

NOVEMBER 6 - 8, 2024

#### **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. The conference for the 2024 Virtual Fall Summit will cover Clinical and Emerging Trends in OEM. 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 11.25 *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

Alya Khan, MD, MS, FACOEM (Chair, COEAA)
Sajjad Savul, MD, MS, FACOEM (Vice Chair, COEAA)
Beth Baker, MD, MPH, FACOEM, FACMT
Melissa Broadman, DO, MPH, FACOEM
Allison L. Jones, MD, MS, FACOEM



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### **SCHEDULE AT A GLANCE**

WEDNESDAY, NOVEMBER 6		
	Clinical OEM	
TIME (CT)		
11:30 – 11:45 AM	Virtual Fall Summit Presidential Welcome	
	Tanisha K. Taylor, MD, MPH, MBA, FACP, CIME, FACOEM	
11:45 AM – 12:30 PM	Session #1: The Top 4 Provider Mistakes That Sabotage Return-to Work Success	
	Leslie Cadet, MD, MPH & Co-Speaker	
	Kimberly Kinney, CPDM, WCCP, AIN	
12:30 – 12:45 PM	Session #1 Q&A	
12:45 – 1:15 PM	Session #2: New Guidance for the Evaluation of Firefighters with Cardiovascular Disease	
	Daniel Samo, MD, FACOEM	
	Fabrice Czarnecki, MD, MPH, MA, FACOEM, FAAFP, FIAME	
1:15 – 1:30 PM	Session #2 Q&A	
1:30 – 1:45 PM	BREAK	
1:45 – 2:30 PM	Session #3: The Event Medicine 101- The Role of Occupational Medicine Physician	
	Louis Philip Rotkowitz, MD, MPH, FAAFP, DABUCM	
2:30 – 2:45 PM	Session #3 Q&A	
2:45 – 3:30 PM	Session #4: Essentials of Musculoskeletal Radiology	
2.43 – 3.30 FIVI	Michael Vo, MD	
3:30 – 3:45 PM	Session #4 Q&A	
3:45 – 4:15 PM	Daily Wrap Up	
	THURSDAY, NOVEMBER 7	
	Emerging Trends in OEM	
TIME (CT)		
11:40 – 11:45 AM	Welcome	
	Alya Khan, MD, MS, FACOEM	
11:45 AM – 12:30 PM	Session #1: All Suited Up with No Place to Go: A Brief Overview of OEM in Space	
42.22.42.22	J. Timothy LaVan, MD, MPH	
12:30 – 12:45 PM	Session #1 Q&A	
12:45 – 1:30 PM	Session #2: Navigating the AI Wave: A Framework for Understanding Occupational Impact and Adaptation	
	Cameron Kiani, MD	
1:30 – 1:45 PM	Manijeh Berenji, MD, MPH Session #2 Q&A	
	BREAK	
1:45 – 2:00 PM 2:00 – 2:45 PM	Session #3: PFAS Health Effects, Environmental Exposures and Cost Implications	
	Ali Ling, PhD, PE	
	Beth Baker, MD, MPH, FACOEM, FACMT	
2:45 – 3:00 PM	Session #3 Q&A	
3:00 – 3:45 PM	Session #4: Occupational Challenges and Health Effects in Nail and Hair Salons	
	Beth Baker, MD, MPH, FACOEM, FACMT	
	Trân Huỳnh, PhD, MPH, CIH	
3:45 – 4:00 PM	Session #4 Q&A	
4:00 – 4:30 PM	Daily Wrap Up	



# 2024 VIRTUAL FALL SUMMIT NOVEMBER 6 - 8, 2024

	FRIDAY, NOVEMBER 8
Clinical OEM	
TIME (CT)	
11:40 – 11:45 AM	Welcome
11:45 AM – 12:30 PM	Session #1: Silicosis: Clinical Features and Emerging Exposures  Sheiphali Gandhi, MD, MPH
12:30 – 12:45 PM	Session #1 Q&A
12:45 – 1:30 PM	Session #2: Risk Factors Associated with Rwandan Cassiterite Mining  Samuel Hatfield, MD
1:30 – 1:45 PM	Session #2 Q&A
1:45 – 2:00 PM	BREAK
2:00 – 3:15 PM	Session #3: Addressing Environmental Health: Clinician Training and Practice of Environmental Medicine  - ACOEM Guidance Statement  Kathleen Fagan, MD, MPH  Manijeh Berenji, MD, MPH  Beth Baker, MD, MPH, FACOEM, FACMT  Robert K. McLellan, MD, MPH, FAAFP, FACOEM
3:15 – 3:30 PM	Session #3 Q&A
3:30 – 3:45 PM	Daily Wrap Up



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#### WEDNESDAY, NOVEMBER 6, 2023

Clinical OEM

11:30 – 11:45 PM CT President's Welcome

Tanisha K. Taylor, MD, MPH, MBA, FACP, CIME, FACOEM

11:45 - 12:30 PM CT

The Top 4 Provider Mistakes That Sabotage Return-to-Work Success Leslie Cadet, MD, MPH & Kim Kinney CPDM, WCCP, AIN

The return-to-work process hinges on the collaboration of multiple stakeholders, but none plays a more pivotal role than physicians and healthcare providers. As the frontline in the worker's recovery journey, these professionals are uniquely positioned to shape the path to a successful return-to-work outcome. In this presentation, we'll explore how physicians and providers not only set expectations for the healing process but also actively integrate stay-at-work/return-to-work strategies into recovery plans. Their interactions with employers and their ability to assess and communicate the worker's capabilities are critical in facilitating a smooth transition back to the workplace. However, the process is not without its challenges. Missteps in communication and assessment can derail recovery and prolong absence. Join us as we uncover the top four mistakes that physicians and providers commonly make in the return-to-work process—and, most importantly, learn practical strategies to avoid these pitfalls and enhance your role in driving positive outcomes.

#### **Learning Objectives**

- 1. Identify the key roles and responsibilities of physicians and providers in the return-to-work process and how their actions impact the worker's recovery journey.
- Analyze common communication and assessment mistakes that physicians and providers make in the return-to-work process and understand their potential consequences.
- 3. Implement effective strategies to avoid common pitfalls and enhance collaboration with workers and employers, ensuring a successful return-to-work outcome.

Dr. Cadet, an Air Force Veteran & former Flight Surgeon, supported over 3,000 missions in Operations INHERENT RESOLVE & ENDURING FREEDOM. She later completed her residency at Harvard T.H. Chan School of Public Health & now leads ASCEND Occupational Medicine Consulting, helping self-insured employers reduce their workers' compensation costs.



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Kimberly Kinney – Director, WC-Risk Management Kimberly began her career in Workers' Compensation claims administration in 1989, throughout her career she's enjoyed overseeing claim staff, conducted face to face interviews with injured workers, their supervisors and union representatives, participated in weekly safety meetings and provided input on how injuries could be avoided. She's been responsible for Claim adjudication and claim auditing, Stay / Return to Work programs, Utilization Review, Nurse Case Managers and Medical Provider Networks. In 2014 she began her career with Loma Linda University Health where she oversees the Stay / Return to work and Claim adjudication programs. She co-created Loma Linda University Health's "Returning to wholeness after your injury" pamphlet and participates in Loma Linda University Health Occupational Medicine Residency Training program. Kimberly is active in supporting Workers' Compensation by being a guest speaker for The Southern California Risk Managers Association (2018), Inland Empire Workers' Compensation Forum (2019, 2024), CWC & Risk Conference (2019), Elevate Conference 2024, and she co-authored an article for the EWC Magazine (2019). Kimberly holds her certifications in Workers Compensation Claims Associate (WCCA), Workers Compensation Claims Professional (WCCP), certificate in disability management (CPDM), and has and has an Associates in Insurance (AINS). She secured her certificate to administer self-insured claims from the California Department Self Insurance Plans (SIP) on 6/8/1996.

12:30 - 12:45 PM CT

Session #1 Q&A

12:45 - 1:15 PM CT

New Guidance for the Evaluation of Firefighters with Cardiovascular Disease Daniel Samo, MD, FACOEM & Fabrice Czarnecki, MD, MPH, MA, FACOEM, FAAFP, FIAME

With the significant changes to NFPA's standard 1580 (formerly 1582) on firefighter cardiovascular disease, the ACOEM Task Group for The Medical Evaluation of Public Safety Workers felt that an alternative Guidance was needed for fitness for duty evaluation of firefighters in regard to cardiovascular disease. This would impact evaluations done for post-offer placement, return to duty after a cardiovascular event, disability evaluation(s) and ongoing surveillance. This session will present the new document created by the Task Group.

- 1. Recognize the changes to the NFPA standards
- 2. Distinguish the difference between the NFPA standard and the ACOEM Guidance
- 3. Apply the ACOEM Guidance to the fitness for duty evaluations of firefighters



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Dr. Daniel Samo received his MD at The Chicago Medical School. His Residency was in Emergency Medicine through Northwestern University. He was an attending in Emergency Medicine for 10 years before founding an Occupation Medicine Practice. His current job is medical consultant to the Division Public Safety Medicine at Northwestern Medicine. He is an Assistant Professor at Northwestern's Feinberg School of Medicine. He is very active in the Public Safety Medicine field. He has been a member of NFPA's Technical Committee on Fire Service Occupational Safety and Health since 1996. He is also the Founder and past Chair of the ACOEM Public Safety Medicine Section. In 2003 he founded and is still the Chair of the Task Group writing Guidance for the Medical Evaluation of Public Safety Employees. He is a past officer of CSOEMA. He was twice a Board Director of ACOEM. He is a regular presenter at AOHC, component society meetings as well as for police, fire, legal and lay audiences.

Fabrice Czarnecki, MD, MA, MPH, FACOEM, FIAIME, FAAFP is the Chief Medical Officer for the Transportation Security Administration (TSA), US Department of Homeland Security. Prior to joining TSA, Dr. Czarnecki was the Medical Director of Public Safety Medicine at Northwestern Medical Group, in Chicago. He has served as the Medical Officer of the US Secret Service and as the Medical Director of the Chicago Fire Department. He previously practiced emergency medicine in Baltimore, MD, and in Paris, France. He is actively involved in writing medical guidelines for safety-sensitive occupations, as vice-chair of the ACOEM Task Group on Medical Guidance for Public Safety Employees, and as a member of the Emergency Responders Occupational Health Technical Committee of the National Fire Protection Association. He is board-certified in public health and general preventive medicine, in emergency medicine and in family medicine. He serves on the Board of Directors of ACOEM and is a past president of the International Academy of Independent Medical Evaluators.

1:15 – 1:30 PM CT Session #2 Q&A

1:30 – 1:45 PM CT Break

1:45 – 2:30 PM CT The Event Medicine 101 – The Role of Occupational Medicine Physician Louis Philip Rotkowitz, MD, MPH, FAAFP, DABUCM

Event Medicine, mass gathering medicine, crowd medicine or mass gathering health has traditionally been viewed as a niche field of prehospital care in emergency medicine. Planning the medical response to such events/gatherings requires the intricate design of an Emergency Action Plan (EAP). Such planning and design must conform to various government regulations. The Occupational Medicine Physician, by virtue of their role and



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experience working to conform in various regulatory frameworks are equally if not better equipped to become the authority in this young specialty of medicine. This session will demonstrate the role of the Occupational Medicine Physician in Event Medicine and the unique expertise and experience that they can offer in this budding specialty.

#### **Learning Objectives**

- 1. Demonstrate an understanding and appreciation of the dynamic need for medical care delivery and planning at special events.
- 2. Explain the various and specific roles that event medicine services play at an event.
- 3. Explain how to plan, design and execute sound and feasible Emergency Action Plans.

Dr. Dr. Lou Rotkowitz has been a full-time practicing emergency medicine physician working throughout Queens, NY, for over a decade. Lou's introduction and journey into Event Medicine began in 2015. Leading medical teams at various concerts, festivals and events throughout New York City and Long Island, Dr. Rotkowitz would serve as a Per-Diem Stadium Physician at Citi Field (Flushing, NY) for the New York Mets Major League Baseball Team. Originally from East Meadow, Long Island, he is a Graduate of the University of Delaware and attended Medical School at St. Matthew's University School of Medicine. Dr. Rotkowitz was appointed Honorary Surgeon in the New York City Police Department in 2013 by Commissioner Ray Kelly. He has served as a Ringside Physician for the New York State Athletic Commission and a Medical Control Physician/Incident Management Team Advisor for the New York City Fire Department. Dr. Rotkowitz has served as faculty member at the Icahn School of Medicine at Mount Sinai Health System, SUNY Downstate Health Sciences University, the Donald and Barbara Zucker School of Medicine at Hofstra University, Charles E. Schmidt College of Medicine at Florida Atlantic University and the Jerry M. Wallace School of Osteopathic Medicine in North Carolina. While pursuing his MPH at SUNY Albany, Dr. Rotkowitz was selected by the Journal of Public Health Management and Practice as one of the "Students Who Rocked Public Health" during 2020. Known affectionately to his patients and colleagues as "Dr. Rock", Lou recently became a Medical Officer/Primary Care Physician with the United States Department of Veterans Affairs. He is currently serving at the South Charlotte VA Health Care Center in Charlotte, North Carolina. Dr. Rotkowitz continues to seek to expand his practice of Occupational Medicine. He is working towards becoming a Fellow of the American College of Occupational and Environmental Medicine. He currently holds licenses to practice medicine in New York, Florida and North Carolina.



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2:45 - 3:30 PM CT

Essentials of Musculoskeletal Radiology\*

Michael Vo, MD

The main aims of this presentation are to review the radiologic correlates of common orthopedic injuries and to develop an efficient and accurate method to recognize the radiologic abnormalities in a timely manner.

#### **Learning Objectives**

- 1. Provide Brief review of the types of fractures and the language of fracture.
- 2. Explain Imaging of upper extremity trauma
- 3. Explain Imaging of lower extremity trauma

Michael Vo, M.D. was a practicing board-certified radiologist prior to joining the Occupational Medicine residency program at the University of California, Irvine (UCI) in July 2022. Upon graduation from the residency program in June 2024, I started a one-year fellowship in body and chest imaging at UCI in July 2024 and plan to become board certified in Occupational Medicine as well as a certified B reader in the coming months.

3:30 – 3:45 PM CT Session #4 Q&A

3:45 – 4:15 PM CT Day 1 Wrap Up

#### THURSDAY, NOVEMBER 7, 2024

**Emerging Trends in OEM** 

11:40 – 11:45 PM CT Welcome

Alya Khan, MD, MS, FACOEM

11:45 – 12:30 PM CT All Suited Up with No Place to Go: A Brief Overview of OEM in Space

J. Timothy LaVan, MD, MPH

This session will provide a brief survey of interesting and/or important Occupational and Environmental Medicine topics related to manned space flight. Issues to be discussed will include issues in fitness for duty, identification and management of occupational injuries terrestrially and on orbit and a discussion of the longitudinal surveillance of astronaut health (LSAH) program.



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- 1. Explain concerns related to space flight and the physical qualifications required to be considered fit for duty
- 2. Discuss occupational/environmental concerns related to the unique environments of manned space flight
- 3. Recognize the concepts of longitudinal surveillance of astronaut health and the limitations of the program

Dr. LaVan is the Clinic Medical Director at NASA's Johnson Space Center where he helps direct fitness for duty examinations as well as terrestrial and on orbit primary care of active astronauts both. He directs surveillance of retired astronauts and occupational programs for JSC. He is board certified in Aerospace, Occupational and Family Medicine.

12:30 - 12:45 PM CT

Session #1 Q&A

12:45 - 1:30 PM CT

Navigating the AI Wave: A Framework for Understanding Occupational Impact and Adaptation

Cameron Kiani, MD & Manijeh Berenji, MD, MPH

The rapid advancement of artificial intelligence (AI) is poised to reshape the future of work across industries. In this engaging session, Dr. Mani Berenji, Head of ACOEM's Health Informatics Section, and Dr. Cameron Kiani explore a practical framework for gauging AI's potential impact on different occupations. Through the lenses of task exposure and socialtechnical complementarity, they shed light on which jobs face greater disruption, which are ripe for human-AI symbiosis, and how workers can proactively adapt. They will center the discussion on the knowledge and skills the OEM physician must develop in this rapidly changing landscape, both for their own career development and to ensure OEM is at the forefront of utilizing AI in our work. Combining research-backed insights with live demos of cutting-edge AI tools like GPT and Claude, this session offers a hands-on look at the technologies behind the transformation. Attendees will gain a roadmap for their own AI upskilling and a vision for stewarding human-centric innovation in the workplace. Join us to ride the Al wave with confidence and purpose.

- Describe the core concepts of AI task exposure and human-AI
  complementarity and their relevance for gauging the impact of AI
  on different occupations in Occupational and Environmental
  Medicine.
- Identify key considerations, best practices, and pitfalls when exploring the use of large language models and other AI tools to augment OEM workflows, based on live demos of platforms like GPT and Claude.



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 Discuss proactive strategies for upskilling and adapting OEM career paths to harness the power of AI productively while navigating the technology's limitations and risks.

Dr. Dr. Cameron Kiani, MD, is an early-career physician completing his Residency in Occupational & Environmental Medicine and Masters in Public Health at Mount Sinai School of Medicine, anticipated to finish in July 2025. His mission is to empower physicians to shape the future of healthcare technology, ensuring they have a voice in implementing innovations that impact their practice. As founder of Amisana Solutions LLC, Dr. Kiani guides businesses in harnessing generative Al's potential, while also equipping professionals across industries with practical skills in modern technologies like cloud computing and Al platforms. His research focuses on responsibly integrating Al into occupational and environmental medicine. Dr. Kiani explores the interplay of art, society, medicine, and technology on his blog at hanlonsrazor.com.

Dr. Berenji is a double board-certified physician specializing in Occupational and Environmental Medicine as well as Preventive Medicine. She is currently Chief of Occupational Health at VA Long Beach Healthcare System. She also leads the Environmental Health Clinic at VA Long Beach Healthcare System, conducting exposure assessments for veterans (including Agent Orange, Gulf War, and Open Burn Pit registry exams). She is Associate Clinical Professor in the Department of Occupational and Environmental Medicine at UC Irvine School of Medicine as well as Associate Clinical Professor in the Department of Environmental and Occupational Health at the Wen School of Public Health. She is Lead of Academic and Community Partnerships with the University of California Center for Climate, Health and Equity, where she is spearheading efforts to enhance academic and industry partnerships; evaluating new methodologies to enhance emergency preparedness surrounding climaterelated events; working with community leaders on identifying practical climate solutions; and developing climate curricula for medical students and residents. She is currently pursuing board eligibility in Clinical Informatics through the American Board of Preventive Medicine's Practice Pathway. She is Chair of the Health Informatics as well as the Environmental Health section of ACOEM and continues to lead the ACOEM Presidential Task Force on Digital Transformation through Planetary Health Lens. She is also a certified medico- legal evaluator and qualified medical examiner in the state of California.



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\*Artificial Intelligence (AI) is a new and evolving topic. In this session, Dr. Kiani and Dr. Berenji 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 CT Session #2 Q&A

1:45 – 2:00 PM CT Break

2:00 - 2:45 PM CT

PFAS Health Effects, Environmental Exposures and Cost Implications Ali Ling, PhD, PE & Beth Baker, MD, MPH, FACOEM, FACMT

Per- and polyfluoroalkyl substances (PFAS) are receiving increasing media and regulatory attention. OEM providers may need to respond to questions about environmental PFAS exposures and how to avoid or mitigate those exposures. The persistence of all PFAS means that once PFAS are released into the environment, they remain until actively removed and destroyed. Persistence also means removing and destroying PFAS from the environment very costly, millions of USD per pound removed. When considering environmental exposures, removing PFAS from drinking water has received the most attention, but accounts for less than 20% of American's PFAS intake and is expensive to achieve. The majority of exposures, including food ingestion, dust inhalation, and dermal adsorption, are innately linked to the use of PFAS in products. Societal responses to PFAS should consider the relative impact of different exposure routes, limited economic resources, and impacts to future generations, prioritizing phaseout from consumer products and ongoing research of alternatives.

#### **Learning Objectives**

- Describe how persistence/mobility, ubiquity in products, and large number of substances make PFAS a uniquely problematic environmental contaminant.
- 2. Describe relative importance of environmental PFAS exposure routes, including food ingestion, drinking water ingestion, dust inhalation, and dermal absorption
- 3. Communicate the long-term risks of continued PFAS use and considerations for PFAS phase-out from products

Ali Ling is an environmental engineer who works across disciplines to understand the impacts of environmental contamination and treatment. She is currently an assistant professor of Civil Engineering at the University of St. Thomas in St. Paul. Prior to joining St. Thomas, she worked in environmental consulting for ten years, serving municipal water and industrial wastewater clients.



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2:45 - 3:00 PM CT

Session #3 Q&A

3:00 - 3:45 PM CT

Occupational Challenges and Health Effects in Nail and Hair Salons Beth Baker, MD, MPH, FACOEM, FACMT & Trân Huỳnh, PhD, MPH, CIH

Many hair and nail salons are small businesses which employ large number of women and minority workers. A Total Worker Health® approach may help address challenging work-related issues, inequities, and social determinants of health. These small businesses often do not have the resources to hire occupational health professionals and may not supply adequate education or training regarding the health effects, or control measures to minimize health and safety risks. Workers and owners may be unaware of US laws or local regulations or work as independent contractors. Hazards may include awkward postures, repetitive motion and infections. Chemical exposures may include acetone, acetonitrile, butyl acetate, ethyl methacrylate, formaldehyde, methyl methacrylate, toluene, and dibutyl phthalate. For example, OSHA issued a hair salon health hazard alert for hair salons because of mislabeled products and some salons exceeding OSHA formaldehyde exposure levels. Salon workers may develop asthma, other respiratory complaints, musculoskeletal issues or severe hand dermatitis and leave the profession, but control measures may be available to limit exposure.

#### **Learning Objectives**

- Assess potential hazards and health effects among nail and hair salons workers
- 2. Recognize the regulations and some of the structural barriers impacting salon workers' health and well-being, particularly those from vulnerable communities.
- Compose appropriate return to work plans and suggestions for hazard control measures.

BETH BAKER, MD, MPH, FACOEM, FACMT is the Academic OEM Director and an Adjunct Professor at the University of Minnesota School of Public Health. She serves on the board of the American Board of Preventive Medicine and on the Medical Services Review Board for the Minnesota Department of Labor and Industry. She is a past president of ACOEM and is currently chair of the ACOEM MOC Committee.

Dr. Trân Huỳnh is an Associate Professor in the Division of Environmental Health Sciences at the University of Minnesota School of Public Health. She



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is an occupational hygiene faculty member and Outreach Director of the NIOSH-funded Midwest Center for Occupational Health and Safety Education and Research Center. Her work centers around community-based participatory research (CBPR) and environmental and occupational health with the aim of reducing health disparities. She is a certified industrial hygienist (CIH) with experience working with immigrant-owned, underresourced small businesses (e.g., hair and nail salons) to maintain safe work environments. She uses both qualitative and quantitative research methods to document health disparities among underserved populations and enjoy working collaboratively with academics, nonprofit organizations, and governmental agencies on public policy and programs to remove structural barriers for underserved communities to achieve their optimal health and well-being.

3:45 – 4:00 PM CT Session #4 Q&A

4:00 - 4:30 PM CT Day 2 Wrap-up

## FRIDAY, NOVEMBER 8, 2024 Clinical OEM

11:40 – 11:45 PM CT Welcome

Alya Khan, MD, MS, FACOEM

11:45 – 12:30 PM CT Silicosis: Clinical Features and Emerging Exposures

Sheiphali Gandhi, MD, MPH

Silicosis is the most prevalent pneumoconiosis worldwide. It is a fibrotic interstitial lung disease resulting from the occupational inhalation of respirable crystalline silica over decades. With exposure to higher dust levels, the disease can also occur in acute and accelerated forms over shorter periods of time. Initially, patients are often asymptomatic. Subsequently, they may develop worsening respiratory symptoms and endstage lung disease. As there are no effective treatments, silicosis may lead to premature death or lung transplant. In California, we have identified 175 young men with accelerated silicosis identifying an emerging pandemic of silicosis secondary to artificial stone fabrication due to installing countertops. I plan to highlight clinical features, give an update on the literature for diagnostic techniques, and discuss emerging epidemics and exposures.

#### **Learning Objectives**

1. Discuss clinical features of Silicosis



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- 2. Describe Emerging silica exposures
- 3. Discuss current literature on diagnosis and screening

Dr. Sheiphali Gandhi, MD, MPH, is an Assistant Professor at the University of California San Francisco in the Divisions of Occupational, Environmental, and Climate Medicine and Pulmonary, Critical Care, Sleep, and Allergy Medicine. She is a dual-boarded pulmonologist and occupational medicine physician, specializing in occupational and environmental respiratory disease. She attends the UCSF Occupational and Environmental Medicine specialty practice with an emphasis on occupational respiratory diseases and toxicology. She is the Director of the California Silicosis Support Network based at UCSF. Additionally, she is the Associate Director of the San Francisco Veteran's Association Post-Deployment Cardiopulmonary Evaluation Network, assessing veterans with military exposures in Southwest Asia. Her research concentrates on the epidemiology of interstitial lung disease including pneumoconiosis and the occupational contributions to health disparities.

12:30 - 12:45 PM CT

Session #1 Q&A

12:45 - 1:30 PM CT

Risk Factors Associated with Rwandan Cassiterite Mining Samuel Hatfield, MD

Developing millions of years ago, the East African Rift is the site of two divergent tectonic plates, producing some of the world's most beautiful natural wonders, and critically, one of the most mineralogically important areas in the world. Within this gorgeous topography of savannah, volcanoes and highlands sits Rwanda, who's mineral wealth is now its second largest economic sector, behind ecotourism. Through its exploration of critical deposits of tin, tungsten, gold, cobalt, tantalum and wolframite, it has become an important international player in supplying these raw minerals to various countries across the globe, boosting the development of high-tech industries in the process. Within this milieu, I will detail our experience working with a cohort of Cassiterite miners in Rwanda's eastern province, where we noticed an epidemiologic cluster of silicosis and what we learned about the risk factors influencing the incidence of this disease in these young men. Additionally, I will share the lessons, pratfalls and difficulties we encountered embarking on an ambitious clinical collaboration with the local mining company and developing an occupational health program from scratch, as well as the ongoing challenges we face in eliminating silicosis in Rwandan mines.



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- 1. Describe the unique challenges of formal risk factor analysis in mining regions in Subsaharan Africa
- 2. Analyze different methods for workplace surveillance given resource or political constraints
- 3. Discuss on the challenges of establishing clinical infrastructure for Occupational Health in parts of Africa

Dr. Samuel Hatfield is a hospitalist at the San Francisco General Hospital. His academic and project work is split between global health equity, education, and occupational and environmental health. He is particularly focused on initiatives in building clinical infrastructure and developing curriculum in international settings. He is a visiting faculty in internal medicine at the University of Global Health Equity in Butaro, Rwanda and is involved in curriculum development and ultrasound skills teaching. He discovered a passion working in mining communities, and in collaboration with Partners in Health has helped create a rural screening and surveillance program for silicosis in the Eastern Province of Rwanda. Through this work, he hopes to generate new knowledge on how to best manage these patients longitudinally to prevent morbidity and mortality from mining related lung disease and to uncover risk factors for those mining in poorly regulated environments.

1:30 – 1:45 PM CT

Session #2 Q&A

1:45 - 2:00 PM CT

Break

2:00 - 3:15 PM CT

Addressing Environmental Health: Clinician Training and Practice of Environmental Medicine - ACOEM Guidance Statement Kathleen Fagan, MD, MPH, FACOEM, Manijeh Berenji, MD, MPH, Beth Baker, MD, MPH, FACOEM, FACMT & Robert K. McLellan, MD, MPH, FAAFP, FACOEM

Clinicians practicing occupational and environmental medicine (OEM) are increasingly consulted about environmental health and safety concerns- by patients, by employers, and by public health agencies. Both ACOEM and the American Board of Preventive Medicine (ABPM) have expanded their lists of required clinical competencies in Environmental Medicine. The range and depth of environmental exposures, concerns, and knowledge gaps has increased exponentially over the last few decades. This session will describe ACOEM's pending guidance statement on environmental medicine practice and how ACOEM's Environmental Health section has sought to address clinician training and practice in environmental medicine. Topics covered will include an overview of environmental medicine clinical competencies, integrating environmental health into



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clinical practice, and potential career opportunities in environmental medicine.

#### **Learning Objectives**

- Illustrate key points of the ACOEM guidance statement "Addressing Environmental Health: Clinician Training and Practice of Environmental Medicine
- 2. Describe ACOEM's expanded clinical competencies in environmental medicine.
- 3. Discuss both obstacles and successes integrating environmental medicine into OEM clinical and consultative practices.

Dr. Kathleen Fagan is OEM board certified with over 40 years of practice, including clinical practice in Cleveland, Ohio and as an OSHA medical officer. She is on the faculty of CWRU Department of Bioethics. She is a member of ACOEM's Environmental Health section and ACOEM representative to the Medical Society Consortium on Climate and Health Roster.

Robert K. McLellan, MD, MPH is an Emeritus Professor at the Geisel School of Medicine at Dartmouth. He has over 40 years of experience as a consultant and clinician addressing environmental health issues at work and in the community. He has chaired several ACOEM committees, including the Environmental Medicine Committee and helped create ACOEM's initial environmental medicine core curriculum. He served as the president of the American College of Occupational and Environmental Medicine (ACOEM) and the New England College of Occupational and Environmental Medicine. Most recently, he retired as the Chief of Occupational and Environmental Medicine at Dartmouth Health. Dr. McLellan's work at a national and regional level focuses on the opportunities to understand and manage the relationship between work, the environment, and health. To further this work, he co-chaired the National Academy of Medicine Action Collaborative on Business Engagement in Building Healthy Communities for many years. He currently serves on the New Hampshire Governor's Advisory Council for the Recovery Friendly Workplace, the American College of Occupational and Environmental Medicine's Council on Government Affairs, the New Hampshire Health Care Workers for Climate Action Advisory Board, and the Faculty Advisory Board of the Irving Institute for Energy and Society. Dr. McLellan has written extensively and lectured nationwide and internationally on various issues related to occupational and environmental medicine. Dr McLellan taught an Environmental Health Sciences and Policy course for 20 years at The Dartmouth Institute for Health Policy and Clinical Practice and launched an inaugural course on Climate and Health. He has been the Principal Investigator of several occupational and environmental



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medicine grants and was a co-recipient of the National Institute of Occupational Health and Safety's NORA (National Occupational Research Agenda) award for innovative research. He is the recipient of numerous other awards, including The American College of Occupational and Environmental Medicine's Lifetime Achievement award for "special contributions to the specialty of occupational and environmental medicine," the NIOSH Total Worker Health® Founder's Award for "exceptional leadership scholarship, and steadfastness in advancing the NIOSH Total Worker Health Program®," the Harriet Hardy Award from the New England College of Occupational and Environmental Medicine "for a physician who exemplifies the highest ideals of occupational and environmental medicine practice," New Hampshire Public Health Association's Roger Fossum award "for dedicated commitment and leadership in environmental and public health," and a Commendation from the Governor of New Hampshire for his commitment to the community and the state.

3:15 – 3:30 PM CT Session #3 Q&A

3:30- – 3:45 PM CT Day 3 Wrap-up

Alya Khan, MD, MPH, FACOEM