Institutes in recognition of her work on artificial intelligence.

Aaron Wilkowitz is a Solutions Engineer on the OpenAI for Government team, focused on Federal Civilian and State & Local Government. Mr. Wilkowitz provides technical expertise to help government agencies understand and adopt OpenAI's ChatGPT Enterprise and API products. Mr. Wilkowitz is passionate about helping organizations fulfill their mission through AI & data science. Before joining OpenAI, Mr. Wilkowitz was an AI/ML Solutions Engineer at Google Cloud on the Healthcare team. Before that, he had technical roles in data science and data analytics across Federal & Healthcare verticals, including as a Consultant at Applied Predictive Technologies & a Sales Engineer at Looker. Mr. Wilkowitz holds a BA in Economics from UNC Chapel Hill, where he was a Robertson Scholar.

Session III Speakers: Issues Related to Respiratory Protection for Wildland Firefighters

Pontus Ahllwy is a Project Leader Technical Support and Technical Expert at Sundström Safety AB, a global manufacturer of high-quality respiratory protection. Mr. Ahllwy has spent more than 30 years in the industry, all of them at Sundström Safety, which has given him a deep technical understanding of the organization's products and a strong commitment to supporting users and partners worldwide. In his role as Project Leader, Mr. Ahllwy is responsible for product certifications across several markets, including European CE approvals, NIOSH certifications in the United States, and Australian product approvals. As a Technical Expert, he collaborates with regulatory authorities, sales teams, and end users to identify and implement the most suitable respiratory protection solutions for a wide range of work environments. He has also been heavily involved in developing training programs to ensure high competency levels and to help users achieve the maximum protective performance from their equipment. Mr. Ahllwy has a background as a mechanical engineer and has spent many years working in product development. This background has given him a strong understanding of the relationship between product standards, safety requirements, and customer needs—along with the challenges that sometimes arise when these factors conflict. Mr. Ahllwy also serves as the chair of the Swedish SIS committee for respiratory protection and represents Sweden as a Technical Expert in both CEN and ISO committees involved in developing international standards. Through his involvement in the Nordic Safety Association (NSA), Mr. Ahllwy has also contributed to implementing competency training for leaders conducting fit testing when this legislation came into force.

Stacey Blundell, M.Sc., CIH, ROH, is a Certified Industrial Hygienist (CIH) and a Registered Occupational Hygienist (ROH). She has an honours degree in Biology from McMaster University and a master's degree in occupational health from McGill University. She has worked for 3M for over 25 years. Ms. Blundell started her career with 3M as a Corporate Industrial Hygienist supporting 3M's manufacturing sites in Ontario. She currently works for 3M's Personal Safety Division as a Senior Health and Safety Specialist. Ms. Blundell provides bilingual technical,

regulatory and product support for many of 3M's different personal protective equipment portfolios within the US and Canada and with a focus on respiratory protection. She is based in Montreal, Quebec.

Nicola Cherry, Ph.D., is an occupational epidemiologist who graduated in medicine and epidemiology from McGill after obtaining a PhD in occupational psychology at the University of London (UK). She has worked in occupational health on both sides of the Atlantic, first with the UK Medical Research Council, then at the Institute for Occupational Health at the London School of Hygiene, followed by time in Quebec, at the Provincial Research Institute for Health and Safety at Work and then at the McGill School of Occupational Health and the Department of Epidemiology. From there she returned to the UK to be Director of the Centre of Occupational and Environmental Health at the University of Manchester and Head of the School of Epidemiology and Health Sciences. She returned to Canada in 2000, and until 2006 served as Chair of the Department of Public Health Sciences. Dr. Cherry has wide research interests including surveillance, intervention and its evaluation, molecular markers and the effects of chemicals on the nervous and reproductive system.

Christopher Coffey, Ph.D., worked for the National Institute for Occupational Safety and Health (NIOSH) for over 41 years. He was involved with respiratory protective devices worn by workers for 35 of those years. From 1978 to 1993, Dr. Coffey worked in the respirator certification program (now the Respirator Approval Program). He initially worked as a chemist performing gas testing on air-purifying respirators utilizing chemical canisters and cartridges. He then became the supervisory chemist and the Air-purifying Respirator Section Chief responsible for directing the testing and certification of air-purifying respirators to ensure the units met the minimum requirements specified in Title 30, Code of Federal Regulations. From 1993 through 2004, Dr. Coffey was a Senior Research Chemist performing respirator fit testing research. During this time, he was a member of the team that revised the particulate certification regulations in Title 42, Code of Federal Regulations, Part 84 and the project officer for Interagency Agreements and a contract to determine the efficiency of air-purifying respirator filters as well as surgical masks against biological aerosols. From 2004 to 2011, Dr. Coffey was the chief of NIOSH's Laboratory Research Branch which conducted research complementary to and coordinated with field investigations of occupational respiratory diseases specifically exposure assessment research. Beginning in 2011 until his retirement in January 2020, Dr. Coffey served as the Associate Director for Science for NIOSH's National Personal Protective Technology Laboratory (NPPTL). Since March 2020, he has served as a contract consultant to NPPTL working on various projects such as respiratory fit capability, updating the NIOSH Guide to Industrial Respiratory Protection and the respirator portion of the EPA Wildfire Smoke documents, various NPPTL standard operating procedures, and the NIOSH Healthcare Personal Protective Technology (PPT) Targets for 2020 to 2030.

Kathleen Navarro Dubose, Ph.D., M.P.H., is the Environmental and Occupational Health Director for the Federal Wildland Firefighter Health and Wellbeing Program, an interagency effort with the Department of the Interior and USDA Forest Service. She earned her PhD and MPH in Environmental Health Sciences from the University of California, Berkeley. After graduate school, Dr. Navarro worked for the US Forest Service and CDC NIOSH conducting wildland firefighter health and smoke research. In addition, she spent the 2019 fire season as a crewmember on a Type 1 Interagency Hotshot Crew. Her time as a researcher and wildland firefighter allowed her to obtain high-quality personal and area exposure data and understand risks in the complex fire work environment.

Rufus Edwards, Ph.D., is a Professor of Environmental and Occupational Health at the University of California Irvine, Joe C. Wen School of Population and Public Health. Dr Edwards has broad experience at a policy level promoting evidence-based policies to reduce air pollution exposures working with government ministries, public health institutes and other stakeholders as technical consultant to UNICEF, the World Health Organization, the Swiss Agency for Development and the Asian Development Bank. Dr Edwards was a member of the WHO Indoor Air Quality Guidelines Development Group and with Dr. Karin Troncoso also developed the WHO Household Energy Assessment Rapid Tool (HEART) to conduct rapid situational assessments and stakeholder mapping of a country's readiness to address access to clean energy, a module of the WHO Clean Household Energy Solutions Toolkit (CHEST) (<https://www.who.int/airpollution/household/chest/en/>). Some of Dr. Edwards's research interests are human exposures to air pollution, indoor air pollution, paint emissions, and emissions of climate-altering pollutant species. Dr. Edwards holds a Ph.D. in exposure measurement and assessment from Rutgers and UMDNJ.

Joseph Ten Eyck, is currently the Director of the Wildfire/Urban-Interface Fire Programs at the International Association of Fire Fighters (IAFF). He also serves as a Member of the Board of Directors at the Wildfire Conservancy. Prior to his current position, Mr. Ten Eyck served as the Past State Supervisor Director for CAL FIRE Local 2881 in Sacramento, California.

Chief Jeremy Lawson is the Staff Chief, Safety and Emergency Medical Services Programs at CAL FIRE. Chief Lawson began his career with CAL FIRE in 1996 in the Sonoma-Lake-Napa Unit. Since then, he has worked in various operational assignments including fire stations, emergency command center, hand crew, training officer, EMS coordinator, safety officer, administration, cooperative agreements, and CAL FIRE Incident Management Teams. He is currently a Staff Chief overseeing the Safety and EMS Programs. He has previously led the Research & Development Program and the day-to-day operations of the CAL FIRE Training Centers. Chief Lawson serves as the Department representative for both of Cal/OSHA's Technical Advisory Committees on PPE Selection, Care, and Maintenance and the development of Wildland Respiratory Protection. He is a principal member on a National Fire Protection Association (NFPA) Committee and is involved in various task groups and advisory committees related to PPE and PPE research. His focus includes developing standards for firefighting personal protective equipment, cleaning, and respiratory protection.

Daniel Morton, CIH, is a board certified industrial hygienist and safety professional with a demonstrated history of health and safety experience solving personal protective equipment problems focusing on high hazards in the oil, energy, and heavy manufacturing industries. Mr. Morton is currently a Technical Service/ Application Engineer for 3M. Prior to his current position, he was an industrial hygienist for ASRC. Mr. Morton earned his Bachelor of Science in Chemistry/ Statistics from the University of Minnesota Duluth.

Travis Parker is currently a Fire Operations Risk Management Specialist for the U.S. Forest Service where he has worked for 24 years. Mr. Parker earned an Associate of Science in Forestry from Flathead Valley Community College.

Melissa Ray is the Director of Marketing for Emergency and Resue Services at Drager. Ms. Ray also serves as a Marketing Consultant at RayZor Production LLC.

Captain Ryan Souder is a Superintendent for the County of Los Angeles Fire Department. Captain Souder has over 20 years of experience as a firefighter and is a subject matter expert in wildland PPE. He is a member of the National Wildfire Coordinating Group's (NWCG's) Fire Shelter Group and the Cal Fire PPE Group. Captain Souder earned his B.S. from Cal Poly Pomona where he played NCAA collegiate baseball.

Jessica Tredinnick-Higgins, M.P.H., CIH, CSP, is an industrial hygienist with expertise in recognizing, characterizing, and preventing inhalation exposures. Ms. Tredinnick-Higgins currently manages a global team of standards development, regulatory affairs, and policy professionals for 3M's Personal Safety Division. Ms. Tredinnick-Higgins has a background in environmental and occupational health, as well as journalism. Previously, she was a member of 3M's Corporate Industrial Hygiene team and a coordinator of hazardous materials and first responder trainings at the University of Minnesota. She is currently serving on the Executive Committee of the Board of Directors of the International Society for Respiratory Protection.

Michael Wilson, Ph.D., M.P.H., CIH, is a Senior Safety Engineer with the Cal/OSHA Research and Standards Health Unit. He is a certified industrial hygienist and holds a Ph.D. and M.P.H. in environmental health sciences from UC Berkeley. He previously served as national Director for Occupational and Environmental Health at the BlueGreen Alliance, and as Chief Scientist in the Office of the Director, California Department of Industrial Relations. Before returning to graduate school, Dr. Wilson worked for 13 years as a firefighter, paramedic and EMT with the City of Salinas and County of Santa Cruz, where he was president of IAFF Local 1270 and field representative with SEIU Local 250. He served with FEMA Task Force 4, based at the Oakland Fire Department, and as a rescue crewman and coxswain with Station Monterey, U.S. Coast Guard Reserve.

Deputy Fire Chief Albert Yanagisawa has served the County of Los Angeles Fire Department (LACoFD) for 23 years beginning in the year 2000. He was appointed to the rank of deputy fire chief in October 2023. Prior to joining the LACoFD, he had a 16-year career in the private sector. Chief Yanagisawa is always looking for a challenge. He has a diverse background in fire prevention, driver training, incident command system, training, wellness fitness, peer support, and has previously served as a staff aide fire captain. He has a Bachelor of Science degree in Fire and Emergency Management. Chief Yanagisawa is the founder and President of the LACoFD Asian Pacific Islander (API) Association. This is the first API association in the history of the LACoFD. He also serves as the Chair of the National Fire Protection Association (NFPA) committee for firefighter respiratory protection and as an incident commander trainee for LACoFD Incident Management Team 3. Chief Yanagisawa resides in Long Beach with his wife. He is a supporter of teen suicide prevention through Didi Hirsch Mental Health Services and is a volunteer for the Long Beach Community Emergency Response Team.