## PROGRAM OVERVIEW

Experience the high-quality learning and expert instruction you've come to expect from ACOEM in-person education – from the convenience of your home or office. Daily themes for the 2023 Virtual Fall Summit will cover The Evolution of Artificial Intelligence (AI), Climate Change and Its Impact on OEM, Clinical Occupational and Environmental Medicine. The full agenda is included below and is subject to change.

## TARGET AUDIENCE

The Virtual Symposium is designed for physicians and other health care professionals who specialize in or have an interest in occupational and environmental medicine (OEM), including nurses, physician assistants, industrial hygienists, safety professionals, environmental health specialists, and human resource professionals.

## ACCREDITATION AND CREDIT DESIGNATION STATEMENTS

The American College of Occupational and Environmental Medicine (ACOEM) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American College of Occupational and Environmental Medicine designates this live activity for a maximum of 11.5 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## VIRTUAL FALL SUMMIT PLANNING GROUP

Judith McKenzie, MD, MPH, FACOEM (Chair, COEAA)
Alya Khan, MD, MS, FACOEM (Vice Chair, COEAA)
Karl Auerbach, MD, MS, MBA, FACOEM
Melissa Broadman, DO, MPH, FACOEM
Allison L. Jones, MD, MS, FACOEM
Sajjad Savul, MD, MS, FACOEM
Leigh R. Wilson, DO, MPH

## SCHEDULE AT A GLANCE

| WEDNESDAY, NOVEMBER 15<br>The Evolution of Artificial Intelligence (AI)<br>*Moderator: Manijeh Berenji, MD, MPH, FACOEM* | | |
|---|---|---|
| **TIME (CT)** | **TIME (ET)** | |
| **11:30 – 11:45 AM** | **12:30-12:45 PM** | **Virtual Fall Summit Presidential Welcome**<br>*Kenji Saito, MD, JD, FACOEM* |
| **11:45 AM – 12:30 PM** | **12:45 - 1:30 PM** | **Session #1: AI in Occupational Medicine - Introduction to ChatGPT**<br>*Eric Jackson-Scott, MD, MPH* |
| **12:30 – 12:45 PM** | **1:30 - 1:45 PM** | **Session #1 Q&A** |
| **12:45 – 1:30 PM** | **1:45 - 2:30 PM** | **Session #2: AI and Machine Learning in Occ. Health**<br>*Houshang Darabi, PhD* |
| **1:30 – 1:45 PM** | **2:30 - 2:45 PM** | **Session #2 Q&A** |
| **1:45 – 2:00 PM** | **2:45 - 3:00 PM** | BREAK |
| **2:00 – 2:45 PM** | **3:00 - 3:45 PM** | **Session #3: The B Reader Program and Silicosis:**<br>**A Niche for AI Technologies**<br>*Glen Cheng, MD, JD, MPH* |
| **2:45 – 3:00 PM** | **3:45 - 4:00 PM** | **Session #3 Q&A** |
| **3:00 – 3:45 PM** | **4:00 - 4:45 PM** | **Session #4: Predicting Turnover and Budgeting for Clinical Well-Being**<br>*Sisi Hu, PhD* |
| **3:45 – 4:00 PM** | **4:45 – 5:00 PM** | **Session #4 Q&A** |
| **4:00 – 4:15 PM** | **5:00 - 5:15 PM** | **Day One Wrap Up**<br>*Mani Berenji, MD, MPH, FACOEM* |
| **THURSDAY, NOVEMBER 16**<br>**Climate Change and Its Impact on OEM**<br>*Moderator: Alya Khan, MD, MS, FACOEM* | | |
| **TIME (CT)** | **TIME (ET)** | |
| **11:40 – 11:45 AM** | **12:40-12:45 PM** | **Welcome**<br>*Alya Khan, MD, MS, FACOEM* |
| **11:45 AM – 12:15 PM** | **12:45 - 1:15 PM** | **Session #1: Lead in Pipes: Our Experience and a Review of Leaded Pipe Dope in Occupational Groups / The Importance of Biological Monitoring Of Exposure And Different Methods To Assess Previous (Short Term) And Chronic (Cumulative) Exposure**<br>*Cheryl Rook, RN; OHCOW; Kevin Hedges, PhD, CIH, COH; OHCOW* |
| **12:15 – 12:30 PM** | **1:15 - 1:30 PM** | **Session #1 Q&A** |
| **12:30 – 1:00 PM** | **1:30 – 2:00 PM** | **Session #2: Libby Amphibole Disease: Not your Grandfather's Asbestosis**<br>*Jaime Szeinuk, MD, MS* |
| **1:00 – 1:15 PM** | **2:00 – 2:15 PM** | **Session #2 Q&A** |
| **1:15 – 1:30 PM** | **2:15 - 2:30 PM** | BREAK |
| **1:30 – 2:15 PM** | **2:30 – 3:15 PM** | **Session #3: The East Palestine Derailment: What Happened, What Did We Learn, and How Do We Move Forward**<br>*Kevin Trangle, MD, MHA, MBA, FACOEM;*<br>*Teresa Ehnert; and Susan Santos, PhD, MS, BS* |
| **2:15 – 2:30 PM** | **3:15 - 3:30 PM** | **Session #3 Q&A** |

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|---|---|---|
| **2:30 – 3:15 PM** | **3:30 – 4:15 PM** | **Session #4: Changing Climate: New York City Haze and Wildfire Smoke Impacting Workers' Health in the Urban Metropolis**<br>Ismail Nabeel, *MD, MPH, MS, FACOEM* |
| **3:15 – 3:30 PM** | **4:15 – 4:30 PM** | **Session #4 Q&A** |
| **3:30 – 3:45 PM** | **4:30 – 4:45 PM** | **Day Two Wrap Up**<br>*Alya Khan, MD, MS, FACOEM* |
| **FRIDAY, NOVEMBER 17**<br>**Clinical OEM**<br>*Moderator: Judith McKenzie, MD, MPH, FACOEM* | | |
| **TIME (CT)** | **TIME (ET)** | |
| **11:40 – 11:45 AM** | **12:40–12:45 PM** | **Welcome**<br>*Judith McKenzie, MD, MPH, FACOEM* |
| **11:45 AM – 12:30 PM** | **12:45 – 1:30 PM** | **Session #1: Updated 2023 COVID-19 Vaccines: Use, Timing, Co-Administration Questions Answered**<br>*Judith O'Donnell, MD* |
| **12:30 – 12:45 PM** | **1:30 – 1:45 PM** | **Session #1 Q&A** |
| **12:45 – 1:30 PM** | **1:45 – 2:30 PM** | **Session #2: Silicosis and Engineered Stone**<br>*Robert Harrison, MD, MPH* |
| **1:30 – 1:45 PM** | **2:30 – 2:45 PM** | Session #2 Q&A |
| **1:45 – 2:00 PM** | **2:45 – 3:00 PM** | BREAK |
| **2:00 – 2:45 PM** | **3:00 – 3:45 PM** | **Session #3: Violence in Healthcare Settings**<br>*Michael Hodgson, MD, MPH* |
| **2:45 – 3:00 PM** | **3:45 – 4:00 PM** | **Session #3 Q&A** |
| **3:00 – 3:45 PM** | **4:00 – 4:45 PM** | **Session #4: Occupational Color Vision: Standards, Testing, and Rationale**<br>*Jeffrey Weaver, OD, MBA, MS* |
| **3:45 – 4:00 PM** | **4:45 – 5:00 PM** | **Session #4 Q&A** |
| **4:00 – 4:15 PM** | **5:00 – 5:15 PM** | **Day Three Wrap Up**<br>*Judith McKenzie, MD, MPH, FACOEM* |

## WEDNESDAY, NOVEMBER 15, 2023

The Evolution of Artificial Intelligence (AI)

12:30 – 12:45 PM ET — President's Welcome
*Kenji Saito, MD, JD, FACOEM; President, ACOEM*

12:45 – 1:30 PM ET — AI in Occupational Medicine – Introduction to ChatGPT*
*Eric Jackson-Scott, MD, MPH*

Introduction to AI in Healthcare: Explore the role of AI in transforming the healthcare industry and its specific applications in occupational medicine. Understanding ChatGPT: Delve into the workings of ChatGPT, a state-of-the-art AI language model developed by OpenAI. Learn about its capabilities, training data, and the technology behind it. Applications in Occupational Medicine: Discover how ChatGPT can be utilized to streamline and enhance various aspects of occupational medicine, including: Medical Documentation: Explore how ChatGPT can assist in generating accurate and efficient medical reports and documentation. Diagnostic Support: Learn how AI can aid in the interpretation of diagnostic tests and help doctors make more informed decisions. Health Education and Communication: Explore the potential for ChatGPT to improve patient education and communication, ensuring better compliance with medical advice and recommendations.

**Learning Objectives**

1. Understanding ChatGPT
2. Applications in Occupational Medicine
3. Health Education and Communication

*Dr. Eric Jackson-Scott, MD, MPH, is not only a dedicated father, but also an esteemed Occupational Medicine clinician, a compassionate visionary, philanthropist, and advocate for community wellness. As a devoted father and leader, he has dedicated his life to the upliftment of underserved communities, leaving an indelible mark on countless lives globally. His unwavering commitment to catalyzing positive change has given rise to the acclaimed Jackson-Scott Foundation, aimed at enriching the world we live in.*

**Artificial Intelligence (AI) is a new and evolving topic. In this session, Dr. Scott-Jackson will help facilitate engagement with the topic without advocating for, or promoting, practices that are not, or not yet adequately based on current science, evidence, and clinical reasoning.*

1:30 – 1:45 PM ET — Session #1 Q&A

1:45 – 2:30 PM ET

AI and Machine Learning in Occupational Health: Overview of Current AI/ML Research Methods in Occupational Health*

*Houshang Darabi, PhD*

AI and machine learning is rapidly transforming various sectors of the economy, including the workplace. The rise of AI has a mixture of potential benefits and challenges related to occupational health. The benefits include improved ergonomics and safety and health monitoring (i.e. use of sensors and wearable devices to pinpoint where injuries are occurring and developing data-driven solutions). The challenges include job displacement and mental health impacts as well as ethical and privacy concerns. While AI offers numerous potential advantages for improving employee health and safety, it's essential to approach its integration with care. Balancing the benefits with the potential challenges and keeping the human aspect of work in focus is crucial for the well-being of employees in an AI-driven world.

**Learning Objectives**

1. Understand what current AI/machine learning research is being conducted in the US/worldwide.
2. Review the potential benefits as well as challenges that AI/machine learning technology has on occupational health practice.
3. Discuss the ethical and privacy implications of AI in occupational health and safeguards that can be put in place.

*Dr. Houshang Darabi is a Professor of Industrial and Systems Engineering in the Department of Mechanical and Industrial Engineering at the University of Illinois Chicago. He is the codirector of the Occupational Safety program at the Illinois Education and Research Center which is funded by the National Institutes of Occupational Safety and Health. Dr. Darabi is the creator of the first Artificial Intelligence for Occupational Safety and Health Experts course in the United States. Dr. Darabi's research focuses on the use of Big Data, process mining, data mining, Operations Research, high performance computing, and visualization in improving educational, worker safety, and healthcare systems. Dr. Darabi's research has been funded by federal and corporate sponsors including the National Science Foundation, and the National Institute of Occupational Health and Safety.*

2:30 – 2:45 PM ET

Session #2 Q&A

2:45 – 3:00 PM ET

Break

3:00 – 3:45 PM ET

The B Reader Program and Silicosis: A Niche for AI Technologies*
*Glen Cheng, MD, JD, MPH*

Emerging AI technologies can offer a solution to both conflicts of interest and supply-demand mismatch. Leveraging their innate machine learning capabilities to reduce physician workload, efficiently process large volumes of imaging data, and lower rates of human error, AI-enabled radiology tools may breathe new life into an ailing program.

**Learning Objectives**

1. Describe silicosis pathology and management.
2. Summarize the regulatory history of the B Reader Program and how the 2018 OSHA Silica Standard increased the need for Certified B Reads for workers exposed to silica.
3. Explain how AI technologies could help alleviate the shortage of Certified B Readers in the US.

*Dr. Glen Cheng serves as Chief of Occupational Health at the VA Pittsburgh Healthcare System, providing preventive and occupational medicine care for VA employees across Pittsburgh VA's two campuses. Dr. Cheng received his medical degree from Rutgers New Jersey Medical School in 2009 and received his J.D. from Rutgers School of Law in 2011. After serving as regulatory counsel at the FDA Center for Drug Evaluation and Research, Dr. Cheng completed his M.P.H. at the Harvard School of Public Health and graduated from the Harvard Occupational and Environmental Medicine Residency. Dr. Cheng has authored publications focusing on occupational and environmental health, and health law and policy. Dr. Cheng's areas of expertise include occupational & preventive medicine, lifestyle medicine, OSHA regulations, ergonomics, and worker compensation law and policy. Outside of medicine, he enjoys spending time rock climbing and hiking with his wife and daughter.*

3:45 – 4:00 PM ET

Session #3 Q&A

4:00 – 4:45 PM ET

Predicting Turnover and Budgeting for Clinical Well-Being*
*Sisi Hu, PhD*

The CDC's National Institute for Occupational Safety and Health just launched the first federal campaign for hospitals to tackle healthcare workers' burnout, highlighting the importance of addressing this national crisis. This session will be diving into the cutting-edge machine learning, economics, and intervention science methodology that not only predicts clinician turnover risk but also quantifies the financial impact of both burnout and turnover. We will also discuss how machine learning can be used to empower and transform wellbeing efforts at health systems.

**Learning Objectives**

1. To share how we can use machine learning to predict turnover risk as an indicator of clinician burnout.
2. To explain a methodology published at the National Bureau of Economic Research that leverages standard organizational data to quantify the comprehensive costs of clinician burnout, setting the foundation of making the business case in investing in clinician wellbeing.

3. To discuss how we should think about quantifying the ROI of well-being programs and interventions.
4. To discuss the ethical implications of using machine learning to develop wellbeing programs.

*Dr. Xi (Sisi) Hu is a Research Fellow at the Center for Labor and a Just Economy at Harvard Law School and a Research Economist at the National Bureau of Economic Research, where she focuses her research on the economics of clinician burnout risk and wellbeing. Her expertise is in risk science and its application to climate change has received media attention from around the world including the World Economic Forum, Sky News, the UN, among others. She is also a coauthor of The Self We Choose (我们选择的自己), a book published in Chinese that features the life stories of scientists from the largest ever all-women expedition to Antarctica. Dr. Hu completed her graduate studies at the London School of Economics and received her PhD from the University of Oxford.*

4:45 – 5:00 PM ET — Session #4 Q&A

5:00 – 5:15 PM ET — Day 1 Wrap-up
*Manjehi Berenji, MD, MPH, FACOEM*

**Artificial Intelligence (AI) is a new and evolving topic. In this session, Dr. Scott-Jackson will help facilitate engagement with the topic without advocating for, or promoting, practices that are not, or not yet adequately based on current science, evidence, and clinical reasoning.*

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## THURSDAY, NOVEMBER 16, 2023

Climate Change and Its Impact on OEM

12:40 – 12:45 PM ET — Welcome
*Alya Khan, MD, MS, FACOEM*

12:45 – 1:15 PM ET — Lead – in pipes. Our experience and a review of leaded pipe dope in occupational groups. The importance of biological monitoring of exposure and different methods to assess previous (short term) and chronic (cumulative) exposure.
*Cheryl Rook, RN; OHCOW*
*Kevin Hedges, PhD, CIH, COH; OHCOW*

A presentation of chronic occupational lead exposure in occupational groups dealing with pipes, with a focus on reproductive health effects at blood lead levels (BLL) currently promulgated in legislation. Working as an interdisciplinary group of occupational health nursing, industrial hygiene, and others, discover how this occupational exposure can be transferred to family members in Ontario and the US. An update on the literature, including biological monitoring for exposure and health effects is provided. Also, the measurement of lead in tibia (as a cumulative measure of exposure), to retrospectively estimate historical blood lead levels is presented. In Ontario, worker's compensation claims have been allowed for lead exposure albeit based on blood lead and personal exposure to inhalable lead. Blood lead only accounts for recent exposure not chronic or cumulative exposure. X-ray fluorescence

scanning (XRF) will allow this kind of assessment. We will review some of the health effects from the AIOH (Australia institute of Occupational Hygienists) and other resources to provide Occupational Health physicians and related occupational health professionals with current research updates. A booklet for lead in pipe sealant will be reviewed with environmental/community implications. Learn about the significance of lead in our workplaces and environment. Learn to take steps to eliminate/mitigate lead exposure. Understand that there is methodology to estimate cumulative body burden of lead using techniques such as XRF.

**Learning Objectives**

1. Identify the health effects of lead and how exposure may occur.
2. Discuss lead containing materials and the importance of reviewing safety data sheets (SDS) as a catalyst for substitution.
3. Describe the risk posed to family members from lead contaminated work clothing. 4. List different ways to assess exposure including personal exposure monitoring, blood lead and lead in bone and compare the merits of each.

*Cheryl Rook is a Registered Nurse specializing in occupational health, safety, and environmental health. She holds specialist certifications in Occupational Health Nursing from the Canadian Nurses' Association and the American Board of Occupational Health Nurses Inc. In addition, she holds certification in safety from the Association of Canadian Registered Safety Professionals and holds diplomas in both Occupational Health and Safety, and Environmental Health from McMaster University. Cheryl has worked as an occupational health nurse for the past 35 years. Her work experience includes the manufacturing and insurance sectors. For the past 25 years, she has worked for the Occupational Health Clinics for Ontario Workers, Inc. Cheryl Rook has been involved in many projects throughout her years with OHCOW, looking at individual workers with an interdisciplinary team to determine / characterize work relatedness of occupational disease. Much of this work has also been carried out towards prevention of occupational disease as well as supporting advocates in compensation claims as well as influencing policy to recognize occupational disease towards the acceptance of claims.*

*Dr. Kevin Hedges Obtained occupational hygiene certification in early 2000 as Certified Occupational Hygienist and Certified Industrial Hygienist, Spend the first 10 years as a field services supervisor based in an Australian Environmental Health Laboratory. Also, coauthor on an Australian Institute of Occupational Hygienists (AIOH) position paper on lead. As site occupational hygienist and senior regulator with the Queensland Mines Inspectorate carried our regulatory oversight along with inspections and auditing of lead mining and processing operations in Queensland Australia. For the past 7 years has been employed with the Occupational Health Clinics for Ontario Workers Inc. (OHCOW) as an Occupational Hygienist. Also, past president and current board member with Workplace Health Without Borders WHWB (International).*

1:15 – 1:30 PM ET Session #1 Q&A

1:30 – 2:00 PM ET

Libby Amphibole Disease: Not your Grandfather's Asbestosis

*Jaime Szeinuk, MD, MS*

Exposure to Libby amphibole results in novel and very different medical consequences when compared to exposure to regulated asbestos fibers. This presentation will review the findings of the Libby Environmental Research Program, an ATSDR-funded grant that focused on the investigation of the medical consequences of exposure to Libby amphibole.

**Learning Objectives**

1. Describe the clinical manifestations of Libby amphibole disease.
2. Identify the radiographic abnormalities associated with Libby amphibole disease.
3. Describe immunological abnormalities associated with exposure to Libby amphibole.

*Dr. Jaime Szeinuk graduated as Doctor of Medicine and Surgery from the School of Medicine of the National University of Colombia in 1978. In 1983, he completed training in Internal Medicine and Pulmonary Medicine at the Central Military Hospital in Bogota. Dr. Szeinuk worked as an Attending in the Pulmonary Medicine Department of the Central Military Hospital in Bogota and was Associate Professor at the Nueva Granada Military University School of Medicine. In 1992 his family immigrated to the US. Subsequently, Dr. Szeinuk completed residency training in Occupational Medicine at the Mount Sinai School of Medicine in 1996 and continued to work as an Occupational Medicine specialist at the Mount Sinai-Irving J Selikoff Center for Occupational and Environmental Medicine until 2013. He then transferred to the Department of Occupational Medicine, Epidemiology and Prevention at Northwell Health in May 2015, where he is an Attending Physician and Assistant Professor. Dr. Szeinuk was the Director of Medical Standards for the NYS Workers' Compensation Board between 2010 and 2015. He was involved in the creation of the WTC Treatment and Monitoring Program at Mount Sinai and served as Co-Investigator for the Libby Amphibole Research Program.*

2:00 – 2:15 PM ET

Session #2 Q&A

2:15 – 2:30 PM ET

Break

2:30 – 3:15 PM ET

The East Palestine Derailment: What Happened, What Did We Learn, and How Do We Move Forward

*Kevin Trangle, MD, MHA, MBA, FACOEM; Teresa Ehnert; Susan Santos, PhD, MS, BS*

Review of the facts that led up to the East Palestine derailment on February 3, 2023. This will include a toxicological overview and a environmental assessment. Will then provide an overview of incident command structure from a public health standpoint, including how respective local, state, and federal agencies disseminate resources and personnel to affected communities. Lastly, will provide an evidence-based risk communication tutorial on how information during such environmental incidents should be relayed to stakeholders (including the public).

**Learning Objectives**

1. Understand the full sequence of events that led to the East Palestine derailment on February 3, 2023 (including a toxicological and environmental overview).
2. Review incident command structure in the event of an environmental disaster and how respective agencies are activated.
3. Learn risk communication techniques that can be employed in the event of an environmental disaster for timely notifications to stakeholders.

*Dr. Kevin Trangle is a Board Certified Occupational and Environmental (OEM) physician, Board Certified Internal Medicine physician, Board-Certified Preventive Medicine specialist and Board Eligible Addiction Medicine specialist. He is an active member of the Transportation Section of ACOEM which includes medical directors of Class 1 and other railroads, FAA, DOT, FMCSA, Coast Guard and other shipping company medical directors. He has been a Medical Director for a railroad, and as an OEM specialist, he is versed in FFD, FCE, LCP, FCN, VA, UCR adjustments, RTW and PDA determinations, particularly as it pertains to railroads. His professional knowledge encompasses FMCSA and FRA regulations and recommendations. Dr. Trangle has established protocols and procedures to protect those technicians and professionals who may be exposed to various chemicals, IAQ concerns, infectious diseases, environmental exposures, herbicides and pesticides, nanotechnology, disaster planning and potential adverse effects. His clinical orthopedic experience includes working as an Emergency Room physician and having cared for patients while at University Orthopedics and Ohio City (Cleveland Clinic) Orthopedics.*

*Ms. Ehnert serves as the Bureau Chief for Public Health Emergency Preparedness and Response for The Department of Health Services. The Bureau is responsible for program oversight and emergency planning activities for Tribes, County Public Health, and health care partners in the state. Ms. Ehnert is responsible for conducting a broad scope of operational and or program specific analyses of policies, procedures, and operations for the purpose of implementing statewide plans.*
*Additionally, she serves as the health lead within the State Emergency Operations Center. Ms. Ehnert has been with the Department of Health Services for 18 years, she has a master's degree in management and outside of work, she enjoys spending time with her grandchildren, golfing and swimming.*

*Dr. Susan L. Santos is an internationally recognized expert in risk communication with over 35 years of experience in developing and facilitating risk communication training and developing materials in support of executing risk communication and outreach plans for a wide range of environmental and occupational risk/health issues. She is the founder and principal of FOCUS GROUP, a consultancy specializing in risk communication, health, and environmental management. For over 20 years Dr Santos served as Director of Education and Risk Communication for the VA's War Related Illness and Injury Study Center (WRIISC), in East Orange, NJ where she developed training for providers on a wide range of deployment and occupational exposure issues. She has served as a member of several NASEM committees and the Board of on Population Health and Public Health Practice. She is widely published in the field of risk communication. Dr Santos has a Doctorate degree in risk Communication and public policy form Northeastern University, a master's degree in public Healht and environmental engineering from Tufts University and a BS in Chemistry from Boston College.*

3:15 - 3:30 PM ET Session #3 Q&A

3:30 – 4:15 PM ET

Changing Climate: New York City Haze and Wildfire Smoke Impacting Workers' Health in the Urban Metropolis

*Ismail Nabeel, MD, MPH, MS, FACOEM*

In this session, we will look at the impact of climate change particularly wildfire on air quality and the detrimental effects on human health. New York City and the American Northeast was recently engulfed in the thick smoke, becoming the most polluted City in the world, after the smoke from hundreds of active wildfires created a spectacular sunrise in the NY skies, with thick hazy deep orange hue draping the cityscape. It has extreme detrimental effects on the health of the workers. Particularly outdoor workers who are directly impacted by the conditions outside. We will look at some potential policy measures that can be employed to mitigate the health risks associated with poor air quality for both outdoor workers and the general population.

**Learning Objectives**

1. Upon completion, participants will be able to relate to the recent experience of New York City and the American Northeast being engulfed in thick smoke due to wildfires illustrate the connection between climate change, wildfire, and air quality, and what are the specific health implications for workers in such areas.
2. Upon completion, participants will be able to learn about the practical strategies or interventions to protect the health of these workers in the face of worsening air quality conditions.
3. Upon completion, participants will be able to understand some of the potential policy measures that can be employed to mitigate the health risks associated with poor air quality for both outdoor workers and the general population.

*Ismail Nabeel, MD, MPH, MS is an Associate Professor in the Department of Environmental Medicine and Public Health at the Icahn School of Medicine at Mount Sinai. Dr. Nabeel has expertise in Internal Medicine, Occupational/Environmental Medicine, and Clinical Informatics. He has always been interested in Climate Change and its impacts on workers' health in multiple different working environments. Over the course of years, he has published a series of articles providing in-depth guidance on the clinical competencies for occupational and environmental medicine practitioners to protect workers health in the impending climate change crisis. He was instrumental in the development of Climate change specific podcasts called "Climate conversations" exploring the impact of climate change on workers' health. For the past five years, he has been working on the development of "Pocket Ark"- a collaborative effort to enhance the health and safety of the construction workers, working in the flood zones. In 2023, he also received the P-30 grant on Climate Change and Health which looks at the flooding and its impact on respiratory illness.*

4:15 – 4:30 PM ET

Session #4 Q&A

4:30 - 4:45 PM ET

Day 2 Wrap-up

*Alya Khan, MD, MS, FACOEM*

## FRIDAY, NOVEMBER 17, 2023
### Clinical OEM

12:40 – 12:45 PM ET — Welcome
*Judith McKenzie, MD, MPH, FACOEM*

12:45 – 1:30 PM ET — Updated 2023 COVID-19 Vaccines: Use, Timing, Co-Administration Questions Answered
*Judith O'Donnell, MD*

An overview of the 2023 new updated COVID-19 vaccines including both RNA vaccines and the protein subunit vaccine (Novavax). Current use, workflows, and answer common questions about timing of vaccination, use in immunocompromised, pregnant, and other special populations will be discussed. Judith will also discuss co-administration of COVID vaccines with other vaccines used in Occupational Medicine, such as flu; touching on the new RSV vaccine co-administration question. During this session insights into what may be on the horizon in terms of the next generation of COVID vaccines, and what the future may hold in terms of fall/winter resp. season vaccination programs - such as a single co-formulated COVID-flu vaccine, etc... will be discussed. additional information around COVID prevention in the healthcare workforce, including masking in healthcare settings during peak winter respiratory virus season.

**Learning Objectives**

1. Describe 2023 updated COVID-19 vaccine types, recommended doses and differences.
2. Delineate which patients benefit most, and what the optimal timing is, for COVID vaccine administration.
3. Understand how vaccines are an integral part of winter respiratory season infection prevention.

*Dr. Judith O'Donnell who will present on 2023 Updated COVID-19 Vaccines: Use, Timing and Co-Administration Questions Answered. Dr. O'Donnell currently serves as the Hospital Epidemiologist and Director of the Department of Infection Prevention & Control, and as the Chief of the Division of Infectious Diseases, at Penn Presbyterian Medical Center, and is an Associate Chief Medical Officer for Healthcare Epidemiology at the University of Pennsylvania Health System. She has been a faculty member in the Division of Infectious Diseases at the University of Pennsylvania's Perelman School of Medicine since 2007, and currently holds the rank of Professor of Clinical Medicine. She is a board-certified Infectious Diseases specialist with more than 25 years of clinical experience in her specialty, and maintains an active practice in ID, along with ongoing commitment to student and graduate education. Her specific areas of clinical expertise include hospital-acquired infections, endocarditis, bone and joint infections, and sexually transmitted infections. Since the beginning of the COVID-19 pandemic, Dr. O'Donnell has been leading Penn Medicine's efforts around Infection Prevention and has served on several committees and working groups over the last year to address all aspects of the pandemic.*

1:30 – 1:45 PM ET — Session #1 Q&A

1:45 – 2:30 PM ET

Silicosis and Engineered Stone

*Robert Harrison, MD, MPH*

This presentation will focus on the cause, treatment, and prevention of silicosis among engineered stone fabrication workers. Since 2010, more than 1,000 cases of silicosis in workers who fabricate countertops have been reported worldwide. Workers in this industry can inhale crystalline silica dust as they cut and finish countertops, which places them at risk for silicosis, a severe, incurable lung disease. More than 80 cases of silicosis have been identified in California by the California Department of Public Health since 2019, and at least 10 California workers have died, most of whom were in their 30s and 40s. While silicosis is a serious disease, it is preventable with appropriate controls to reduce silica dust exposure.

**Learning Objectives**

1. Identify the hazards of silica dust exposure in stone fabrication shops.
2. Describe the extent of disease among engineered stone fabrication workers.
3. Understand the implications for policies to prevent this disease.

*Dr. Harrison is a Public Health Medical Officer with the California Department of Public Health Occupational Health Branch and Clinical Professor at the University of California, San Francisco in the Division of Occupational and Environmental Medicine. He established the UCSF Occupational Health Services where he has diagnosed and treated thousands of work and environmental injuries and illnesses. He has designed and implemented numerous medical monitoring programs for workplace exposures, and has consulted widely with employers, health care professionals, and labor organizations on the prevention of work-related injuries and illnesses. Dr. Harrison has led many work and environmental investigations of disease outbreaks. He has served as a technical and scientific consultant to Federal OSHA and CDC/NIOSH and was a member of the California Occupational Safety and Health Standards Board. His research interests include the collection and analyses of California and national data on the incidence of work-related injuries and illnesses. Dr. Harrison has authored or coauthored more than 70 peer-reviewed journal articles, and more than 50 book chapters/contributed articles/letters to the editor. He is the co-editor of the most recent edition of the textbook Occupational and Environmental Medicine (McGraw-Hill Education, New York, NY, 2021).*

2:30 – 2:45 PM ET Session #2 Q&A

2:45 – 3:00 PM ET Break

3:00 – 3:45 PM ET

Violence Prevention in Healthcare

*Michael Hodgson, MD, MPH; OSHA/DOL/US*

The presentation will present an overview of violence in healthcare. It will review current OSHA guidance and data on violence inspections. It will then present the structure of workplace violence prevention programs (WVPP), describe the various systems that should be in place and what individual employees should know, together with data on prediction of violence. Finally, it will describe a current data project on using checklists to evaluate programs, comparing the items described some years ago in JOEM and those recently published by TJC (formerly The Joint Commission).

**Learning Objectives**

1. Describe the characteristics of systems needed in healthcare institutions to address violence prevention.
2. Use a checklist to evaluate the effectiveness of the program in their own institution.

*Michael Hodgson, MD, MPH, has been Chief Medical Ofc. at OSHA and the Director of the Office of Occupational Medicine and Nursing since 2013. Previously he led him the Veterans Health Administration employee occupational health system, with responsibility for critical patient care/employee health and safety programs, including violence prevention, safe patient handling, occupational health and infection control, and was involved in the work organization activities at VHA through its National Center for Organizational Development after 2001. Previously, after a year in the NIOSH Director's Office (1998-1999) as a senior scientist, he served as faculty at the universities of Connecticut (1991 – 1998) and Pittsburgh (1983 – 1991). He was an Epidemiology Intelligence Service officer (CDC – PHS) in the Morgantown now Respiratory Health Division (1981-83. His interest in workplace violence in healthcare dates back to his own assault in the emergency department at the Washington DC VA 1979. He is board certified in internal medicine and occupational medicine and was the 2019 recipient of ACOEM Lifetime Achievement Award.*

3:45 – 4:00 PM ET

Session #3 Q&A

4:00 – 4:45 PM ET

Occupational Color Vision: Standards, Testing and Rationale

*Jeffrey L. Weaver, OD, MBA, MS*

Color vision can be an important consideration in fitness for duty evaluations for many occupational roles. We will briefly review the common vision requirements for various roles, both pre- and post-hire, and the pitfalls that should be avoided. Color vision will then be addressed in detail. The course reviews specific roles in which color vision should always be considered, what standards are reasonable and in accordance with essential job function, procedures for completing a variety of color vision tests, and the rationale for standards and test selection.

**Learning Objectives**

1. Understand the need for careful critical assessment of visual skills for the worker who must meet vision standards for a job.
2. Explain job-related standards related to common procedures such as visual acuity, color vision, stereopsis and visuals fields.
3. Recognize commonly encountered situations that should be red flags when making determination on whether a candidate or employee is visually fit for duty.

*Jeffrey L. Weaver, OD, MBA, MS, is the optometry director for Cornerstone Care, a federally qualified health center, in his hometown of Waynesburg, Pennsylvania. He is also a medical review officer and consultant on occupational eye and vision issues to government agencies and other organizations. He is Adjunct Professor at the University of Missouri-St. Louis College of Optometry and in group private family practice in St. Louis, Missouri. He is a graduate of Pennsylvania College of Optometry and The Ohio State University. Throughout his career, he has balanced clinical, academic, administrative and military healthcare roles. He is triple board certified as an optometrist, healthcare executive and association executive. He is a Past Chair of the American Academy of Optometry's Section on Public Health and Environmental Vision. He currently serves on the board of directors of VOSH International. He is finalizing his dissertation on his latest pursuit, a PhD in Industrial & Organizational Psychology at Liberty University.*

5:00 – 5:15 PM ET

Day 3 Wrap-up

*Judith McKenzie, MD, MPH, FACOEM*

## FACULTY DISCLOSURES

*The faculty presenting during Virtual Fall Summit have nothing to disclose.*