

#A○HC Virtual 2021

AMERICAN OCCUPATIONAL
HEALTH CONFERENCE

MAY 2-5, 2021

Learn. Grow. Connect!

PRELIMINARY PROGRAM

TOPICS AND FACULTY SUBJECT TO CHANGE; CURRENT AS OF 4/9/21

GENERAL INFORMATION

ACOEM

Established in 1916, the American College of Occupational and Environmental Medicine (ACOEM) is the pre-eminent organization of occupational health professionals who champion the health and safety of workers, workplaces, and environments. Its mission is to provide leadership by educating health professionals and the public; stimulating research; enhancing the quality of practice; guiding public policy; and advancing the field of occupational and environmental medicine (OEM). In its leadership role, ACOEM sponsors educational activities for physicians and other health professionals, including courses and the annual spring AOHC.

AOHC Virtual 2021

The American Occupational Health Conference (AOHC) Virtual 2021 is ACOEM's 105th Annual Meeting. AOHC serves two fundamental purposes: it is the premier professional meeting for physicians and other health professionals who have an interest in the field of occupational and environmental medicine (OEM); and it is the annual membership meeting for ACOEM's members.

Educational Needs and Learning Objectives

OEM is the medical specialty devoted to the prevention and management of occupational and environmental injury, illness, and disability, and the promotion of health and productivity of workers, their families, and communities.

ACOEM has identified core competencies in areas where the OEM-trained physician should strive to remain current and serve as a knowledgeable representative of the specialty. The ten core competencies [can be found here](#).

The ACOEM CME mission is to provide educational activities that enhance the professional capabilities related directly to the professional work of physicians practicing occupational and environmental medicine and (1) to promote physician lifelong and self-directed learning, (2) to improve worker/patient clinical outcomes, (3) to facilitate physician effectiveness and efficiency in carrying out professional responsibilities, and (4) to communicate the value of occupational and environmental medicine.

To address the educational needs of OEM physicians, AOHC is planned within the context of desirable physician attributes and aligned with the OEM core competencies.

AOHC content is designed to enhance physician competence and performance and to improve patient outcomes by providing learner-centered education in the most current issues relevant to the practice of OEM.

Upon completion of AOHC Virtual 2021, the learner should be able to:

1. Evaluate current research;
2. Analyze emerging issues in OEM; and
3. Exemplify effectiveness and efficiency in carrying out professional responsibilities.

Accreditation and Credit Designation Statement

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 hybrid activity (live and enduring material) for a maximum of 147 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Target Audience

AOHC is designed for physicians who specialize in or have an interest in OEM as well as for non-physicians, such as advanced practice providers, industrial hygienists, nurses, safety professionals, and environmental health specialists who are involved in the field. AOHC offers a variety of educational activities for participants new to OEM as well as for the experienced professional.

Disclosure Policy

As a provider accredited by the ACCME, ACOEM must ensure balance, independence, objectivity, and scientific rigor in all of its educational activities. In accordance with the Accreditation Council for Continuing Medical Education's Standards for Commercial Support, all CME providers are required to disclose to the activity audience the relevant financial relationships of the planners, teachers, and authors involved in the development of CME content. An individual has a relevant financial relationship if he or she has a financial relationship in any amount occurring in the last 12 months with a commercial interest whose products or services are discussed in the CME activity content over which the individual has control. In the case of an individual for whom a conflict cannot be resolved, that individual shall not participate in the development or presentation of the CME activity. Disclosures will be available in the Final Program book.

Content

AOHC sessions offer focused presentations that cover critically chosen, cutting-edge subjects related to OEM competencies. Sessions are designed for OEM physicians and related professionals who practice in a variety of work settings and are identified by the following tracks:

- OEM Clinical Practice
- Workers' Compensation, Case Management and Return-to-Duty
- Surveillance and Emerging Issues in Occupational and Environmental Medicine
- Environmental Medicine, Oil and Gas Industry
- Regulatory, Legal, Military and Governmental OEM
- Worker Well-being

101 A Systematic Review and Meta-analysis of Psychosocial Stress and Its Risk Factors Among Healthcare Workers

May 2, 2021 7:30 a.m.

Short research presentation to highlight the growing effect of psychosocial stress and common risk factors often ignored among healthcare workers - including those in Nigeria. Healthcare workers experience psychosocial stress in their workplace. Available statistics are at variance, hence the need to know the overall prevalence of psychosocial stress among Nigerian healthcare workers and associated risk factors, using meta-analysis of the few studies with validated standardized instruments.

Learning Objectives:

- Describe the general prevalence of psychosocial stress among health-care workers in Nigeria, emphasizing the epidemic nature of the condition
- Provide generally acceptable data to make informed preventive and therapeutic policy decisions, that might be applicable globally.
- Explore and compare data with global trends, in fostering best remedy towards combating the condition, adding to the body of knowledge.

Faculty:

Charles B. Onigbogi, MD MPH FIOGR, SOEHPON

Co-Author:

Srikanta Banerjee

102 Crisis Health Workers, Their Particular Hazards, and What to Do About It

May 2, 2021 7:30 a.m.

Working conditions for conventional Health Workers in classic work environments, such as hospitals, clinics, or labs have been well defined in both the developed and developing world, but there are more particular issues for Crisis Health Workers (CHWs) who provide the same services, but during crises. Working conditions significantly differ from their training and regular practice. Combining with the plethora of unfamiliarities, hazardous working conditions tumble together when complications from supplies, water, electricity, internet connection, finances, mental fatigue, and physical exhaustion pile up. Adaptation and resilience are the foundational attributes that ensure the safety and success of these CHWs. Success is achieved by not just working with one's own team and the patient population, but also constructively collaborating with local authorities, local CHWs, the national military, foreign military, and aid organizations. These demands require raw talent and learned skills. CHWs must constantly adapt to the ever-challenging and changing work environments – they must think outside the box while working outside their comfort zone.

Learning Objectives:

- List the different types of crisis health workers involved in crisis response and what makes them different
- Describe the particular hazards for crisis health workers
- Explain the successful traits and practices to ensure the health and safety of crisis healthcare workers

Faculty:

Mason D. Harrell, III, MD, MPH, FACOEM – Chief Medical Officer, Sequoia Port

Yohama A. Caraballo-Arias, MD – Facultad de Medicina de la Universidad Central, Institución Afiliada de la Escuela de Medicina Luis Razetti

103 Determining Merchant Mariner Fitness for Medical Certification

May 2, 2021 7:30 a.m.

The Department of Homeland Security, US Coast Guard is the government agency charged with ensuring the safety and security of a \$7B Marine Transportation System (MTS). A critical component of the MTS is the merchant marine workforce, a group of dedicated maritime professionals employed on the fleet of over 390 marine vessels. A mariner obtains medical certification by taking a Merchant Mariner Medical Certificate application (CG 719K) to a medical provider for completion, then by submitting the application directly to the National Maritime Center, Medical Evaluation Division. This session will increase the understanding of practicing OEM physicians on how to properly complete the Coast Guard Form 719K, and medical information required to determine a merchant mariner's fitness for medical certification. It will include an overview of current regulations and guidance applicable to information required for the merchant mariner medical certificate application process.

Learning Objectives:

- Recognize the essential information that an examining provider needs to include on the Merchant Mariner Medical Certificate application (CG 719K)
- Describe the physical ability and exam components that a provider should consider for making a determination of fitness for medical certification of a merchant mariner
- Identify the top three medical conditions that are most prevalent among merchant mariners that require additional information from the provider signing the Merchant Mariner Medical Certificate application (CG 719K)

Faculty:

Laura Torres-Reyes, M.D. M.P.H. F.A.C.O.E.M. – Chief Medical Evaluation Division, Department of Homeland Security, United States Coast Guard, National Maritime Center

104 Developing Personal Resilience in Unprecedented Circumstances

May 2, 2021 7:30 a.m.

This session describes Chevron's global response during the COVID-19 pandemic and organizational change to address workforce mental health and resilience in Kazakhstan. Our objectives were to: 1) Assist in development of a comprehensive mental health and well-being plan, particularly targeted to workforce in Tengiz who have gone into lock-down and/or in extended rotations. 2) Extend mental health offerings beyond our Chevron expats to take a oneTeam approach to managing mental health across the business units in Kazakhstan, and 3) Develop (in partnership with local teams) a holistic plan to engage the workforce and focus on health and personal resilience in stressful times. We describe the creation of awareness materials, presentations and quarantine newsletters for expatriates, and the Kazakh and Russian speaking workforce.

Learning Objectives:

- List the key stakeholders needed to support a well-being campaign that engages the entire workforce
- Describe different communication methods and mediums used in a well-being campaign
- Describe program components that help build personal resilience in uncertain times

Faculty:

Ryan Amato, MS – Sr. Health & Productivity Advisor, Chevron

105 The Trauma- Informed Approach for Patient and Practitioner Well-being

May 2, 2021 7:30 a.m.

Trauma represents a pervasive, damaging, and costly public health problem that affects people from all realms of society. Traumatic stress can result from disaster, violence, abuse, injury, illness, loss, and other emotionally harmful experiences. The trauma-informed approach has emerged as an important model to address the ubiquity of traumatic experiences throughout the life span, along with their subsequent, profound physical and psychological consequences. A growing number of organizations and institutions at the federal, state, and local levels are adopting this paradigm, as the need to address trauma increasingly becomes a significant element of effective health services delivery. In addition, clinicians experience primary trauma, as well as the secondary and vicarious trauma of their patients—which is the reason that promotion of self-care for clinicians is such an important tenet of trauma-informed care. Therefore, creating trauma-informed systems can considerably enhance patient care, augment clinician wellness, transform organizational culture, and increase population well-being.

Learning Objectives:

- Recognize sources of trauma and potential manifestations in patients and self
- Describe the trauma-informed approach, guiding principles, and benefits
- Employ trauma-informed strategies to enhance patient care and support practitioner well-being

Faculty:

Rosandra Daywalker, MD – Physician, Total Worker Health® Doctoral Trainee, University of Texas Health Science Center

Marcqwon Daywalker, MD – Staff Physician, Director of Health & Well-Being, Trauma-Informed Care Leader, AccessHealth Community Health Center

106 Worksite Visit of a Hospital Teaching Kitchen and Urban Garden: Addressing the Invisible Hazards of a Social Determinant of Health

May 2, 2022 7:30 a.m.

Following a brief discussion of food insecurity as a social determinant of health and how nutrition impacts the workforce, participants will engage in a cooking demonstration led by a physician and a dietitian/chef educator. Obstacles to healthful eating will be addressed by exploring unconventional factors including cultural considerations and habits. Topics such as ingredient swap outs, money and time-saving strategies, and cook ahead tactics will be discussed while preparing a delicious and healthful recipe utilizing food found in a hospital food pantry with some supplies from the onsite urban garden.

Learning Objectives:

- List the key components of the plate method with 100% accuracy
- Consider access to food and be able to provide at least two affordable food solutions
- Identify three ways to include culinary medicine into practice either through counseling, referrals, or Shared Medical Appointments

Faculty:

Kenji Saito, MD, JD – Chief Medical and Science Officer, MedLawPractice.com

Olivia Weinstein, MD, RD, LDN, Culinary Kitchen Director, Teaching Kitchen, Boston Medical Center

107 Design a Medical Surveillance Program – An Interactive Workshop

May 2, 2021 9:00 a.m.

This interactive workshop will give participants an opportunity to design a medical surveillance program. Participants will work in groups to design a medical surveillance program using sample scenarios. Medical surveillance program elements include establishing programmatic goals, identifying participants, implementing biomonitoring, communicating with workers and employers, and ensuring compliance with regulatory and medical practice standards. Teams will share their results with one another and discuss challenges and barriers to designing effective programs.

Occupational medicine physicians have a unique opportunity to shape the health and wellbeing of the workforce through the effective management of medical surveillance programs. Special emphasis will be given to novel agents, environmental exposures, the growing number of guidelines and other trends affecting the design and operation of medical surveillance programs.

This session may be of particular interest to residents and recent graduates.

Learning Objectives:

- Develop, implement and evaluate medical surveillance programs for the workplace
- Interpret monitoring and surveillance data and communicate results to workers and employers
- Identify trends affecting medical surveillance programs

Faculty:

John Piacentino, MD, MPH, FACOEM – Associate Director for Science, National Institute for Occupational Safety and Health

Laura G. Gillis, MD, MPH, FACOEM – Chief Medical Officer, Union Pacific Railroad

Judith Green McKenzie, MD, MPH, FACOEM – Professor, Division Chief, and Residency Program Director, Department Emergency Medicine, Division of Occupational and Environmental Medicine, University of Pennsylvania

Ronda B. McCarthy, MD, MPH, FACOEM – National Medical Director, Concentra

108 Evaluating Ventilation, Airflow and Filtration in the Built Environment During the COVID-19 Pandemic

May 2, 2021 9:00 a.m.

The COVID-19 pandemic is driving property managers, building owners, and tenants to re-evaluate the ventilation within the built environment. Some newer buildings condition the recirculated air while older buildings may allow for windows and doors to open. The age and condition of the building are relative to occupancy density, space allocation, and time of use. Most buildings have never been evaluated by a mechanical contractor or engineer to determine if the design meets current performance requirements. Supply air diffusers and return grilles may be improperly positioned and they may circulate potentially contaminated air back to the occupants. Some buildings have been repurposed allowing for tenants to open businesses without change to the building. This presentation will discuss some of the concerns with general building ventilation, review the latest technologies available for newer buildings and diffusers, discuss how airflow and circulation can be evaluated for various occupancies based on relative risk, and a brief discussion on improvement to air filtration capacity and capability.

Learning Objectives:

- Describe problems associated with older building design as compared to newer buildings and understand the need for proper airflow to circulate can reduce viral loads in hospitals, clinics, and medical practices.
- Discuss new technologies for bipolar ionization and use of hot-wired mesh screens with HEPA filters and UVGI can vastly improve air quality in both healthcare, clinics, medical and dental offices as well as patients.
- Explain the need for changes in airflow, air filtration and how portable HEPA units can be used in workplaces without any HVAC system to protect workers and the public.

Faculty:

Bernard L. Fontaine, Jr., CIH, CSP, FAIHA – Managing Partner, The Windsor Consulting Group, Inc.

109 One-year Retrospective Quality Evaluation of Corporate Medical Director Review of Department of Transportation Examinations

May 2, 2021 9:00 a.m.

Few studies have evaluated the quality of Department of Transportation (DOT) medical examinations being performed. Corporate medical director review of the DOT examinations anecdotally revealed frequent divergences from FMCSA guidelines. Our study aimed to evaluate common process errors on the part of clinicians and drivers. The objective of this study was to develop interventions for quality improvement cost reduction for employers requiring these examinations.

Learning Objectives:

- List the most common driver errors while completing documentation for the DDOT physical
- List the common errors/inconsistencies made by geristered examiners while performing the DOT physicals
- Describe recommendations that could help decrease inconsistencies both on the driver and medical examiner side

Faculty:

Maria N. Starchook-Moore, MD, MPH – Physician, Minnesota Occupational Health

Zeke J. McKinney, MD, MPH, FACOEM – Faculty Physician, UMN

Ralph Bovard, M.D., MPH – Program Director of the HealthPartners Occupational & Environmental Medicine Residency Program Health Partners

110 Return to Duty during COVID-19: A Review of the Planning and Response Actions of 250 Global Corporations from 01/20 to 08/20

May 2, 2021 9:00 a.m.

During the evolution of the COVID-19 pandemic, multiple organizations, in an effort to have their employees safely return to work, have leveraged a common operational tool to assist them in planning and responding to the global crisis. The dynamic tool (Enterprise Health Security Center: EHSC) has allowed organizations, in multiple sectors, to download applicable checklists while activating resources and managing templated instructional playbooks. The 250 corporations have downloaded more than 280 COVID-19 and pandemic related planning documents over 21,500 times. Coincident with this timeframe over 24,000 playbook activations and corresponding actions were completed. In this session we will outline the functionality of EHSC and how global organizations have exploited its merits to protect their returning workforce.

Learning Objectives:

- Describe the function of the EHSC
- Identify the merits of the EHSC in protecting the health and safety of any workforce during a crisis
- Discuss best practices in varied industry sectors, on return to work/operations

Faculty:

Robert Quigley, MD, D.PHIL – Senior Vice President and Regional Medical Director, Assistance & MedAire | Americas, International SOS

Myles Druckman, MD – Senior Vice President and Regional Medical Director, Americas Region, International SOS

Mark Parrish, MB ChB, MHA, FRACGP, MRCGP, FRACMA – Regional Medical Director, International SOS

111 The Relationship of Health and Sustainability and The Post Hurricane Harvey Respiratory Protection Training Program

May 2, 2021 9:00 a.m.

The first part by Dr. Tee Guidotti presents a high level look at how our concept of health needs to incorporate the concept of environmental sustainability. The talk also includes resources available to the practitioner in the area of sustainability. This field has become a dominant business trend over the last decade, first for public relations, and second for a substantial return on investment

The second part discusses a specific example of how an organization sought to improve the health and sustainability of the local community; specifically in the area of resiliency to natural flooding disasters. The program will describe a project that was implemented to help residents affected by flooding in the aftermath of Hurricane Harvey. The outreach program provided residents and construction workers with gloves, N-95 respirators, and instructions on how to appropriately put on face masks and safely repair flooded homes. More than 3,000 kits were distributed. The presentation also reviews the results of a survey study that evaluated how well residents were recovering six months after the flood.

Learning Objectives:

- Articulate the dependency that human health has upon environmental sustainability
- Acquire an understanding of the social and health hazards that construction workers and homeowners are subjected to when cleaning up communities after a flooding disaster
- Explain how to design a service project to assist communities affected by natural disasters and objectively analyze the project's effectiveness afterwards

Faculty:

William Brett Perkison, MD MPH FACOEM – Program Director, UT Houston Occupational and Environmental Medicine

Tee L. Guidotti, MD, MPH, FACOEM, DABT – Current Occupational and Environmental Health Health Consultant / Retired Professor ATL

112 Tuberculosis Program Challenges Post-2019

May 2, 2021 9:00 a.m.

In May 2019, CDC/NTCA released a new set of guidelines for TB testing and treatment of health care personnel (HCP), ending the time-honored annual TB test as a rite of passage for most HCP, and shifting emphasis from testing for LTBI to treatment of LTBI. While most experts welcome this change, implementation brings unexpected challenges. How to manage exposures when HCP have not been tested in years, often with different test methodology than that in current use? How to optimize treatment? How to best monitor and educate HCP with LTBI or with potential non-occupational exposure? How has the COVID-19 pandemic affected TB programs? This session offers insights from four of the co-authors of the ACOEM Guidance Statement on Tuberculosis Screening, Testing, and Treatment of US Health Care Personnel, published in the July 2020 JOEM, with a heavy focus on case-based learning and audience interaction.

Learning Objectives:

- Explain the rationale for the recent CDC TB guideline changes
- Identify strategies to improve LTBI treatment in HCP
- Apply state-of-the-art testing strategies to TB exposure management

Faculty:

Melanie D. Swift, MD, MPH, FACOEM – Medical Director, Physicians Health Center; Associate Medical Director, Occupational Medicine, Mayo Clinic

Wendy Thanassi, MD, MA – Chief, Occupational Health, Palo Alto VAHC

Amy J. Behrman, MD, FACOEM, FACP – Medical Director, Occupational Medicine, Hospital of the University of Pennsylvania

Mark Russi, MD, MPH, FACOEM – Medical Director, Wellness and Employee Population Health, Yale-New Haven Health System

113 Underserved Occupational Populations in the Time of COVID

May 2, 2021 9:00 a.m.

Many underserved occupational populations represent Essential Workers and yet have not received the protections afforded other working populations during the COVID pandemic. This has resulted in preventable outbreaks, illness, and mental health effects for these workers and their families who, prior to COVID, were already considered to be vulnerable to increased health and safety risks. This session will explore some of these situations, the gaps in worker protections, and what can be done to provide workplace protection parity for underserved workers and their families.

Learning Objectives:

- List some of the absent or inferior health and safety protections for underserved workers and their families
- Describe the increased incidence of COVID-19 in underserved worker populations as a direct result of disparities in worker protections
- List legislation designed to provide equitable health and safety protections for the workforce

Faculty:

Scott D. Morris, MD, MPH, FACOEM – Occupational Medicine Physician and Medical Director of Clinician Coaching and Associate Faculty UW, Valley Medical Center of University of Washington

Rosemary K. Sokas, MD, MOH, MSc, FACOEM – Professor of Human Science and of Family Medicine, Georgetown University

Bruce Goldstein, JD – President, Farmworker Justice

Samah E. Nour, MD MPH – Physician, Cleveland Clinic Abu Dhabi

Alan Hanson, BA, MSc, Vice President, Service Director, United Food and Commercial Workers Union Local 400

Kelly Huffman, PhD, Cleveland Clinic Abu Dhabi

114 ACOEM Core Competency Document - The 2021 Update

May 2, 2021 11:00 a.m.

The American College of Occupational and Environmental Medicine (ACOEM) recognized the need for defining competencies essential to occupational and environmental medicine (OEM) physicians. The first set of OEM competencies were published in 1998, later updated in 2008 and 2014. The increasing globalization and modernization of the workplace, along with published research on OEM practice, as well as evolution in the curricula of the U.S. OEM residency programs required an update in these OEM competencies in order to stay current with the field overall and the practice of OEM. ACOEM's Workgroup on OEM Core Competencies – 2020, recently completed this project and will be discussing revisions.

Learning Objectives:

- Discuss the ten Core Competencies for OEM providers
- Describe core knowledge and skills for each core competency
- List additional knowledge and skills for each core competency

Faculty:

Natalie P. Hartenbaum, MD, MPH, FACOEM – President/Chief Medical Officer, OccuMedix, Inc.

Beth A. Baker, MD, MPH, FACOEM, FACMT - Physician Specialist in OEM

115 Current Trends in DoD Civilian Deployment Medical Clearance

May 2, 2021 11:00 a.m.

Department of Defense civilian workers from Joint Base San Antonio--Lackland regularly deploy to locations around the world each year in support of Department of Defense and Department of State missions. While at home station medical qualification for these civilian workers is based solely on whether or not they can successfully complete required job functions. For deployment however, the civilian must meet the same medical standard as active duty military members, which takes into account one's ability to sustain long distance travel and live in medically austere environments. Subsequently, civilians selected for deployment are medically disqualified at higher rates than their active duty counterparts as a result of a myriad of acute and chronic medical conditions.

This analysis looks at several hundred recent deployment medical clearances and characterizes the process by describing components of the evaluation, patient demographics, clearance rates, and leading reasons for medical disqualifications. We will also discuss multiple cases of health complications that were exacerbated in deployed work environments.

Learning Objectives:

- Describe common causes of medical disqualification for deployment among DoD civilians
- Describe principles of combatant command (COCOM) medical standards
- Identify important factors that should be considered prior to proving a medical clearance for a DoD employee to deploy

Faculty:

Rosalinda Fitts, M.D., MPH – Faculty, Occupational Medicine, US Air Force / Joint Base San Antonio - Lackland

Steven M. Hetrick, MD, MPH, FACOEM – Medical Director, Occupational Medicine, US Air Force, JBSA - Lackland

116 Occupational and Environmental Hazards of the Correctional Environment: A Scoping Review from an ACOEM Presidential Task Force

May 2, 2021 11:00 a.m.

Workers in the correctional environment (prisons, jails and immigrant detention facilities) include correctional officers, healthcare workers, administration, and inmates. Together they constitute about 500,000 non-incarcerated and 870,000 incarcerated workers. The hazards they face parallel with those in industries outside the correctional environment, but the unique isolation and power dynamics of prisons and jails confer unique effects that are often shared between inmates and staff.

The goal of our Presidential Task Force is to perform a scoping review of the literature regarding occupational and environmental hazards and outcomes in the correctional setting. In this session, our team will present the findings of our scoping review. We characterize published articles on correctional staff, medical professionals, ancillary staff or inmates, identify hazards in the correctional environment, and identify paths for future investigation.

Learning Objectives:

- List the occupational hazards faced by correctional staff, officers, and administration, correctional health care workers, and inmates
- Identify the current knowledge gaps in correctional occupational health research
- Describe opportunities for partnership with Occupational and Environmental Medicine physicians to address correctional occupational health and safety

Faculty:

Andre Montoya-Barthelemy, MD MPH – Physician, HealthPartners

117 Occupational Skin Diseases

May 2, 2021 11:00 a.m.

The Bureau of Labor Statistics estimates that 15% of all workplace injuries involve dermatologic illness or injury. However, these potentially disabling conditions are some of the most preventable conditions that working occupational medicine physicians treat each day. This presentation will provide each participant with the most current evidence of how disorders such as dermatitis breakdown the skin barrier, and the various pathways of inflammatory and immune responses. With this information, the occupational medicine physician will be able to effectively treat and prevent the current skin condition and future recurrence. By the end of the presentation, the participant will be able to differentiate such conditions as irritant versus allergic contact dermatitis, create a differential diagnosis for the complaint of latex allergy, and be able to visually identify some of the more common skin manifestations of toxic exposure to workplace compounds and toxins.

Learning Objectives:

- Apply an understanding of clinical skin anatomy and external defense structures to the development of contact dermatitis, allergic reactions in the workplace, and general toxicity
- Recognize the differences in diagnosis and treatment between Irritant and Allergic Contact Dermatitis
- Formulate a differential diagnosis and treatment plan for patients who present with workplace exposures that may masquerade as other conditions like latex allergy or cement burns

Faculty:

Max F. Lebow, MD, MPH, FACEP, FACPM – Medical Director, Reliant Immediate Care Medical Group

119 Reversing Diabetes with Precision Treatment Enabled by Digital Twin Technology

May 2, 2021 11:00 a.m.

Diabetes is a priority health issue for employers. Not only is it a major contributor to rising group health costs, but it leads to substantial productivity loss, and increased risk of injuries and accidents, including motor vehicle crashes. This session will describe how digital twin technology is enabling diabetes reversal - that is, achieving normal blood glucose levels without the use of glucose-lowering medications. The session will feature: A) a description of digital twin technology; B) a review of how a digital twin of metabolic function is created to enable precision treatment recommendations that repair a patient's metabolism, achieving normal blood glucose while substantially reducing or eliminating the need for medications; and C) a review of clinical outcomes of the Twin Health diabetes reversal service.

Learning Objectives:

- Describe how it is possible to achieve diabetes reversal at a scale that can impact the health, productivity and costs at a population level, and in a way that is sustainable for patients
- Explain how Internet of Things (IOT) and Machine Learning technologies can be used to create a digital twin of a patient's metabolic function, enabling precision treatment that addresses the root cause of disease
- Discuss the health, economic and quality-of-life impacts of diabetes reversal from a business and personal/patient perspective

Faculty:

Chuck Reynolds, MS – Market Development, Twin Health

Lisa Shah, MD, MAPP – Chief Medical Officer, Twin Health

Ben Hoffman, MD, MPH – Chief Medical Officer, WorkSTEPS

120 Social Determinants of Health: The Benefits to Workers During Employment and Moving On to Retirement

May 2, 2021 11:00 a.m.

Social determinants of health are a set of social and physical domains (demographics, socioeconomic, transportation) that identify factors that impact our lives, including where we work. The workplace is often the focus of preventive health interventions, like health risk appraisals, assessment of cardiovascular risk factors, wellness programs, and even in recent years, onsite health clinics or health coaches for workers. While there are measurable benefits to these activities, the focus has been on health outcome. The usefulness of the SDOH domains in different settings is becoming more evident, and these changes continue to be identified. The purpose of the presentation is to identify a set of SDOH domains that apply to the workplace and workers and to outline outcome measures and community-based resources valuable to workers. These measures will be looked at as we consider changes in a worker's situation, such as retirement. Addressing these factors are best completed early, especially in cases of retirement when access to employer-supported resources may not be immediately available following retirement. Four case studies will be presented.

Learning Objectives:

- Define Social Determinants of Health and describe 3 - 5 domains
- Describe the uses and benefits of Social Determinants of Health to workers
- Contrast the varied role of Social Determinants of Health in workers and retired workers

Faculty:

Kevin F. Smith, MD, MPH – Medical Director, ProMedica 360 Health

121 A Tale of Two Cities - 20th Anniversary of the 9/11 Terrorist Attack on WTC and Pentagon

May 2, 2021 1:00 p.m.

The tragedy that occurred both at the World Trade Center (WTC) in New York City and Pentagon in Arlington, VA changed how Occupational and Environmental Health and Safety (OEHS) profession protects workers. Even after all of these years, there are many untold stories about OEHS professionals, including analytical laboratories that assessed the toxic components of the dust from building collapse, who were involved behind the scenes. Physicians have reported 69% of the responders had acute and chronic respiratory disease. Medical professionals shared their epidemiological and clinical experience, which described the manifestation of both short- and long-term exposure. But the underlying story of how OSH specialists protected the workforce, public and the environment remain untold. As a result, the OEHS profession has expanded into unexplored opportunities like incident response and emergency readiness and preparedness. We use these skills repeatedly to conquer other natural and man-made tragedies like the anthrax and ricin exposure, and expanded other opportunities into IAQ within the built environment. Even with all of these changes, OSH specialists find new ways to use these skills in other venues to collaborate with various stakeholders in the current COVID-19 pandemic.

Learning Objectives:

- Discuss the magnitude of negative health outcomes, particularly diseases related to toxic components of dust, from the collapse of the World Trade Center in New York City to emergency responders and the general public
- Describe the sample collection and analytical challenges for laboratories responding to the dust resulting from the collapse of the World Trade Center
- Describe the capacity and capability of OEHS professionals, working in collaboration with occupational health physicians and other stakeholders, to protect the workforce, public, and environment in man-made and natural disasters to construct a robust emergency response plan that includes business continuity and strategic alignment with government policy, programs and procedures

Faculty:

Iris Udasin, MD – Medical Director, Rutgers University Environmental & Occupational Health Sciences Institute (EOHSI)

Celia Booth, CIH, CSP – Consultant, Booth McCaffery, LLC

Frank Ehrenfeld, III – Laboratory Director, International Asbestos Testing Laboratories

122 AMA Guides® to the Evaluation of Permanent Impairment: Achieving Equitable Impairment Ratings through the Most Current Medicine

May 2, 2021 1:00 p.m.

In 2019, following extensive industry feedback from physicians, state and specialty medical societies, regulators and other industry stakeholders, the American Medical Association (AMA) initiated a program to update and modernize the AMA Guides®—the authoritative source for impairment rating information and tools.

In this session, attendees will be among the first to learn about the substantial modernization and simplified utilization of the new and improved AMA Guides®, directly from the source. Specifically, panelists will address upcoming content updates to the AMA Guides®.

Learning Objectives:

- Describe the new process for updates and changes to the AMA Guides to the Evaluation of Permanent Impairment
- Articulate the rationale for the need for updates to the AMA Guides
- Describe those areas that are in most need of updating

Faculty:

Douglas W. Martin, MD FACOEM FAAFP FAADEP – Medical Director, UnityPoint Health St. Luke's Occupational Medicine

David Sosnow, Vice President, Product Management, AMA

123 Intrepid Spirit Center: The Department of Defense Integrated Care Program for Traumatic Brain Injury, PTSD, and Beyond

May 2, 2021 1:00 p.m.

This session will introduce participants to the first of its kind integrated care model that the Department of Defense has undertaken to diagnose, treat, and restore function to active duty members performing at the highest levels. This session will describe in great detail the cognitive, behavioral, and physical assessments to help diagnose PTSD, TBI, and Acute/Chronic Pain. This session will then delve into an integrated care approach to restore function and return members to work. At the end of the session participants will learn how they can model a functional restoration program at their institutions based on the dynamic program that has been created.

Learning Objectives:

- Recognize cognitive deficits related to PTSD, TBI and pain
- Prescribe integrated approaches to treat PTSD, TBI and pain
- Describe resources in their local community to help patients that suffer from PTSD, TBI and pain

Faculty:

Yusef A. Sayeed, MD, MPH, MEng, CPH, CMRO, CME, RMSK, DABPM - Director of Pain Medicine and Functional Rehabilitation, United States Air Force/Department of Defense

124 Non Communicable Disease Risk Factors Among a Cohort of Mine Workers in Mongolia

May 2, 2021 1:00 p.m.

Prevalence of non-communicable diseases (NCD) are growing among working populations globally. The World Health Organization (WHO) estimates NCD are responsible for 80% of all premature deaths (Lancet, 2016). The purpose of this study is to determine baseline level of NCD and risk factors among mine workers and to identify intervention strategies based on results. The collected results will be compared with a NCD study on the general population of Mongolia.

A cross sectional design was used for this study. Six-hundred eighty-four employees were randomly recruited to the study. We utilized a WHO questionnaire to collect anthropogenic measurements, health behaviors, alcohol consumption, smoking, NCD and work related information. The study focused on four (4) key risk factors of hypertension, obesity, drinking habits and smoking habits. These factors are key contributors to NCD and decreased life expectancy.

Prevalence of arterial hypertension for the mine worker cohort was lower than the general population, however, obesity, drinking and smoking rates were higher. The study findings allow us to target intervention strategies to mitigate the risk of NCD development in the future.

Learning Objectives:

- Define what non communicable disease is, the risk factors for development and recommendations for risk mitigation.
- Conduct similar risk assessments at their own workplace.
- List non communicable diseases which are contributing to early death globally, understand how to measure and how to mitigate risk of development.

Faculty:

Andy McCarthy, MSc, MPH, MAIOH, COH – Principal Advisor Health and Hygiene, Rio Tinto

125 The COVID-19 Pandemic: Ongoing Behavioral Health and Safety Concerns and Employer Strategies

May 2, 2021 1:00 p.m.

The COVID-19 pandemic has produced multiple challenges for employers and a need to address behavioral health and worker safety in different and innovative ways to create an environment conducive to a healthy and productive workforce. This session will be composed of three parts: 1) An overview of the impact of COVID-19 and innovative strategies and solutions deployed by employers; 2) An employer case study detailing differentiated behavioral health strategies to support employees and their families throughout the pandemic (presented by the director of benefits of a 10K life employer). This employer will share how they are tackling behavioral health issues including the stress, fear and isolation caused by the pandemic; 3) An employer case study demonstrating an end-to-end strategy for worker safety and repopulation of the work-place during the COVID-19 pandemic (presented by the Director of Safety of a 7K global employer). This employer will share interventions deployed including environmental controls, personal protective equipment, screening, testing, and contact tracing and challenges and results.

Learning Objectives:

- Incorporate leadership empathy in developing strategies to address the behavioral health issues faced by the employees to create a more engaged and productive workforce
- Incorporate health and safety strategies, tactics and success measures to return employees to the workplace
- Describe how two employers have implemented these strategies, their successes, learnings and adjustments they have made along the way, including planning for future pandemics

Faculty:

Louise J. Short, MD, MSc – National Clinical Leader, Strategic Benefit Advisors (SBA)/Brown & Brown, Inc.

Abha Bhandair, CPA, MBA, CEP – Director, Team Resources -- Total Rewards, Compensation & Benefits, Brown & Brown, Inc.

Joel L. Axler, MD – National Behavioral Health Leader, Strategic Benefit Advisors (SBA)/Brown & Brown

Thomas A. Wesley – Senior Director, Workplace Solutions, Waters Corporation

126 Value Based Health Care; What is it and What is Occupational Medicine’s Contribution to Health System Transformation?

May 2, 2021 1:00 p.m.

Value-based healthcare (VBHC) is a healthcare delivery system that defines value as health outcomes achieved per dollar spent. Here, three nationally recognized experts on quality and patient safety will present topics in VBHC and how they relate to OEM.

This session will begin with an overview of VBHC, the six concepts that support this delivery model, and emphasize the importance of measuring costs and outcomes, including patient reported outcome measures. Next, the latest evidence-based OEM-specific outcome measures and their relationship to claims costs will be shared with attendees. How OEM, with its emphasis on functional outcomes, contributes to health systems adapting to a value-based delivery model will be explored. Lastly, effective communication techniques to address the psychosocial influences in musculoskeletal disease will be shared as skills physicians can use to promote value when managing challenging cases.

The session will conclude with an “ask-the-expert panel” on VBHC. Attend and develop working knowledge of a language our non-OEM physician colleagues are speaking as health systems transition from a volume-based to a value-based world.

Learning Objectives:

- Recognize value in health care defined as health outcomes (quality of care) achieved per dollar spent (cost of care) and how the six 6 concepts of value-based health care contribute to this outcome measure. Measuring costs and outcomes, including patient reported outcome measures, are the basis of a value-based health care delivery system.
- Describe OEM specific outcome measures and explain the importance measuring these outcomes for individual patients to promote value in the worker’s compensation system.
- Detail effective communication techniques for, and the appreciation of, both nontechnical skills and biopsychosocial influences on musculoskeletal illness as they relate to case management in a value-based health care delivery system and helping people choose healthy options consistent with their values.

Faculty:

David C. Caretto, MD MPH – Occupational Medicine Physician, Dignity Health - Mercy Medical Group

Edward J. Bernacki, M.D., M.P.H. – Professor of Population Health and Executive Director of Health Solutions, Dell Medical School—The University of Texas at Austin

David Ring, MD PhD – Associate Dean for Comprehensive Care, Department of Surgery and Perioperative Care, Dell Medical School—The University of Texas at Austin

127 Assessing Fitness For Duty Among School Bus Drivers

May 2, 2021 2:30 p.m.

Occupational medicine clinicians are often asked to certify the medical fitness of school bus drivers. However, many may not recognize that these drivers have different job demands and may have different medical certification standards than drivers operating under FMCSA authority. This session will outline the duties of the school bus drivers and contrast them with those of the FMCSA covered driver. We will look at some school bus crashes that illustrate the importance of appropriate medical certification. Finally, our panel will present an overview of school bus driver medical standards highlighting important or significant deviations from the Federal commercial driver standards and highlight when these drivers must be medically certified under Federal regulations rather than state requirements. Dr. Saito will moderate the discussion. Panel members include Dr. Michael Berneking and Dr. Natalie Hartenbaum, experts in commercial driver medical fitness issues.

Learning Objectives:

- Identify the tasks and demographics of school bus drivers contrasting them with commercial truck drivers
- Recall medical standards impacting school bus drivers and discuss when Federal medical standards may apply
- Perform evidence-based fitness-for-duty assessments of school bus drivers to appropriately balance their employment opportunities with public health and safety

Faculty:

Natalie P. Hartenbaum, MD, MPH, FACOEM – President/Chief Medical Officer, OccuMedix, inc

Michael W. Berneking, MD, FACOEM – Medical Director, Concentra

Kenji Saito, MD, JD – Chief Medical and Science Officer, MedLawPractice.com

128 Evidence Based Approach to Workers' Compensation Claim Management

May 2, 2021 2:30 p.m.

Evidence-based approaches to workers' compensation claim management is a comprehensive system involving the measurement, prediction, and surveillance of cost and return-to work measures. Identifying various determinants as well as evaluating impacts related to systematic intervention is an ongoing endeavor, involving multiple topic areas. Our team is actively investigating these determinants and reporting the result of our most recent studies. The topics proposed in this year's session will include:

- Increased Spinal Cord Stimulator Use and Continued Opioid Treatment Among Injured Workers: A Regional Pilot Study.
- Do Work-Related Lost-time Injuries Sustained Early in Employment Predict Multiple Lost-time Injuries throughout Employment?
- The relationship of the amount of physical therapy to time lost from work and costs in the workers' compensation system.
- Incorporating Social Determinants of Health in the Assessment of COVID-19 risk
- Standardizing the Accommodations Process for Healthcare Workers during the COVID-19 Pandemic (Drs. Nimisha Kalia and Edward Bernacki)
- Panel session

Learning Objectives:

- Describe the trend of increased spinal cord stimulator use and continued opioid treatment among injured workers and the relationship between physical therapy utilization in workers' compensation claims and time lost from work
- Discuss implications that injuries sustained early in employment predict multiple lost-time injuries throughout employment
- List the social determinants of health that should be considered when assessing occupational risk of COVID-19 in the workforce and the importance of standardizing the accommodations process for HCWs during the COVID-19 pandemic

Faculty:

Xuguang (Grant) Tao, M.D., Ph.D. – Professor and Research Director, Division of Occupational Medicine, Johns Hopkins School of Medicine

Nimisha Kalia, MD MPH MBA ACOEM – North America Medical Leader, Procter and Gamble

Edward J. Bernacki, M.D., M.P.H. – Professor of Population Health and Executive Director of Health Solutions, Dell Medical School—The University of Texas at Austin

Nicholas F. Tsourmas, MD – Medical Director, Texas Mutual Insurance Company

Nina Leung, Ph.D., M.P.H. – Texas Mutual Insurance Company

Larry Yuspeh, BA – LWCC

Robert Lavin, MD, MS. – University of Maryland

Che Liu, MD - Johns Hopkins University

129 First Responder Physical Fitness Testing & Assessment Injury Reduction

May 2, 2021 2:30 p.m.

The Texas Department of Public Safety Fitness Wellness Unit is focused on changing lives and the prevention of heart and obesity related disease through training and education. This award winning unit uses a holistic approach to educate commissioned and non-commissioned personnel through physical fitness classes, nutrition education, sleep education, and resilience training.

The TX DPS Physical Training and Fitness Testing Model is being replicated across the state of Texas and throughout the nation by multiple agencies. TX DPS's physical fitness program started in 2006 and since has evolved into utilizing the rower as the primary means of testing since 2010. TX DPS has designed an extensive revolutionary approach to Physical fitness/readiness testing on law enforcement personnel through a test of functionality versus testing the strength of an isolated area of the body as it is impossible to establish the exact amount of force to effect an arrest.

Additionally, the unit teaches wellness seminars, fitness symposiums, and helps agencies develop subject matter experts within their agency as a part of an overarching vision of changing the culture of wellness within agencies.

Learning Objectives:

- Identify the components of an Officer Fitness and Wellness Program that aligns with the 6th pillar of the 21st Century Policing and supports de-escalation through the components of physical fitness testing and assessment, wellness, resiliency, nutrition and cardiac screening
- Identify and implement fitness and wellness program initiatives along with means of testing and assessment that reduce injury potential while receiving support from legal, risk management, ADA, HR and EEO
- Develop solutions to the significant number of injuries seen in testing and assessment that are compliant with federal and state law, supported by local unions and associations and effective at keeping our officers healthy, on the job and alive

Faculty:

Ralph Bovard, M.D., MPH – Program Director of the HealthPartners Occupational & Environmental Medicine Residency Program, Health Partners

Michael Harper, M.Ed. – Fitness Wellness Unit Program Supervisor, Texas Department of Public Safety

Greg Davis, M.S. – Captain, Texas Department of Public Safety

130 Fitness for Duty - You Thought You Knew How to Do It

May 2, 2021 2:30 p.m.

This session will show participants when and how to perform medical fitness-for duty evaluations (including for mental health issues) as well as how to present the outcome of the evaluations. It will highlight the legal constraints on performing fitness for duty evaluations. This will include discussion by an attorney with extensive experience in workplace law as well as occupational physicians. There will also be review of case studies of practical and realistic situations. Common pitfalls and compliance issues will be addressed, including when a fitness-for duty evaluation it is or is not appropriate. We will also discuss why the need for fitness-for duty evaluations is much more limited than expected. We will review the roles and duties of supervisors, legal advisors, human resources and medical providers throughout the fitness of duty process.

Learning Objectives:

- Discuss the laws that govern the performance of a fitness-for-duty evaluation
- Define exactly what is and is not allowed to be included in a fitness-for-duty report
- Identify whether a request for a fitness-for-duty evaluation request is appropriate or inappropriate

Faculty:

Daniel G. Samo, MD – Medical Director - Public Safety Medicine, Northwestern Medicine

Fabrice Czarnecki, MD, MA, MPH, FACOEM – Chief Medical Officer, Transportation Security Administration

Jo Linda Johnson, JD – Director, Office of Equal Rights, DHS - FEMA

131 Implementation of a Workplace Physician Wellness Program

May 2, 2021 2:30 p.m.

A recent report from the National Academy of Medicine and supported by the American College of Occupational and Environmental Medicine highlights the threat of physician burnout on the nation's healthcare system. Physician burnout has been linked to poor patient experience, increased medical errors, decreased productivity, attrition, and turnover. While multiple studies highlight the importance of an institutional approach to improving well-being, the methods to identify needs and initiate systems improvement has received less attention. This session will provide participants a structured approach to jump start and sustain systems-based improvements addressing workplace well-being. We will share our experience in using an environmental perspective to gather physicians' perspectives on workplace factors that empower well-being and use that information to formulate recommendations targeting factors contributing to physician burnout. We will discuss effective strategies to build consensus among leadership regarding action items/recommendations by aligning our recommendations with ongoing institutional work and goals.

Learning Objectives:

- Discuss the important of systems-based interventions to empower physician well-being
- Describe the steps required to gather local perspectives and use this data to create recommendations for change at the organizational and work-unit levels
- Identify the importance of considering the multiple stakeholders involved and describe strategies to align recommendations with ongoing institutional work

Faculty:

Elizabeth A. Yakes, MD – Associate Professor, Vanderbilt University Medical Center

Mary Yarbrough, MD – Executive Director of Faculty/Staff Health and Wellness Programs, Vanderbilt University Medical Center

132 IOMSC Updates: A Global Focus on WHO SDGs - Including Universal Access to Health Care; Mental Health and Well-being for Health Care Professionals and Prevention of Non-Communicable Diseases through Workplace Health Initiatives

May 2, 2021 2:30 p.m.

The International Occupational Medicine Society Collaborative (IOMSC) provides an assembly for representatives of occupational medicine societies to promote greater awareness of issues and best practices for better worker health worldwide. This session will update IOMSC's activities in addressing areas consistent with the World Health Organization's Sustainable Development Goals - universal access to occupational health and "good" health and prevention of non-communicable diseases (NCDs). Health care professional (HCP) burnout can be a limiting factor to access to "good" health. Guidance will be provided on the "Declaration on Promoting Mental Health and Wellbeing of HCPs" and how occupational health can play a role in addressing HCP burnout and the delivery of safe and effective patient care. IOMSC will also share its work in promoting the role that occupational health can play in addressing NCDs through workplace health/wellness initiatives—including innovative workplace mental health and well-being programs in Japan. Lastly, a global perspective will be provided on what has worked and what we have learned from the COVID-19 pandemic.

Learning Objectives:

- Describe the WHO Sustainable Development Goals of promoting mental health and preventing non-communicable diseases in workers
- Identify strategies for addressing mental health and well-being among health care professionals and understand the role that occupational health can play in addressing non-communicable diseases through workplace health and wellness initiative
- Utilize internationally recognized evidence-based resources in effective workplace health and wellness programs

Faculty:

Ronald Loeppke, MD, MPH, FACOEM – Vice Chairman, U.S. Preventive Medicine, Inc.

Richard JL Heron, MB CHB, FRCP, FFOM, FACOEM, MB CHB, FRCP, FFOM, FACOEM – Vice President Health and Chief Medical Officer, BP International

Peter Connaughton, LRCP&SI, MBA, FACOEM, FAFOEM – Immediate Past President, International Occupational Medicine Society Collaborative

Herman Spanjaard, MD, MPH, FACOEM – Director, Arbo Consult

Paulo Antonio De Paiva A.P Rebelo, MD, PhD – Executive Committee Member, ABMT - Brazilian Occupational Medicine Association

Koji Mori, MD, PhD – Professor, University of Occupational and Environmental Health Japan

133 Occupational Data for Health in the Electronic Health Record: The Time is Now!

May 2, 2021 2:30 p.m.

Information about the work of patients, central to the care provided in an occupational health setting, is frequently missing in the context of primary care. Occupational Data for Health (ODH) is a set of informatics products developed by researchers at the National Institute for Occupational Safety and Health (NIOSH) to incorporate work information, including structured industry and occupation data, into electronic health records. The need for this information has long been recognized, but the coronavirus epidemic has made this need more acute, particularly in the context of case reporting, contact tracing, and reduction of disease transmission. This session will introduce the components and demonstrate a collection methodology for ODH. Patient care, population health, and public health scenarios will illustrate ODH utility. ACOEM's workgroup on Industry and Occupation (I&O) Coding in Electronic Health Records will present the workgroup's activities, and future steps will be discussed.

Learning Objectives:

- Define Occupational Data for Health in non-technical terms
- List situations in which ODH will improve patient outcomes, enhance public health surveillance, and further population health goals
- Contribute to efforts to include ODH in electronic health records

Faculty:

Kathleen Fagan, MD, MPH – Consultant, Self

Eileen Storey, MD, MPH – Senior Consultant (CTR), NIOSH/CDC

Michele Kowalski-McGraw, MD, MPH – Medical Director COEM Community Care, UCSD

Manijeh Berenji, MD, MPH, FACOEM – Assistant Professor, Boston Medical Center

Joseph "Chip" Hughes, Jr. – Deputy Assistant Secretary for Pandemic and Emergency Response, OSHA

Barbara Wallace, MS – Health IT Consultant (CTR), Respiratory Health Division, OSHA

134 Responding to Unique and Special Health and Safety Needs of an International Employee Workforce During the COVID-19 Pandemic

May 2, 2021 2:30 p.m.

The presentation will describe how The World Bank Group (WBG) and Smithsonian Institution (SI) leveraged the expertise, experience, and skills of their respective health and safety offices to effectively respond to the unique and often very complex challenges that the COVID-19 pandemic has imposed their workforces. With staff assigned to headquarters in Washington DC, as well as a variety of international locations, several of which suffer from fragility and conflict, occupational health doctors and nurses have needed to be creative, nimble, and tireless in responding to employee needs both at the individual and workforce population level.

Beginning with the immediate response efforts at the beginning of the pandemic, this session will cover the myriad employee health and safety risk mitigation measures that were implemented to control the spread and impact of COVID-19 on employees. The presentations will focus on a variety of topics with special emphasis on COVID-19 testing for staff returning to the workplace and developing plans for providing COVID-19 vaccine to employees.

Learning Objectives:

- Demonstrate, through strategies and approaches, the relevance and value of a robust internal occupational health and safety services capability within businesses and corporations.
- Create more effective ways of making the business case for ROI value of an integrated occupational health and safety program for employers.
- Motivate institutional change that places the company's integrated health and safety on the organogram at a level where its head reports at the level of a company vice-president

Faculty:

Jules R. Duval, MD – Chief Medical Officer, The World Bank Group

Clarence L. Brown, MD – Senior Occupational Health Specialist, World Bank Group

Anne McDonough, MD – Medical Director, Smithsonian Institution

Opening General Session

May 2, 2021 4:15 p.m.

Join your colleagues for the AOHC Opening Session featuring the Patterson Lecture with photojournalist Earl Dotter. Mr. Dotter is the author of the book and exhibit LIFE'S WORK, A Fifty-Year Photographic Chronical of Working in the U.S.A. He will present an exhibit entitled, ESSENTIAL WORKERS IN THE TIME OF COVID-19 With a Historical Look at Personal Protective Equipment in Use, at AOHC Virtual 2021. Dotter has been a Visiting Scholar at the Harvard School of Public Health since 1998 and is the recipient of several accolades including an Alicia Patterson Foundation Fellowship to document commercial fishing hazards, and APHA's Alice Hamilton Award for photographing the rescue recovery effort at Ground Zero.

201 Be Well Work Well Session

May 3, 2021 7:30 a.m.

Hospitals, clinics, and other health care providers are just like any other businesses. They need to manage large numbers of employees and control expenses, while delivering needed services.

Hospitals and other healthcare settings are excellent places to offer wellness programs because healthcare workers struggle with their own health.

Royal commission hospital in Yanbu started in June 2019 to apply BWWW (Be Well ... Work Well) Program as occupational wellness program, with application of five initiatives:

- Physical Health Activities
- Psychosocial Health
- Nutritional Health
- Ergonomics
- Happiness Initiatives

The execution plan contain 24 activities to be applied for this main five initiatives, this hospital wide project planned to be executed for 3 years from 2019-2022. The formed task force from the hospital to execute this project develop six measurement tools; three of them act on short term, happiness meter, engagement score and burnout and wellbeing level. Moreover, the other three act on long term, Employee turnover, Safety Culture (Good Catches) and absenteeism (Bradford).

Learning Objectives:

- Define the workplace wellness program and its components and different activities
- Execute the actual phases of the wellness project inside healthcare facility
- Describe the "Do's and Don'ts" in application of wellness project inside hospitals

Faculty:

Ahmed Albadry, M.B.B.Ch, M.D., Ph.D., TQMD - AUC – Occupational Medicine Consultant, Royal Commission Health Service Program, Yanbu , KSA

Co-Authors:

Amal R. Alalwani – Director of Public Health, Royal Commission Health Service Program, Yanbu, KSA

Faud M. Alshebi – Director of Medical Affairs, Royal Commission Health Service Program, Yanbu, KSA

202 Beryllium and the BeLPT: What Every OM Provider Needs to Know

May 3, 2021 7:30 a.m.

Beryllium-exposed patients are required by OSHA to undergo routine surveillance examinations, including biennial testing with the Beryllium Lymphocyte Proliferation Test (BeLPT). This is a complex test that can be difficult to interpret. This session seeks to give an overview of beryllium exposure, testing, and sensitization, regulatory concerns, and diagnosis of chronic beryllium disease. This will be covered in sufficient detail to give OEM providers the knowledge they need to handle this interesting but challenging clinical topic. Special attention is given to interpretation of the BeLPT results and making the determination of beryllium sensitization.

Learning Objectives:

- Interpret results from the BeLPT
- Determine beryllium sensitization and known when to refer to a specialist for further evaluation for chronic beryllium disease
- Describe the properties and uses of beryllium, the medical effects of beryllium exposure, and the major regulatory concerns around beryllium surveillance

Faculty:

Ross A. Mullinax, MD, MPH – Associate Director of Public Health, US Naval Hospital Yokosuka, Japan

Stella E. Hines, MD, MSPH – Associate Professor, University of Maryland School of Medicine

Donna L. Cragle, PhD – Director, ORISE Beryllium Testing Laboratory, Oak Ridge Institute for Science and Education

Lisa A. Maier, MD, MSPH – Division Chief, Environmental and Occupational Health Sciences, National Jewish Health

203 Best Practices for Athletic Trainers in Occupational Health

May 3, 2021 7:30 a.m.

Athletic Trainers have been an important component of the Sports Medicine Team for the past century, but many physicians are still unfamiliar with their unique education and skill set. Athletic Trainers work directly under a physician's direction to enhance the health, safety, recovery, and return of participants to physical activity. Athletic Trainers are credentialed and regulated allied healthcare professionals responsible for the prevention, recognition, treatment, and management of injuries and illnesses in the context of physical activity. Recently, Athletic Trainers are supporting Occupational Medicine through designing and implementing prevention programs, health and fitness screenings, ergonomic evaluations, JSAs, and RTW programs. This presentation reviews the education and skill set of the Athletic Trainer; how to implement Athletic Trainers in an Occupational Medicine Team; and, real-life use cases of Athletic Trainers in Occupational Medicine.

Learning Objectives:

- Define the Athletic Trainer as an allied healthcare professional
- Compare and contrast the Athletic Trainer with Personal Trainers, Physical & Occupational Therapists, Nurses, Physician Assistants, and Nurse Practitioners
- Describe the practice settings where Athletic Trainers are found
- Describe the role of the Athletic Trainer in Occupational Health
- Summarize the legal boundaries for Athletic Trainers working in a non-athletic population
- Appraise the value an Athletic Trainer adds to a patient's plan of care
- Relate various case studies of Athletic Trainers in Occupational Health
- Explain the best practices for providing Athletic Training to your patients
- Design a strategy to implement Athletic Trainers in your patient's plan of care

Faculty:

Jeremy Verrillo, ATC – Vice President, CIP Solutions

Barbara Stevens, RN, BSN, MHA – Exelon

204 Colorado's Opioid Solution: Clinicians United to Resolve the Epidemic (CO's CURE)

May 3, 2021 7:30 a.m.

Despite regulatory changes, opioid prescribing guidelines, and provider education on the dangers of opioid use, the opioid epidemic continues to escalate, and 2020 was the worst year on record for opioid-related deaths. The Rocky Mountain Academy of Occupational and Environmental Medicine (in association with the Colorado Hospital Association) released a new set of clinical opioid prescribing guidelines for OEM practitioners in Colorado in order to help combat the opioid epidemic in Colorado as part of the CO's CURE Initiative. These unique guidelines center around limiting opioid use, using alternatives to opioids (ALTOs) for the treatment of pain, implementing harm reduction strategies, and improving the treatment and referral of patients with opioid use disorder. But these actionable, state-specific guidelines are just the beginning. There is a group working to champion and implement these guidelines in OEM clinics across our state, and we'd like you to join the discussion.

Learning Objectives:

- Demonstrate knowledge of the impacts of the opioid epidemic
- Formulate novel ideas about how to reach providers to decrease reliance on opioids
- Apply appropriate opioid harm reduction strategies to clinical practice

Faculty:

X.J. Ethan Moses, MD, MPH, FACOEM – Medical Director, Colorado Division of Workers' Compensation

Margaret K. Cook-Shimanek, MD, MPH – Medical Director, Montana Department of Labor and Industry

Elizabeth Esty, MD – Guideline Strategist, Colorado Division of Workers' Compensation

205 Evidence Based Treatments to Prevent Burnout in the Fire Service during the COVID-19 Pandemic

May 3, 2021 7:30 a.m.

This session will focus on evidence based interventions to prevent burnout in the fire service during the COVID-19 pandemic. During this uncertain time, the fire service is on the front lines responding to fire and medical emergencies while potentially being exposed to COVID-19. Compared to the general population, the fire service has higher rates of suicidality and other mental health conditions (e.g., depression, PTSD). This unprecedented stressor can further exacerbate their elevated rates of mental health concerns and foster feelings of burnout that can impact their overall functioning. This session will discuss how burnout manifests in the fire culture and aid providers on how to identify burnout in at risk workers. Evidence based strategies that focus on self-care and wellness will be presented during this session. Unique factors specific to the pandemic (e.g., social isolation, quarantine, fear/anxiety) and the impact on mental health will be explored and corresponding behavioral health interventions will be presented. Lastly, how to overcome the stigma of mental health and engage fire personnel in telepsychotherapy interventions.

Learning Objectives:

- Define and identify the elements of burnout, describe how burnout is impacted by COVID-19 pandemic, and compare and contrast the differences in the general population vs. fire service personnel
- Provide a comprehensive list of evidence based strategies for self-care and wellness
- Describe strategies to overcome mental health stigma in the fire service and how to engage fire personnel in virtual-based clinical interventions during the COVID-19 international crisis

Faculty:

Candice Johnson, Psy.D. – Psychologist, International Association of Fire Service Behavioral Health

Luzimar Vega, Psy.D. – Psychologist, International Association of Fire Service Behavioral Health

Alicia Kohalmi, Psy.D. – Psychologist, International Association of Fire Service Behavioral Health

206 How the Occupational Medicine Specialist Mitigates the Occurrences of Police Misconduct

May 3, 2021 7:30 a.m.

Can Occupational Medicine specialists mitigate the presence of problems presented by law enforcement officers? Next to COVID-19, the next prominent news headline has been the discussion about biased policing, excessive force, shootings of unarmed persons, and related problem cops. Is there a role for occupational medicine providers in this discussion? Behavioral health focused providers have an important skill set to contribute to solutions.

Learning Objectives:

- Identify at least three requirements for certifying police officers at the state and national level. These include the Commission on Accreditation of Law Enforcement Agencies (CALEA) and ACOEM recommendations.
- Cite three elements of a competent pre-employment psychological evaluation. These elements are derived from the best practices recommended by the Police Psychological Services Section of the International Association of Chiefs of Police (IACP).
- Describe at least two negative impacts on citizens, through case examples presented, that illustrate the reasons for implementing psychological assessments. The case examples will be drawn from high profile incidents.

Faculty:

Stephen F. Curran, Police & Public Safety board certified, American Board of Professional Psychology – Police & Public Safety Psychologist, Atlantic OccuPsych

207 The Role of Human Connection in Health and Organizational Performance

May 3, 2021 7:30 a.m.

The pandemic has strained human connections and the mental health of healthcare workers with the lockdowns, physical distancing, wearing of protective equipment, remote working and stressful working conditions. We are reminded of the importance of human touch when a healthcare provider holds the hand of a dying patient or holds the iPad for a patient saying their last good-bye to family members. This presentation focuses on a skillset to rebuild and maintain human connection in high stakes environments to reduce stress and increase performance. The skillset presented to improve interpersonal connection will include: deep listening, empathy and action to meet the goals of the other party, narrative competence and brokering trust.

Examples will be presented that demonstrate the use of these approaches to enhance the understanding of the issues of human connection and bridging trust. Through this educational program, participants will better understand how to develop and/or evaluate effective human connection skills to address burnout and low trust settings.

Learning Objectives:

- Describe the tools for addressing burnout and low trust settings
- Address organizational and individual skills associated with human connection
- Discuss human connection interventions to reduce stress, build trust and improve organizational and individual performance

Faculty:

Mary Ann Orzech, MD, MS. MBA – Retired Military Physician, Retired Col (Dr) United States Air Force

208 Writing A Nexus Determination for your Veteran Patients

May 3, 2021 7:30 a.m.

Many times clinicians, especially occupational medicine clinicians, are asked to provide medical nexus opinions for their VA patients. There are very specific rules and requirements for these opinions that are different than either litigation opinions or standard workers' compensation opinions. Knowing the VA rules and regulations greatly enhances your Veteran patient's chances of receiving service-connected disability compensation for their illnesses and injuries. This session will explain the rules and regulations, what works and what doesn't.

Learning Objectives:

- Determine the military exposures most likely to have caused the Veterans medical condition
- Ensure that their medical opinion meets VA criteria
- Utilize scientific evidence to support a nexus decision for military exposures

Faculty:

Victoria A. Cassano, MD, MPhil, MPH – President and CMO, Performance Medicine Consulting, LLC

209 Climate Mitigation Strategies for the Occupational and Environmental Physician

May 3, 2021 9:00 a.m.

In 2018, the American College of Occupational and Environmental Medicine (ACOEM) convened a task force to create guidance discussing the responsibilities of the occupational and environmental medicine (OEM) clinician in the treatment and prevention of climate-related health effects. In 2020, ACOEM convened a new workgroup to develop expanded guidance on climate. This workgroup has focused on strategies that the OEM clinician can implement to protect workers from the health impacts of climate change. Furthermore, this workgroup provides the necessary steps an OEM clinician can take to mitigate the effects of climate change and achieve net-zero carbon emissions. The strategies introduced in this session will also promote worker protection through application of the hierarchy of controls to support workers, their employers, and their workplace. This session seeks to further develop and enhance the OEM clinician's understanding of climate change mitigation strategies.

Learning Objectives:

- Articulate actions that the OEM clinician can take to reduce adverse impacts of climate change among workers, employers, and workplaces
- Define ways an OEM clinician can leverage decision makers to lower the carbon footprint and transition to a zero-carbon economy
- Identify tools that an OEM clinician can use to foster dialogue about energy sources and how employers and other stakeholders can transition from fossil fuel-based energy to renewables (including wind and solar)

Faculty:

Manijeh Berenji, MD, MPH, FACOEM – Assistant Professor, Boston Medical Center

William Brett Perkison, MD MPH FACOEM – Program Director, UT Houston Occupational and Environmental Medicine

Margaret K. Cook-Shimanek, MD, MPH – Medical Director, Montana Department of Labor and Industry

Ismail Nabeel, MD, MPH, MS – Associate Professor, Icahn School of Medicine at Mount Sinai

Yohama A. Caraballo-Arias, MD – Facultad de Medicina de la Universidad Central, Institución Afiliada de la Escuela de Medicina Luis Razetti

Rupali Das, MD, MPH – Senior Vice President, California Medical Director, Zenith Insurance

210 Commercial Driver Medical Examiner Update - Part 1

05/03/202109:00:01

Part 1 of this 2-part session will provide an update on the National Registry of Certified Medical Examiners and other issues which affect commercial driver medical examiners. Topics will include recent or pending regulatory changes including status of the Medical Examiner Handbook, proceedings of the Medical Review Board and discussion of common areas of confusion for the commercial driver medical examiner.

Learning Objectives:

- Utilize new and complicated information on the NRCME
- Describe appropriate certification decisions in the absence of official guidance
- Identify resources for CMV driver certification determinations

Faculty:

Natalie P. Hartenbaum, MD, MPH, FACOEM – President/Chief Medical Officer, OccuMedix, inc

Anne-Marie M. Puricelli, MD, JD – Concentra

211 NIOSH Workplace Investigations

May 3, 2021 9:00 a.m.

NIOSH will present recent workplace investigations on emerging health threats in America's workplaces. Faculty will describe the workplace settings, the specific approaches involving workplace exposures and medical aspects of the cases, and general approaches to making recommendations to employers, employees, and other stakeholders to improve conditions. Discussion will include whether government intervention helps identify gaps in workplace control measures and develop solutions to improve workplace health and safety.

Learning Objectives:

- Describe different evaluation approaches used to identify workplace issues
- Explain how NIOSH evaluations may have industry-wide impact
- Identify the benefits of using NIOSH's Health Hazard Evaluation program

Faculty:

George R. Grimes, MD, MPH, FACOEM – Medical Officer, CDC/NIOSH

Rachel Bailey, DO, MPH – Medical Officer, CDC/NIOSH

Judith Eisenberg, MD, MS – Medical Officer, CDC/NIOSH

212 Occupational and Environmental Neurology Update

May 3, 2021 9:00 a.m.

In this session, clinical cases will be reviewed of patients presenting to industrial medicine clinics with conditions such as head trauma, cervical spine, upper extremity and hand trauma, lower back and lower extremity trauma as well as industrial exposures to solvents and metals and gases to outline an approach to specific diagnostic and treatment challenges. Cases will include functional neurological issues as well as neurological fitness for duty dilemmas. An algorithm for an approach to each of these type of patient will be outlined. Cases if asked could focus to some extent depending on how much time is offered on electrodiagnostic testing interpretation. Cases may also focus on issues regarding being an expert consultant.

Learning Objectives:

- Describe common presentations of brachial plexopathy and the anatomy important to do so
- Describe common agents that may lead to toxic neuropathy, toxic encephalopathy or movement disorders
- Demonstrate a reasonable approach to a patient with a functional neurologic condition

Faculty:

Jonathan Rutchik, MD, MPH – Neurologist Occupational Medicine Physician, NEOMA

213 The Emerging Total Worker Health Professional: Competencies, Training, and Community

May 3, 2021 9:00 a.m.

Adoption of an inclusive approach to promoting employees' safety, health and well-being are central to the NIOSH concept called Total Worker Health® (TWH). Occupational Medicine trainees, practitioners, and academics are increasingly incorporating TWH into practice and research. As such, we need knowledge, skills, and experience that cover an array of subjects that complement, and in some cases go beyond, the competencies gained in traditional occupational medical training. This emerging, transdisciplinary field needs occupational medicine physicians who will become leaders who can conduct and adapt research to practice, serve as TWH consultants to industry, as well as plan, implement, and evaluate TWH programming and its impacts. This presentation summarizes the set of competencies, skills, and knowledge needed by individuals who will help meet workforce capacity needs for TWH-trained professionals (Newman et al. JOEM 2020). We will also discuss the available training options for Occupational Medicine physicians to become the first generation of TWH Professionals. This presentation will share the vision for TWH collaboration and convening.

Learning Objectives:

- Explain the role of Total Worker Health in helping occupational physicians address the future of work, worker health, safety, and well-being
- Identify the 6 core competencies proposed for Total Worker Health Professionals
- Identify how occupational medicine physicians can gain training and certification in TWH and engage with the broader TWH professional community

Faculty:

Lee S. Newman, MD, MA, FACOEM, FCCP, F. Colleg. Ramazzini – Distinguished Professor and Center Director, Colorado School of Public Health and Center for Health, Work &Environment, University of Colorado

Natalie V. Schwatka, PhD – Assistant Professor, Department of Environmental and Occupational Health, Center for Health, Work &Environment, Colorado School of Public Health

Liliana Tenney, DrPH, MPH – Deputy Center Director and Outreach Director, Senior Instructor, Dept of Env't Occ Health, Center for Health, Work &Environment

214 The Impact of Racism on Occupational and Environmental Health: Current State and Steps Forward

May 3, 2021 9:00 a.m.

The murder of George Floyd in the spring of 2020 sparked a national reckoning about systemic racism in the United States. On-going videos of police aggression combined with the heavy burden that the pandemic has cast on people of color have brought into sharp focus historic and chronic fault lines in our diverse society. In response, ACOEM promulgated a public statement and established a workgroup to consider the role of OEM in addressing systemic racism. This session will discuss how we can rise to the challenge as occupational medicine providers, as ACOEM, and as individual citizens of the world, to redress the toll that systemic racism takes on occupational and environmental health.

The session will begin with brief presentations on the impact of racial inequities on occupational and environmental health. We will then break into workgroups to explore a way forward on some specific themes: law enforcement, environmental health, organizational culture, and national advocacy. We will conclude in plenary to raise ideas that have emerged from the break out groups for further exploration individually, professionally in our organizations, and with ACOEM.

Learning Objectives:

- Describe how systemic racism impacts occupational and environmental health
- Reflect on the effects of implicit and explicit bias on our individual and professional lives
- Identify actions that each of us can take to create policies, programs and practices that redress inequities in occupational and environmental health

Faculty:

Robert K. McLellan, MD, MPH – Professor, Geisel School of Medicine at Dartmouth

Lenworth Ellis, MD, MPH – Assistant Professor, UConn Health

George Moore, MD, MSc. – Director of Employee Health and Clinical Occupational Medicine, UConn Health Medical Center

Amir Mohammad, MD, MPH, FACOEM – Medical Officer, Department of Veterans Affairs & Yale University School of Medicine

Deena L. Buford, MD, MPH – Retired

215 The Occupational Medicine Pipeline: International Approaches to Developing Occupational Medicine Expertise

May 3, 2021 9:00 a.m.

The World Health Organization and the International Labor Organization have both made improving the health of workers major themes in their plans for improving population health and have established programs that include increasing access to Occupational Health services.

However, studies show that Occupational Medicine expertise is in short supply in most of the world. The COVID-19 pandemic has amplified the critical role of Occupational Medicine in public health. The International Occupational Medicine Societies Collaborative (IOMSC), established in 2013, has grown since then to 47 Occupational Medicine societies from 42 member countries. In 2019-2020, the IOMSC surveyed the leaders of its member societies to learn more about how Occupational Medicine expertise is developed and disseminated in their country. The results of this survey, which included education and approaches to specialty certification and maintaining certification, will inform international health organizations about the mechanisms used around the world to develop this critically underrepresented field of medicine. This session will present findings from this survey.

Learning Objectives:

- Explain the range of approaches to Occupational Medicine education in member countries of the IOMSC
- Explain the implications of the survey results on the ability of at least one IOMSC member developing country to deliver quality occupational health services to its worker population
- Discuss at least one innovative approach to OEM education and implications for education in one's own country

Faculty:

Marianne Cloeren, MD, MPH, FACOEM, FACP – Associate Professor, University of Maryland School of Medicine

Herman Spanjaard, MD, MPH, FACOEM – Director, Arbo Consult

Aisha Rivera, MD, MS – Program Director, Occupational and Environmental Medicine Residency, Johns Hopkins School of Public Health

Peter Connaughton, LRCP&SI, MBA, FACOEM, FAFOEM – Immediate Past President, International Occupational Medicine Society Collaborative

Shoshana Zheng, D.O., MAJ, MC, USA – Occupational & Environmental Medicine Resident, PGY-3, Uniformed Services University

Ronald Loepke, MD, MPH, FACOEM – Vice Chairman, U.S. Preventive Medicine, Inc.

Richard JL Heron, MB CHB, FRCP, FFOM, FACOEM, MB CHB, FRCP, FFOM, FACOEM – Vice President Health and Chief Medical Officer, BP International

Resident Research Abstract Presentations - Part I

May 3, 2021 9:00 a.m.

This annual session will feature current and cutting-edge research presentations by residents, fellows, and recent graduates in occupational and environmental medicine, and provide a picture of contemporary investigative work in the specialty and translation of research into OEM practice. Topical areas and current problems in OEM will be emphasized. Awards recognizing the contributions of residents and preceptors will be presented.

Moderator:

John Meyer, MD, MPH, FACOEM, Mount Sinai School of Medicine, New York, NY

216 Commercial Driver Medical Examiner Update - Part 2

May 3, 2021 11:00 a.m.

Part 2 of this 2-part session includes a discussion by a trucking industry attorney who will discuss legal aspects of what examiners and employers should do in the absence of official FMCSA guidance. Case studies will be presented with a focus on recent literature, Medical Expert Panel or Medical Review Board recommendations. A panel discussion and QA will end the two-Part session to address remaining issues.

Attendees who want to ensure their questions are answered can send them in advance to CDME16@gmail.com. Please include AOHC 2021 in the subject line.

Learning Objectives:

- Utilize new and complicated information on the NRCME to make appropriate certification decisions in the absence of official guidance
- Make appropriate certification decisions in the absence of official guidance
- Identify resources for CMV driver certification determinations

Faculty:

Natalie P. Hartenbaum, MD, MPH, FACOEM – President/Chief Medical Officer, OccuMedix, inc

Douglas Marcello – Attorney, Marcello & Kivisto, LLC

Anne-Marie M. Puricelli, MD, JD – Concentra

Matt Thiese, PhD, MSPH – Associate Professor, Occupational Injury Program Director, University of Utah School of Medicine

217 RETAIN Progress Report at 3 Years: \$150 Million Multi-state Work Disability Prevention Demonstration Project

May 3, 2021 11:00 a.m.

RETAIN is a five-year \$150 million Federal demonstration project to provide rapid access to SAW/RTW services for working people with reduced functional ability due to recent injury or illness, especially MSK conditions. The government's goals: reduce work disability, job loss, and withdrawal from the workforce, and reduce demand for SSDI. Come to this panel session to hear from the 8 participating states (CA, CT, KS, KY, MN, OH, VT and WA) how things actually turned out as they developed, operated, and began operations of their small scale pilot programs. By the time of AOHC 2021, we will know how many of them were selected to go onto Phase 2 in which they will scale up their programs and keep improving efficacy. RETAIN promotes specific occ med best practices to all clinicians. Most states have occ med docs in key roles in their programs, especially in communicating with the local medical community and assuring the effectiveness of service delivery. RETAIN also requires a lot of public-private collaboration. The states had considerable flexibility in designing their programs. If successful, RETAIN may significantly expand opportunities for our specialty nationwide.

Learning Objectives:

- Describe the overall purpose and timeline of the RETAIN Demonstration Project and explain how RETAIN is contributing to community-level changes related to work disability
- Describe at least three realizations or results -- positive or negative -- that occurred during the pilot phase of the participating states' programs
- List at least two factors that are critical to the success of a work disability prevention program that serves multiple healthcare delivery organizations, employers, and insurers across a wide geographic area
- List at least one example why RETAIN is making better outcomes possible than would have occurred without it

Faculty:

Jennifer H. Christian, MD, MPH, FACOEM – President, Webility Corporation

Karen L. Huyck, MD, PhD, MPH, FACOEM – Medical Director, Vermont RETAIN, Dartmouth University

Laura E. Breeher, MD, MPH, FACOEM – Medical Director, Occupational Medicine, Mayo Clinic

Nicole Bennett – Director, CHI Franciscan Services, CHI Franciscan

Robert C. Blink, MD, MPH, FACOEM – Medical Director, California RETAIN, WorkSite Partners

Jung Kim, MD – Medical Director Ohio RETAIN, Mercy Health - St. Elizabeth Ambulatory Clinic

Michael Erdil, MD, FACOEM – Assistant Clinical Professor, UConn Health DOEM and OEHN

218 Sentinel Health Events at OSHA

May 3, 2021 11:00 a.m.

This session will present sentinel events and their appropriate use at the occupational health practice and policy level. The first presentation will describe three outbreaks and the use of diagnostic criteria, screening questionnaires, and follow-up investigations. The second presentation will describe a recently recognized common cause of drowning deaths, the "Delta-P" problem and the appropriate development and use of checklists for occupational health and safety. The third presentation will present an outbreak of nicotine poison in a vaping products manufacturing facility and discuss implications for not just occupational but also environmental routes of exposure.

Learning Objectives:

- Recognize the common, often overlapping, but distinct presentations of lung disease and manage the workforce to prevent further cases
- Discuss how to go from cases of occupational disease and injury to developing prevention checklists

Faculty:

Michael J. Hodgson, MD, MPH – Chief Medical Officer, OSHA / DOL

Dawn Cannon, MD, MS – Medical Officer, OSHA/DOL

Minda G. Nieblas, MD – Medical Officer, OSHA/DOL

219 Supporting Employers In Creating a Recovery-Friendly Workplace

May 3, 2021 11:00 a.m.

Substance use costs employers billions – and most of this impact is due to lost productivity, absenteeism and turnover, and much higher health care costs. The workplace can have a central role in getting people into recovery – and helping them stay there. This session will review compelling evidence for workplace involvement in identification, treatment, and recovery support, drawing upon extensive research and practice experience in health care and aviation. The experience of one of the first employer-directed state wide initiatives, in New Hampshire, will provide suggestions on how these approaches can be generalized to other workplaces. Some of the unique challenges faced by employees with opioid use disorders, related to recovery and return to work will be discussed.

Learning Objectives:

- Identify at least three elements of a workplace policy that lead to decreased relapse rates after substance use disorder treatment
- Identify at least two factors that positively influence employer acceptance of employees returning to work after substance use disorder treatment
- Describe the evidence supporting medication-assisted treatment in opioid addiction

Faculty:

Glenn S. Pransky, MD MOcCH FACOEM – Associate Professor, University of Massachusetts Medical School

Robert K. McLellan, MD,MPH – Professor, Geisel School of Medicine at Dartmouth

Roger Weiss, MD – Professor of Psychiatry, Harvard Medical School

220 Using Soft Skills to Manage the Hard Patients: Simple Motivational Interviewing, Mindfulness and Other Communication Techniques to Manage Strong Emotions and Negative Behavioral Reactions in Workers' Compensation Patients

May 3, 2021 11:00 a.m.

In this session we will review basic pain neuroscience and evidence based factors that can lead to a delayed outcome or greater risk of disability in a work related injury. We will discuss how communication techniques can improve patient engagement and well being and get patients back to moving in the right direction and reduce unintended iatrogenic harm. We will review using mindfulness strategies for clinicians and stress management for patients and share some simple easily implemented strategies in a virtual demonstration session. We will also discuss motivational interviewing techniques and demonstrate basic techniques and apply them to a case study in a virtual demonstration session. Individuals who attend this session should be able to leave with some communication skills that they can easily and readily implement into their practice to improve their outcomes with challenging cases.

Learning Objectives:

- Describe the top down components of pain neuroscience and how interactions can impact pain
- Define Motivational Interviewing and basic skills that make up this technique
- Implement basic mindfulness and motivational interviewing techniques that can mitigate common emotional and behavioral barriers to outcomes

Faculty:

Katie McBee, PT, DPT, OCS, MS – Director of Workers Compensation and Pain Management, Phoenix Physical Therapy

221 What Happened to TOXNET? An Update on Web Resources for the Occupational Health Professional

May 3, 2021 11:00 a.m.

The intent of this session is to help OEM physicians navigate the changing landscape of web resources for occupational and environmental toxicology. This session will provide:

- A high level overview of public health web resources available online to OEM practitioners - outlining toxicology resources found in Center for Disease Control and Prevention (CDC) websites (e.g. Agency for Toxic Substances and Disease Registry - ATSDR and National Institute for Occupational Safety and Health - NIOSH), Environmental Protection Agency (EPA), National Institute of Environmental Health Sciences (NIEHS), and National Library of Medicine (NLM) at the National Institutes of Health (NIH)
- An in-depth update regarding what happened to the National Library of Medicine's TOXNET and how to still find these toxicology resources
- Public health informatics examples of intelligent databases in occupational toxicology and infectious diseases

Learning Objectives:

- List the major public health web resources available online to OEM practitioners in the domain of occupational and environmental toxicology
- Describe how to find and access the occupational and environmental toxicology web resources previously found in NLM's TOXNET
- Describe public health informatics examples of intelligent databases in occupational toxicology and infectious diseases

Faculty:

Richard R. Hammel, MD, MPH, FACPM, FACOEM – Chief Product Evangelist, Enterprise Health

Pertti J. Hakkinen, Ph.D., F-SRA – "NIH Special Volunteer" in Toxicology and Environmental Health Sciences, National Center for Biotechnology Information (NCBI) - National Institutes of Health (NIH)

Shoshana Zheng, D.O., MAJ, MC, USA – Occupational & Environmental Medicine Resident, PGY-3, Uniformed Services University

Jay A. Brown, MD, MPH – Haz-Map Consultant for the U.S. Dept. of Labor, Haz-Map

222 Workforce Resilience to Climate Change: The Critical Role for Occupational Medicine Professionals in Managing the Growing Threat of Climate Instability

May 3, 2021 11:00 a.m.

The session will guide the occupational medicine (OM) professionals to address the threats of climate instability to safety of the workforce. Incorporating frameworks such as Global Reporting Initiatives and Sustainable Development Goals provide the structure to measure and manage climate impacts. To engage relevant stakeholders, participants will learn how to partner with company executives, community and governmental agencies. By audience interaction, they will expand their skills to determine actionable measures based on relevant climate-risk modeling to optimize workforce resiliency. They will gain tools to make the business case of sustainability practices to decision makers. Successful and applicable examples will be shared. Expansion of ACOEM's role will be recommended for educational opportunities related to direct and indirect climate impacts as well as establishing reporting and management systems especially for industries such as health care in order to incorporate sustainability practices.

Learning Objectives:

- Discuss the tools used to make the business case for sustainability in the workforce
- Describe techniques to communicate health hazards of climate instability and importance of resiliency
- Discuss collaboration and research engagement
- Describe creation of educational initiatives, policy recommendations and the role of the organization in implementation

Faculty:

Pouné Saberi, MD, MPH – Section Chief, Veteran Health Administration

Jasminka Goldoni Laestadius, MD, PhD, FACOEM – Senior Occupational Health Specialist, The World Bank Group

Emily Senay, MD, MPH – Assistant Professor, Department of Environmental Medicine & Public Health/ Icahn School of Medicine at Mount Sinai

Ronda B. McCarthy, MD, MPH, FACOEM – National Medical Director, Concentra

Resident Research Abstract Presentations Part II

May 3, 2021 11:00 a.m.

This annual session will feature current and cutting-edge research presentations by residents, fellows, and recent graduates in occupational and environmental medicine, and provide a picture of contemporary investigative work in the specialty and translation of research into OEM practice. Topical areas and current problems in OEM will be emphasized. Awards recognizing the contributions of residents and preceptors will be presented.

Moderator:

John Meyer, MD, MPH, FACOEM, Mount Sinai School of Medicine, New York, NY

223 A New Direct Care Model: the Mobile Nurse-Health Coach Model

May 3, 2021 1:30 p.m.

This session will discuss the development of a unique direct care model deployed to the employees of a retailer with over 15 retail stores over a 100 mile radius. At the end of year one, PMPM dropped by 7%, and this was their only intervention.

Learning Objectives:

- Describe how to create a direct care model based on the appropriate core values
- Design a mobile, onsite direct care model
- Explain the value of this direct care intervention

Faculty:

Bill Satterwhite, III, JD, MD – Chief Health and Wellness Officer, Wake Forest Baptist Health

224 Cutting Edge Treatments for Carpal Tunnel Syndrome

May 3, 2021 1:30 p.m.

This session will provide participants with a review of the highest evidence based on current literature and clinical examination skills to evaluate and treat work related carpal tunnel syndrome, knee pain, and improve the health of the foot through exercise. The presentation will include a review of examination techniques and treatment modalities including skills that the Occupational Medicine provider can utilize in the office. The session will include: EMG/NCS interpretation (when and how to order) of CTS Ultrasound Examination and a review the evidence for knee and foot pain in-office interventional treatment including ultrasound guided interventions for the Occupational Medicine provider.

Learning Objectives:

- Describe how to better diagnose carpal tunnel syndrome from the physical examination
- Discuss cutting edge ultrasound guided interventions that may help patients to restore function and return rapidly to work based on the highest level of clinical evidence
- Provide in the office imaging and learn how the Electromyography and Nerve Conduction Studies relate to CTS pathology and other causes of hand and wrist pain

Faculty:

Yusef A. Sayeed, MD, MPH, MEng, CPH, CMRO, CME, RMSK, DABPM – Director of Pain Medicine and Functional Rehabilitation, United States Air Force/Department of Defense

Kate Sully, MD – Physician, State of Florida

225 Department of Veterans Affairs Airborne Hazard and Open Burn Pit Registry (AHOBPR): A Six Year Update

May 3, 2021 1:30 p.m.

Public Law 112-260, enacted on January 10, 2013 required Secretary of VA to coordinate with Secretary of Defense to establish the Airborne Hazard and Open Burn Pit Registry (AHOBPR), a joint effort between DoD and the VA, was initiated in June of 2014. As of 9 August, 2020, greater than 211,000 Veterans and Service Members from all services have enrolled. It includes those who served in Operations Desert Shield/Storm through current deployments from 10 eligible countries. It is the fastest growing registry within the VA, enrolling about 500 new people weekly. The registry relies on deployment data being transferred from Defense Manpower Data Center (DMDC) and from clinical encounters from VA data sources. This presentation describes the steps to enroll in the registry, outreach activities, eligibility requirements, efforts to increase clinical exams, and the data collected within the registry. Further evaluation of a patient with potential AHOBPR disease will be outlined. The presentation will provide an overview of ongoing (research) efforts to understand the health effects of airborne hazards and open burn pits. Registries limitations will be summarized.

Learning Objectives:

- Identify who is eligible for the AHOBPR in order to advise their patients for this service
- Identify additional efforts to learn about deployment and respiratory disease
- Describe the limitations of registries

Faculty:

Eric E. Shuping, MD, MPH, FACOEM – Director, Post 911 Era Programs, PDHS - VA

226 Keeping the Lights On: Cost Accounting 101 for OEM Practice

May 3, 2021 1:30 p.m.

This session will give a framework on cost accounting that physicians can use to evaluate their OEM program, in any practice setting. First, a framework for cost accounting will be provided followed by an interactive discussion between an OEM physician-owner of a network of occupational medicine clinics, and a clinician with over 13 years as Vice President in the insurance and risk management industry. Topics for discussion will include the cost of providing services and how carriers reimburse for the same services.

Participants will gain familiarity with cost accounting principles and how this information is used to inform staffing, service line, and other practice management decisions. Traditional cost accounting strategies such as ratio of cost to charge (RCC) will be explored alongside contemporary approaches such as activity-based costing (ABC), which may improve the ability to assess practice and patient specific costs.

Cases will be used to highlight key concepts in cost accounting. Participants will gain a skill set for assessing the costs associated with their own practice and learn how to use this information to inform practice management decisions.

Learning Objectives:

- Detail and provide examples of the following concepts and their importance to a cost accounting system: direct costs, indirect costs, fixed costs, variable costs; and express how this data can be used for decision making in managing occupational medicine program in any practice setting
- Describe the strengths and weaknesses between cost accounting strategies ratio of cost to charge (RCC), activity-based costing (ABC), and time-dependent activity-based costing (TDABC)
- Recognize the cost of providing services from the perspective of an occupational medicine physician owner, and contrast this to how services are reimbursed from the perspective of a clinician-executive with extensive experience in the insurance and risk management industry

Faculty:

David C. Caretto, MD MPH – Occupational Medicine Physician, Dignity Health - Mercy Medical Group

Luke Lee, MD, MPH, MBA, CPA – Chief Executive Officer, PRIME Occupational Medicine

Troy Prevot, PA-C, ATC MBA – Physician Assistant; Consultant; Board Member, Ochsner Health; Occupational Health Consultants LLC; Freedom Advantage Ins Co.

227 Meeting the Challenges of COVID in the Entertainment Industry

May 3, 2021 1:30 p.m.

This session describes how an entertainment company approached reopening business with its focus on health and safety protocols for both employees and visitors. During the session we will cover how in a production environment cast and crew were returned to work in TV and Studios with health screening, periodic testing, contact tracing and return to work protocols. This included meeting union requirements as well public health guidance in numerous jurisdictions. Some of the pitfalls and challenges covered include false positives and weekly testing protocols. Additionally discussion on establishing health and safety protocols for both guests and cast in hotels, parks, and cruise lines, with an emphasis on training, safety guidelines, and coordination with numerous departments across a complex organization will be part of the discussion. Enabling environments for special events with "protective bubbles" is also an important learning to be discussed.

Learning Objectives:

- Discuss the challenges of COVID in the entertainment industry
- Explain the complexities of working in multiple jurisdictions and across diverse sectors within a company to design and implement a COVID response program in a multinational organization
- Discuss COVID safety and surveillance strategies across numerous job classifications with entertainment

Faculty:

Pamela A. Hymel, MD, MPH – Chief Medical Officer, Disney Parks, Experiences and Products

Lori Schwartz, MD – Director, Global Medical Operations, The Walt Disney Company

Jeff Tzeng, DO, MPH, MBA – Corporate Medical Director, Comcast NBCUniversal

228 Rabies Exposure Management in Hospital, Laboratory and Field Settings

May 3, 2021 1:30 p.m.

Rabies remains an important global and national pathogen with occupational risk across a range of settings. Rabies epidemiology and patterns of human rabies exposure in the US continue to evolve, reflecting ongoing rabies control programs and research use of the virus and its pseudotypes. Exposure potential may be greatest in settings where infection is not anticipated, such as human health care. Using a case-based approach the session will address diagnostic challenges and exposure management in human health care, veterinary medicine, research laboratories, and fieldwork. Speakers will address collaborative strategies between public health authorities and occupational medicine providers, including laboratory diagnostics and the use of standardized risk assessment tools to determine the need for post-exposure prophylaxis. The session will highlight risk communication and national recommendations for rabies infection control, pre-exposure prophylaxis and post-exposure prophylaxis.

Learning Objectives:

- Discuss rabies epidemiology in the US as it relates to occupational exposure recognition and prevention
- Implement best practices in diagnostic specimen collection, exposure risk assessment, and post-exposure management
- Communicate rabies infection control and safety protocols across a range of community and work settings

Faculty:

Amy J. Behrman, MD, FACOEM, FACP – Medical Director, Occupational Medicine, Hospital of the University of Pennsylvania

Erin R. Whitehouse, PhD – Epidemic Intelligence Service Officer, Centers for Disease Control and Prevention

229 Treat the Patient, Not the OSHA 300 Log - Better Safety Metrics for a Healthier Company

May 3, 2021 1:30 p.m.

Companies are often challenged with how to best use OSH metrics. OSHA recordability is a lagging indicator that has historically been used to focus safety efforts. But when organizations incentivize the reduction of recordables, this limits the effectiveness of longer-term risk reductions that truly reduce injuries and costs. Providing the best medical care and focusing on leading indicators along with lagging, can improve the overall safety of workers. This session will describe methods of using leading indicators and risk assessments to improve outcomes, along with using best practices in medical care.

- **Learning Objectives:**
- Discuss why incentivizing OSHA recordability creates unintended consequences in occupational medical care
- Identify how risk assessment and the associated metrics can be used to reduce injuries and costs
- Describe three examples of leading indicators

Faculty:

Robert M. Bourgeois, MD, MPH, FACOEM – Medical Director, Bourgeois Medical Clinic

Deborah R. Roy, MPH, RN, COHN-S, CIT, CSP, FASSP, FAAOHN – President, SafeTech Consultants, Inc.

Michael J. Hodgson, MD, MPH – Chief Medical Officer, OSHA / DOL

229A Board Certification in OEM

May 3, 2021 1:30 p.m.

Members of the American Board of Preventive Medicine (ABPM) will discuss specifics regarding the rules for acceptance as a candidate to sit for the initial certification examination, as well as for the four parts required for recertification under maintenance of certification: 1) professionalism; 2) lifelong learning; 3) cognitive examination; and 4) practice performance. Extensive Q&A with attendees has been a hallmark of this session. Additional information is available on the ABPM web site at www.theabpm.org. This session may be of particular interest to residents and recent graduates.

Learning Objectives:

- Describe the requirements for achieving certification by the American Board of Preventive Medicine (ABPM)
- Describe the process for maintaining certification during ABPM's transition to a Continuing Certification Program
- Identify APM resources to assist diplomates in meeting ABPM requirements

Faculty:

Eric M. Wood, MD, FACOEM – Director, Occupational Medicine; Director, Occupational Medicine Residency, University of Utah, Rocky Mountain Center for Occupational and Environmental Health

230 Addressing the Personal Protective Equipment Shortage of Early 2020 Through Innovation

May 3, 2021 3:00 p.m.

As COVID-19 began to spread across the world, achieving pandemic status, one major concern was the ability of health care institutions to be able to provide appropriate personal protective equipment (PPE) to their employees for the duration of the pandemic. In addition to seeking to establish new procurement options, the University of Utah formed a team which could evaluate and develop potential PPE alternatives which would provide PPE to their employees. This team evaluated the potential for extended use of PPE, as well as the various methods of re-using PPE such as N-95 masks. In addition, the team explored a variety of novel respiratory protective devices such as extrusion printed face masks, use of industrial respirators in the health care setting, and even respirators using full face snorkel masks. This activity would explore this initial exploration period, and eventual development of an inexpensive method to manufacture a PAPR machine with easily accessible items, as well as the development of a compatible PAPR hood. These efforts led to the influx of a few hundred PAPRs and reusable PAPR hoods, which provided a much needed boost to PPE supplies.

Learning Objectives:

- Describe the design and manufacturing processes of our novel PAPR device
- List the qualitative controls in place to ensure that the PAPR devices continued to function at appropriate flow and filtration levels
- Describe the processes that our team utilized in evaluating various novel means of protecting health care workers during a global pandemic that caused significant shortages of industry standard PPE options

Faculty:

Andy Phillips, MD MOH – Assistant Professor, University of Utah

Jeremy J. Biggs, MD – Associate Professor, University of Utah

231 An Approach to Virtual Occupational Health (VOH)

May 3, 2021 3:00 p.m.

The presentation includes the reasons for and advantages of starting a Virtual Occupational Health (VOH) program, including shortage of trained OM physician, needs at remote sites, part-time OM needs, efficient use of OM physician's time, and better and more cost-effective use of OM physician services. Dr. O'Neal set up the initial VOH program for the Army Regional Health Command - Central, and has continued to use VOH at a remote VA clinic site in Arizona.

Learning Objectives:

- Conduct efficient and detailed virtual OM functional and preventive examinations
- Define the reasons VOH is appropriate for many OM practices
- Describe the advantages of doing a detailed Occupational Health Questionnaire but streamlined and focused physical examination

Faculty:

Jon O'Neal, MD, MPH, FACOEM – Medical Director, Occupational Health, Phoenix VA

232 Back Pain in Workers Compensation- Stepwise or Risk Classification

May 3, 2021 3:00 p.m.

This session reviews step wise versus risk stratification treatment approaches for Nonspecific Low Back Pain (NSLBP) and integrating risk modeling within the ACOEM March 2020 guideline “Non-Invasive and Minimally Invasive Management of Low Back Disorders”.

In 2019, there were 136,190 back injuries resulting in 457,840 lost work days reported to OSHA, resulting in significant expense to employers and society, and changes in productivity and quality of life for workers. Seventy-seven percent of these were sprains and strains (NSLBP).

Historically, guidelines for NSLBP approach treatment utilizing low cost and less intensive treatments first and escalating treatment based on response. This approach is known as a stepped care model.

An alternative approach is risk stratified where individuals with higher risk for poor outcomes are immediately engaged in care that is more comprehensive. The STarT back tool is an example of risk stratification tool for NSLBP.

Learning Objectives:

- Access and utilize an online version of the STarT back tool to place individuals with low back pain into categories based on risk of poor recovery outcomes
- Incorporate risk stratification based guidelines for individuals with non-specific low back pain into the current ACOEM Guideline for Non-Invasive and Minimally Invasive Management of Low Back Disorders
- Identify key elements that differentiate preferred treatment for individuals with non-specific low back pain who are in the medium vs. high risk for poor outcomes

Faculty:

David A. Hoyle, DPT, MA, OCS – National Director, Select Medical- WorkStrategies

Marcos A. Iglesias, MD, MMM, FACOEM, FAAFP – Chief Medical Director, Travelers

233 Managing Post Concussion Syndrome in an Occupational Medicine Environment

May 3, 2021 3:00 p.m.

Concussions from workplace injury are increasing, possibly due to increased awareness from the sports industry. The most common reasons for workplace concussions are motor vehicle accidents, falls, materials hitting the head, and increasingly, workplace violence. Workplace concussions are associated with delayed return to work due to (1) significant symptoms that can be experienced with a concussion, (2) psychosocial factors affecting return to work and (3) concussions are a functional rather than a structural injury. The Occupational Medicine Physician (OMP) is often the gatekeeper for medical management of workplace concussions. Post Concussion Syndrome (PCS) can be considered when a patient fails to recover in normal recovery time. This presentation will prepare the OMP to develop a medical management plan, starting with a referral for a guidelines based neurobehavioral assessment (instead of a full neuropsychological evaluation) by a psychologist, and then develop an appropriate treatment plan or transfer of care based on the assessment findings.

Learning Objectives:

- Identify a concussion versus a post concussion syndrome and be familiar with the growing incidence of post concussion syndrome
- Discuss strategies and screening tools to intervene early in a risk of delayed recovery and how a neurocognitive screening with validity indicators can be used to manage delayed recovery
- Describe the possible outcomes of the assessment and the OMP role in the ongoing medical management or transfer care and write appropriate work restrictions

Faculty:

Steve Wiesner, MD – IMCS

Daniel LeGoff, PhD, LP – Clinical Quality Assurance Advisor, IMCS

234 Social Determinants of Health Impact on Health and Disability Outcomes and Costs, and Strategies to Mitigate the Negative Impacts

May 3, 2021 3:00 p.m.

Social determinants of health (SDOH) are conditions in the places where people live, learn, work, and play, that affect a wide range of health risks and outcomes. As much as 80% of a person's health is determined by these environments. Social determinants are also having considerable effects on COVID-19 outcomes. Factors that impact health include economic status, educational opportunities, access to health care, safety and housing, language, access to food as well as social and community relationships. Employers today are focusing more and more on employee well-being by enlisting holistic approaches to care including social factors, integrating physical and behavioral health needs, and providing healthy work environments. This session will address ways to identify the social determinant factors in a particular workforce, the effects of these on employee health and well-being as well as on medical and disability costs, and explore specific actions employers can take to address these factors and measure the results.

Learning Objectives:

- Articulate specific social drivers of health and their impact on health outcomes, mental health and medical/disability costs to be able to make a business case
- Describe the connection between social drivers of health and health behaviors on COVID-19 outcomes
- Identify specific social determinants of health in their own employee/patient population and have a framework to start addressing these with interventions of various types including well-being and digital solutions

Faculty:

Joel L. Axler, MD – National Behavioral Health Leader, Strategic Benefit Advisors (SBA)/Brown & Brown

235 Toxic Exposures During Military Service: A Role for OEM Physicians

May 3, 2021 3:00 p.m.

Military veterans may be exposed to numerous toxic substances while in service to our country. These exposures can cause debilitating health effects years or decades later, often after the veteran separated from military service. The Department of Veterans Affairs provides health care for veterans; however, not all veterans qualify for services. One way to attain eligibility is through recognition of a service-connected disability. An essential piece of evidence for a successful exposure-related disability claim is a written medical opinion linking a military exposure to a current disability. In this presentation, attendees will learn about some of the most common exposures during military service, and how they can help veterans gain access to the health care they deserve.

Learning Objectives:

- Identify potential health risks associated with exposures during military service
- Recommend resources for patients affected by military toxic exposures
- Help veterans gain access to VA health care

Faculty:

Rebecca Patterson, MPH, CPH – Deputy Director, Veterans Health Council, Vietnam Veterans of America

Artie Shelton, MD – Director, Veterans Health Council, Vietnam Veterans of America

236 Urban Paramedics: An Underserved Occupational Population

May 3, 2021 3:00 p.m.

Paramedics and other emergency response professionals are vital to public health and safety. They perform physically-challenging tasks during emergency response that potentially expose them to hazardous conditions that increase their risk of injury, morbidity and mortality. Compared to general workers, paramedics have higher rates of occupational injuries and three times the lost workday rate of all private-industry workers. These injuries are predominantly strains and sprains incurred during patient care, transport and response to emergency calls.

This study will determine the incidence and characteristics of occupational injuries among Denver Health (DH) Paramedics and compare them to those of other emergency workers in Denver such as firefighters, sheriff's deputies and police officers. It will also frame the foundational evidence to demonstrate the need for a role-related pre-employment evaluation for DH paramedics to enhance their health and safety.

Learning Objectives:

- Describe the burden and characteristics of occupational injuries among Denver Health Paramedics
- Compare the incidence rates and characteristics of occupational injuries among Denver Health Paramedics with those of other emergency workers in the city of Denver such as firefighters, police officers and sheriff's deputies.
- Discuss the need for a pre-employment and routine evaluation for Denver Health paramedics

Faculty:

Ngozil U. Obi, MBBS, MPH – Resident Physician, University of Colorado

Alisa M. Koval, MD, MPH, MHSA – Preceptor, University of Colorado

237 Biological Exposure Monitoring in an Art Glass Factory

May 3, 2021 3:00 p.m.

Chemical compounds used in the manufacture of art glass have potential toxic health effects. OSHA regulations require biological monitoring if the action level is exceeded. This session will provide video of the processes used in art glass manufacture and the industrial hygiene data used to determine an appropriate medical surveillance protocol. Data over the course of 25 years will be summarized to demonstrate the utility of medical surveillance.

Learning Objectives:

- Discuss the potential for toxic chemical exposure in the workplace and configure scientifically sound methods to assure that workers health is maintained
- Explain how OSHA biological exposure standards are used in practice
- Describe how occupational medicine benefits society by protecting the health of workers

Faculty:

Bertram W. Berney, MD, MHS, FACOEM, East Portland Medical Associates

238 The ACOEM Program for ABPM Certified Physicians to Meet Transitional Improvement in Medical Practice (IMP) Requirements

May 3, 2021 3:00 p.m.

As one of the four parts required for recertification under Maintenance of Certification, American Board of Preventive Medicine diplomates are required to complete a practice performance assessment, also known as Part IV. This component utilizes a quality improvement model with opportunities for assessment of practice performance and improvement activities available in clinical practice, teaching, research, and administration. This session will cover ACOEM's Part IV program.

Learning Objectives:

- Describe the overall elements of the ABPM Transitional MOC Requirements
- List the choices available for them to identify an area for a practice improvement plan.
- Demonstrate knowledge of what is required to complete the ACOEM Transitional MOC IMP module for ABPM certified physicians.

Faculty:

Denece Kesler, MD, MPH, FACOEM – Professor, University of New Mexico

Clinician Well-Being General Session

May 3, 2021 4:15 p.m.

Clinician well-being is vital for safe and superior patient care. Yet clinicians of all kinds are experiencing startling burnout rates, especially during the COVID pandemic. According to the Agency for Healthcare Research and Quality, “burnout is a long-term stress reaction marked by emotional exhaustion, depersonalization, and a lack of sense of personal accomplishment.”

Clinician burnout can have severe, wide-ranging consequences on individuals and on patient care. This general session will provide an overview of the National Academy of Medicine’s Action Collaborative on Clinician Well-Being and Resilience along with an example of what one institution is doing and a discussion on grief.

Immediately following the session, participants will have an opportunity to join small groups which will allow them to explore themes presented during the session including personal stories, successes and obstacles to addressing burnout in organizations, and discussing actions that ACOEM could take to better support its members.

Learning Objectives:

- Discuss the resources available through the NAM's Action Collaborative on Clinician Well-being and Resilience
- Provide an organizational framework for supporting clinician well-being
- Describe the well-being program one institution has developed and how it can be implemented at other organizations
- Review steps that can be taken to manage grief in employees

Faculty:

Robert K. McLellan, MD, MPH, FACOEM – Professor Emeritus, Geisel School of Medicine at Dartmouth

Gaurava Agarwal, MD – Director of Undergraduate Medical Education in Psychiatry, Assistant Professor, Departments of Education and Psychiatry, Northwestern Feinberg School of Medicine

Mary Yarbrough, MD, MPH, FACOEM – Executive Director of Health & Wellness, Vanderbilt Medical Center

Glenn S. Pransky, MD MOcCH FACOEM – Associate Professor, University of Massachusetts Medical School

301 Containment Ventilation for Exposure Reduction in Clinical Settings

May 4, 2021 9:00 a.m.

The COVID-19 pandemic resulted in an increased awareness of environmental exposures to airborne infections, and the value of engineering controls to prevent disease transmission in diverse workplaces. This has been heightened by the inadequate supply of personal protective equipment (PPE), and lack of other strategies to prevent disease transmission in workplaces. Some engineering controls are available in healthcare settings, such as airborne infection isolation rooms (AIIRs) and freestanding high efficiency particulate air (HEPA) fan/filter units, but demand has outpaced supply. Local exhaust ventilation (LEV) is designed to capture airborne contaminants, such as respiratory pathogens, at the source; preventing environmental contamination and occupational exposures. While LEV is ubiquitous in industrial processes, LEV is rarely used to capture airborne contaminants generated by people. As such we used the NIOSH Ventilated Headboard design to develop ventilated seating areas for ill patients while in common waiting room areas. This was done to help decrease exposures to employees and other patients.

Learning Objectives:

- Explain the hierarchy of controls in health care settings
- Describe how environmental controls in particular can be used in healthcare settings to decrease infection disease exposures
- Discuss how to coordinate with other health and safety personnel in health care to develop programs to protect employees and patients

Faculty:

Jeremy J. Biggs, MD – Associate Professor, University of Utah

Andy Phillips, MD, MOH – Assistant Professor, University of Utah

302 Medical Center Occupational Health: Dynamic Solutions for Daily Challenges

May 4, 2021 9:00 a.m.

Join some of the authors of the ACOEM Guidance for Occupational Health Services in Medical Centers and leaders from the Medical Center Occupational Health Section (MCOH), for an updated discussion of relevant MCOH topics and challenges faced by medical centers, practices and clinical research and laboratories. Present your challenging questions and conundrums to panel experts for a lively question and answer discussion. This session was coordinated by the Medical Center Occupational Health Section.

Learning Objectives:

- Demonstrate improved knowledge of common challenges faced by a medical center occupational health department
- Discuss the complexities of healthcare worker infectious disease exposure management
- Upon completion, the participant will be able to define three best practices for managing employee return to work in a healthcare setting

Faculty:

Rachel Leib, MD, MBA, MS, FACOEM – Medical Director Occupational Medicine Services, Atlantic Health System

Amy J. Behrman, MD, FACOEM, FACP – Medical Director, Occupational Medicine, Hospital of the University of Pennsylvania

Melanie D. Swift, MD, MPH, FACOEM – Medical Director, Physicians Health Center; Associate Medical Director, Occupational Medicine, Mayo Clinic

Lori Rolondo, MD, MPH, FACOEM – Vanderbilt University Medical Center

Rebecca Guest, MD, FACOEM – Medical Director, Employee Health & Wellness Department, Memorial Sloan Kettering Cancer Center

303 Military Occupational and Environmental Medicine (OEM) Specialty Leaders'/Consultants' Update

05/04/202109:00:02

This 60-minute session led by the specialty leader/consultant for OEM from three of the US uniformed services (Air Force, Army, and Navy) is intended to familiarize and update learners with the occupational health programs of each of these services, highlighting the similarities and differences in major governing regulations. Greater understanding of these similarities and differences can benefit OEM practice on joint installations, provide insight into some of the challenges of integrating programs, and offer suggestions of possible areas for research to address OEM gaps between the Services. As the US military transitions to a greater focus on Readiness and potential public health governance/oversight by the Defense Health Agency, more joint understanding, coordination, and collaboration will be required to ensure that essential OEM missions across the military are efficiently and effectively accomplished.

Learning Objectives:

- Describe the mission and current status of OEM in the US Army, Navy, and Air Force
- Cite the differences in major regulations for occupational health programs in the services
- Describe the current state/transition of occupational health under the Defense Health Agency

Faculty:

Jose M. Ortiz, MD, MPH, FS, FACOEM – Associate Program Director, NCC Occupational and Environmental Medicine Residency Program, Uniformed Services University of the Health Sciences (USUHS)

Max Clark, MD, MPH, MHSA, FACOEM – US Navy Occupational Medicine Specialty Leader, Navy Medicine Readiness & Training Command - Pearl Harbor

Charles D. Clinton, MD, MPH – Chief, Occupational Medicine, USAF

304 The Physical Exam 101: The Lost Art - Introduction to Anatomy, Physiology & Pathology of Common Spinal Conditions

May 4, 2021 9:00 a.m.

The goal of this workshop is to provide participants with a comprehensive refresher on the physical examination of the shoulder, upper extremities and spine. Emphasis will be placed on specific maneuvers to increase the sensitivity and specificity of the clinical diagnosis before further testing. This is the first of two workshops. See Session 311 at 10:30 on Tuesday, May 4.

Learning Objectives:

- Evaluate the more common and most frequent MSK shoulder injuries
- Increase their confidence in special maneuvers to accompany a general MSK exam
- Identify those cases that would need further diagnostic studies such as MRIs

Faculty:

Nicholas F. Tsourmas, MD – Medical Director, Texas Mutual Insurance Company

305 Miners' Wellness TeleECHO (Extension for Community Health Outcomes): Outcomes from New Mexico's Virtual Community Partnership for Occupational Lung Disease

May 4, 2021 9:00 a.m.

The rise of Occupational Lung Disease in the United States, particularly pneumoconiosis among coal miners, poses a challenge for rural communities where specialized healthcare and expertise is lacking. The Miners' Wellness TeleECHO (Extension for Community Health Outcomes) Program was created to address this issue by creating a virtual community of practice where experts from multiple disciplines can collaborate to improve patient outcomes and improve healthcare provider self-efficacy in treating occupational lung disease. This virtual platform enables clinicians, lawyers, respiratory therapists, home health providers, benefits counselors, and other specialists from diverse geographical areas to collaborate. This innovative approach has proven effective in rural New Mexico communities and can serve as a model for other programs to address the needs of marginalized groups with scarce access to resources.

Learning Objectives:

- Describe how a virtual platform can be used to build a diverse and wide-reaching network of experts in lung disease. Participants will then be able to describe how this virtual community of practice can address unique needs of specific occupational cohorts.
- Discuss how qualitative analyses can improve and shape an effective virtual community partnership
- Describe how a virtual community partnership can build self-efficacy in healthcare providers to more effectively manage occupational lung disease

Faculty:

Akshay Sood, MD, MPH – Tenured Professor, University of New Mexico

Summers Kalishman, PhD – Associate Professor Emerita, University of New Mexico

Brian Soller, PhD – Assistant Professor, University of Maryland Baltimore County

Kevin P. Vlahovich, MD, MS – Physician Medical Director, Employee Occupational Health Services/University of New Mexico

306 The United States Air Force Functional Rehabilitation Pilot Program: To Reduce Functional Impairment and Disability

May 4, 2021 9:00 a.m.

During this session participants will receive an emersion in the functional rehabilitation program that the Department of Defense and the United States Air Force have created to continue mission readiness and capability from patients that are suffering from chronic and debilitating pain. There will be an in depth review of selection criteria, outcomes, treatment modalities including: meditation, core strengthening, interval fitness training, interventional pain medicine, and patient education. There will also be an additional discussion on life long learning to reduce impairment and disability with a focus on population level change that will translate into true functional restoration and neuroplasticity in a provider driven format.

Learning Objectives:

- Develop a functional rehabilitation program within their community
- Develop skills to engage patients to restore function after debilitating injury including modalities developed by the evidence
- Develop techniques to perform motivational communication to reduce disability in populations

Faculty:

Yusef A. Sayeed, MD, MPH, MEng, CPH, CMRO, CME, RMSK, DABPM – Director of Pain Medicine and Functional Rehabilitation, United States Air Force/Department of Defense

Julie Price, Phd – Department of Defense/USAF

307 A Health Facility Physical Plant Walkthrough

May 4, 2021 9:00 a.m.

A walk-through of the UTHSCT Physical Plant will be conducted by the UTHSCT faculty (including OEM physicians, safety, biosystems engineering, biomonitoring, and social/behavioral health) and residents, with the purpose of identifying potential occupational risk factors and illustrating steps for conducting hazard evaluation. Different departments and equipment in the plant will be shown, potential hazards outlined, and safety and prevention measures explained. Simple methods of environmental monitoring will also be demonstrated along with control measures where applicable. This will be achieved by a narrated video and photo presentation. Safety recommendations that can best protect the physical plant workers will be outlined and explained.

Learning Objectives:

- Identify important elements of a physical plant walk through
- Outline probable potential hazards and ways of mitigation
- Describe safety recommendations in such an environment, considering relevant guidelines and regulatory standards

Faculty:

Dalia Nessim, MD, MPH, UT Health East Texas

Kenneth Huffman, UT Health East Texas

Jeffrey Levin, MD, MSPH, DrPH, FACOEM, FACP, chairman of the Department of Occupational and Environmental Medicine and the Department of Occupational Health Sciences, The University of Texas Health Science Center at Tyler

Kevin Moore, PhD, MBA, ASP, UT Health East Texas

Timothy Ochrans, MS, DABR, LMP, UT Health East Texas

C. David Rowlett, MD MS FACOEM – Associate Professor, The University of Texas Health Science Center at Tyler

Seena Rohani, DO , UT Health East Texas

308 Healthcare for Underserved Populations: Then and Now

May 4, 2021 10:30 a.m.

SARS-COVID traveled from China to the US in February of 2020. By the middle of March, all 50 states, D. C. and four territories had reported cases. As the infection rate and the death toll continued to rise, a troubling observation was made. Ethnic minorities, particularly black and Native Americans, had a higher mortality than whites. Healthy People 2020 incorporated the Social Determinants of Health as a topic area acknowledging the importance of social and physical components to promoting good health. But what are the origins of these disparities as relates to the provision of healthcare?

Beginning with slavery, this presentation examines the roots of health disparities and some of the myths taken as scientific fact about the health and health needs of African Americans. The narrative continues from the founding of the National Medical Association, through the shameful Tuskegee Experiment, to current disparities in treatment and the impact of the current pandemic on people of color. Finally, it concludes with what lessons can be learned from the past to guide us in shaping the future to improve healthcare not just for people of color but all Americans.

Learning Objectives:

- Describe the origins of health disparities between whites and ethnic minorities, particularly Black and Native Americans.
- Describe how Healthy People 2020 incorporated the Social Determinants of Health as a topic area acknowledging the importance of social and physical components to promoting good health
- Describe ways to increase awareness and responsiveness to the health care needs of underserved populations

Faculty:

Melissa A. Broadman, DO, MPH – SVP Pharmacy Utilization Review, Sedgwick

Jewel Mullen, MD, MPH, MHA – Associate Professor of Population Health and Internal Medicine, Director of Health Equity, Dell Medical School/The University of Texas at Austin

Judith McKenzie, MD, MPH – Professor & Chief, University of Pennsylvania Medical Center

Verba A. Moore, MD, MPH, FACOEM – EHRS Support Medical Lead, NASA Occupational Health Contract Team

309 MRO Controversies - Part 1 - The Testing Issues

May 4, 2021 10:30 a.m.

This year's MRO Controversies will include Bohdan Baczara, Deputy Director, Office of Drug and Alcohol Policy and Compliance, US DOT, who will discuss the recent and pending changes in the DOT drug and alcohol testing program, including the use of oral fluid and hair. Gian Marshall, Clearinghouse Program Manager, US DOT, will discuss the requirements of the MRO as it pertains to the Clearinghouse and other issues of FMCSA Drug and Alcohol testing program. Traditionally, this session also includes the ever-popular MRO Jeopardy hosted by Dr. Doug Martin, but this year we will be introducing a new game show format for our virtual experience where EVERYONE can participate, "MRO HQ" which you will definitely not want to miss!

Learning Objectives:

- Discuss recent and pending changes in Federal drug and alcohol testing
- Recognize the role of the MRO in the FMCSA Drug and Alcohol Clearinghouse
- Explain complex and confusing issues in MRO result interpretation

Faculty:

Douglas W. Martin, MD FACOEM FAAFP FAADEP – Medical Director, UnityPoint Health St. Luke's Occupational Medicine

Bohdan Baczara – Deputy Director, Office of Drug and Alcohol Policy and Compliance, U.S. Department of Transportation

Gian Marshall – Co-Project Manager, FMCSA Drug and Alcohol Clearinghouse, FMCSA

310 Primer on Environmental Medicine - Part I: What is It and What do Environmental Physicians Do?

May 4, 2021 10:30 a.m.

Have you ever wondered what environmental medicine is? How does it relate to occupational medicine, aerospace medicine, environmental science, climate change science, and what the heck does it have to do with clinical medicine? If so, this course is for you. In Part I, our presenters will define environmental medicine and distinguish it from those other fields. We will show how an occupational medicine physician might encounter environmental medicine issues and what approaches they might take to deal with them. This session also gives specific examples of environmental medicine situations both from history and from OEM providers like you. You will gain a frame of understanding and practical skills in this emerging and important area. Don't miss it!

In Part II, we will deepen your view of the environment as it relates to your practice, providing specific problems and encounters from our presenters' own case files. That session will be capped by a discussion with our expert panelists who will address your questions.

Learning Objectives:

- Describe the role of the environmental medicine component within the framework of clinical occupational medicine practice
- Recognize their capability for approaching environmentally linked illnesses
- Incorporate specific tools for them to integrate with and enhance their practice of occupational and environmental medicine

Faculty:

Arch "Chip" Carson, MD PhD – VP ACOEM Environmental Section, ACOEM

Warren Silverman, MD FACOEM – Principal, Workplace Forensics LLC

William Brett Perkison, MD MPH FACOEM – Program Director, UT Houston Occupational and Environmental Medicine

311 The Physical Exam 101: The Lost Art - Basic Anatomy & Physiology of the Shoulder

May 4, 2021 10:30 a.m.

The goal of this workshop is to provide participants with a comprehensive refresher on the physical examination of the shoulder, upper extremities and spine. Emphasis will be placed on specific maneuvers to increase the sensitivity and specificity of the clinical diagnosis before further testing. This is the second of two workshops. See Session 304 at 9:00 a.m. on Tuesday, May 4.

Learning Objectives:

- Evaluate the more common and most frequent MSK shoulder injuries
- Increase their confidence in special maneuvers to accompany a general MSK exam
- Identify those cases that would need further diagnostic studies such as MRIs

Faculty:

Nicholas F. Tsourmas, MD – Medical Director, Texas Mutual Insurance Company

312 The Physician Role in Occupational and Environmental Exposures in the Department of Defense

May 4, 2021 10:30 a.m.

In this session, we will present case examples of three exposure situations relevant to the Department of Defense (DoD): occupational, environmental, and deployment-related exposure. A panel of subject matter experts will then discuss key points regarding the DoD occupational and environmental medicine physician's role in management of each exposure scenario. The specific exposure cases discussed will be an occupational diisocyanate exposure, environmental drinking water contamination with perfluoroalkylated substances, and deployment-related exposures during Operation Tomodachi. By examining these exposure scenarios and generating a dialogue between a range of subject matter experts working at different levels of the organization, we will demonstrate recent advances in addressing DoD-relevant exposures and what that means to the OEM physician practicing in different DoD settings.

Learning Objectives:

- Compare and contrast OEM physician roles in occupational, environmental, and deployment-related exposures in the DoD
- Demonstrate updated knowledge of DoD tools and techniques related to exposures, to include the Emerging Contaminants program and the Individual Longitudinal Exposure Record

Faculty:

Pamela L. Krahl, MD, MPH, FACOEM, FACP – OEM Residency Program Director, Uniformed Services University of the Health Sciences

Cameron Nelson, MD, MPH, FACOEM – Defense Health Agency, US Department of Defense

Charles D. Clinton, MD, MPH – Chief, Occupational Medicine, USAF

Alan F. Philippi, DO, MS – Occupational and Environmental Medicine Physician, Navy and Marine Corps Public Health Center

Jose M. Ortiz, MD, MPH, FS, FACOEM – Associate Program Director, NCC Occupational and Environmental Medicine Residency Program, Uniformed Services University of the Health Sciences (USUHS)

Eric E. Shuping, MD, MPH, FACOEM – Director, Post 911 Era Programs, PDHS - VA

313 Workshop: How to Find Reliable OSH Information Online Efficiently

May 4, 2021 10:30 a.m.

Finding reliable Occupational Safety and Health information online without a roadmap could be as difficult as finding bread in a city you have never been before. The purpose of this workshop is to give the audience the tools to make that search faster and more accurately, thus saving time and money. After an exploration of expectations, the participants and teachers start creating an overview of commonly used strategies, search machines and online sources, followed by a serious discussion. Based on professional questions of the participants best strategies, search machines and online sources are introduced and discussed including PubMed/MEDLINE, the Virtual Health Library, LILACS and SciELO (Latin America), Cochrane reviews, evidence-based guidelines, synopses e.g. Up-to-date, Google (Scholar), YouTube, Wikipedia and authoritative sources for chemical or biological exposure and effects. Finally the relevance of the information found and the complex issue of quality appraisal is discussed. The workshop is based on the book "Occupational Safety and Health online, how to find reliable information" (third edition, 2016), free to download at www.lдох.net.

Learning Objectives:

- Discuss the most important strategies, search machines and online sources to find answers to OSH questions
- Explain the relevance of the information found
- Estimate the reliability of the information found

Faculty:

Yohama A. Caraballo-Arias, MD – Facultad de Medicina de la Universidad Central, Institución Afiliada de la Escuela de Medicina Luis Razetti

Frank J. van Dijk, MD, PhD – Professor, LDOH

320 Resilience - Preventing Burnout and Enhancing Performance During Challenging Times

May 4, 2021 10:30 a.m.

In this fun, highly interactive session, participants will be led through a process of self- assessment and deeper self-understanding. After reviewing basic definitions of and concepts of resilience, an insightful framework will be presented for assessing feelings and moods and how they relate to quality and quantity of energy. Participants will identify where they current reside on a grid that ranges from survival and burnout to recharging and high performance. Participants will identify their current practices for maintaining resilience, share strategies with each other in small breakout groups. They will learn new tools, allowing them to leave with a plan of action for enhancing resilience and sustaining high performance.

Learning Objectives:

- Determine, through self-assessment, what place on a survival, burnout, recharging and high performance spectrum one is at
- Assess current methods they use to increase resilience in four key areas
- Identify additional tools, behaviors and skills they can adopt to increase resilience

Faculty:

Kent W. Peterson, MD – Chief Medical Officer, Examinetics

314 Addressing Veteran Concerns with Exposures at the VA

May 4, 2021 12:45 p.m.

Veterans' health concerns from military and environmental toxic exposures is drawing increasing interest from Veterans, advocates, elected representatives, and the media. Agent Orange, various Gulf War exposures (depleted uranium, pesticides, chemical agents, etc.) burn pits and other airborne hazards, PFAS (and related compounds), Karshi-Khanabad (K2) Air Base are among many examples. The presentation will describe the current six registry programs in this area and the future of registries, known as the Individual Longitudinal Exposure Record (ILER). We will also describe exposure examinations and comprehensive evaluations at the three War Related Illness and Injury Study Centers. Finally, VA is embracing research expansion of environmental exposures. A review of current and proposed research in this critical area will be presented from two offices at VA.

Learning Objectives:

- Identify the major environmental health concerns for Veterans that are also raised by the media and Congress/other stakeholders
- Describe how to refer or begin a workup off such Veterans and when the registries and the ILER might apply
- Explain that there is a lot of research in this area with an expected expansion in the near future

Faculty:

Peter D. Rumm, MD, MPH, FACPM – Director, Pre-911 Era Programs, PDHS - Department of Veterans Affairs

Michael Brumage, MD MPH – Deputy Chief Consultant , PDHS - VA

Eric E. Shuping, MD, MPH, FACOEM – Director, Post 911 Era Programs, PDHS - VA

315 Heroes are Only Human: Protecting Healthcare Personnel in a Pandemic

May 4, 2021 12:45 p.m.

The COVID-19 pandemic has severely impacted and sorely tested our health care systems and health workers. The “silver lining” is that it has highlighted the crucial role of occupational health programs to protect health care personnel in order to sustain our health care systems. This global pandemic has demanded a rapid reassessment of our health care delivery systems and ways of protecting our health workforces while maintaining quality of care and patient safety. Lessons learned during this crisis will help OH providers manage ongoing and future occupational infection risks.

This session will review the effectiveness of various IPC (Infection Prevention and Control) interventions, the challenges of exposure management and contact tracing of HCP, management of COVID infected HCP, crisis and surge staffing strategies, the mental health and well-being of HCP during a pandemic, burnout and moral injury, violence-stigma-discrimination towards health workers, and preparing occupational health programs for our “new normal” of resuming routine operations with COVID-19 precautions in place. This will be discussed on both national and global levels.

Learning Objectives:

- Recognize the variety and severity of risks to Health Care Personnel during a pandemic
- Describe which interventions work and which don't for protecting health care personnel in a pandemic
- Discuss the need for flexible, feasible, and scalable approaches to maintain a healthy and safe workforce to sustain our health care delivery systems

Faculty:

Gwen O. Brachman, MD, MS, MPH, FACOEM – Chair - Scientific Committee Occupational Health for Health Workers, ICOH

Amy J. Behrman, MD, FACOEM, FACP – Medical Director, Occupational Medicine, Hospital of the University of Pennsylvania

Melanie D. Swift, MD, MPH, FACOEM – Medical Director, Physicians Health Center; Associate Medical Director, Occupational Medicine, Mayo Clinic

Laura E. Breeher, MD, MPH, FACOEM – Medical Director, Occupational Medicine, Mayo Clinic

316 How do Award Winning Companies Approach the COVID-19 Pandemic?

May 4, 2021 12:45 p.m.

ACOEM's Excellence in Corporate Health Achievement Award (eCHAA) brings international attention to the importance of worker health, safety, and environmental management. It emphasizes a company's performance measures, positive outcomes, and continuous improvement. It also communicates the highest standards of excellence to the business and professional community and provides organizations with visibility and validation of their efforts to provide a safe and healthy working environment. This session will highlight what several past award winners learned by participating in the eCHAA process and how the processes they implemented and used for eCHAA helped them support their company's response to the COVID-19 pandemic.

Learning Objectives:

- Demonstrate an understanding of the eCHAA criteria and process
- Identify lessons learned from previous award winners from applying for the eCHAA
- Describe how following the criteria and standards in the eCHAA supported winning companies' response to the COVID-19 pandemic

Faculty:

Nathan Jones, MD, MPH – Harvard Chan School of Public Health

Elizabeth A. Jennison, MD, MPH, MBA, FACOEM

Kent W. Peterson, MD – Chief Medical Officer, Examinetics

Julia Shiner, MD, MPH – Vice-President and Medical Director Employee Health and Wellness, Erickson Living

Craig D. Thorne, MD, MPH, MBA, FACP, FACOEM – Chief Medical Director, Occupational and Business Health Services, Yale New Haven Health System

317 MRO Controversies - Part 2 - The Cannabinoid Issues

May 4, 2021 12:45 p.m.

The legislative process on cannabinoid use is progressing faster than the science. It is difficult for employers and occupational health providers to stay current with the rapidly changing state and federal laws addressing cannabinoid use. A key process in for employers will be determining how to evaluate impairment and how to properly assess fitness for duty within the constraints of current federal and state laws. This session will provide an introduction to cannabinoids, what we know and what we don't know with respect to use, both recreational and for medical reason, and issues in assessing Fitness for Duty and impairment. An attorney will review state and federal regulation and the impact on the workplace with examples of recent litigation.

Learning Objectives:

- Explain the science behind cannabinoids and their potential impact on the workplace
- Describe the differences between state and federal law with respect to cannabinoids
- Recognize tools that can be used in evaluating fitness for duty in employees who are using cannabinoids

Faculty:

Natalie P. Hartenbaum, MD, MPH, FACOEM – President/Chief Medical Officer, OccuMedix, inc

Michael J. Kosnett, MD, MPH, FACMT – Associate Clinical Professor, Division of Clinical Pharmacology and Toxicology, University of Colorado School of Medicine

Kathryn J. Russo, Esq., – Principal, Jackson Lewis P.C.

318 Primer on Environmental Medicine - Part II: Case studies, stories and tools.

May 4, 2021 12:45 p.m.

This session is Part II of a two-part program.

Have you ever wondered what environmental medicine is? How does it relate to occupational medicine, aerospace medicine, environmental science, climate change science, and what the heck does it have to do with clinical medicine? If so, this course is for you. In Part I, our presenters will define environmental medicine and distinguish it from those other fields. We will show how an occupational medicine physician might encounter environmental medicine issues and what approaches they might take to deal with them. This session also gives specific examples of environmental medicine situations both from history and from OEM providers like you. You will gain a frame of understanding and practical skills in this emerging and important area. Don't miss it!

In Part II, we will deepen your view of the environment as it relates to your practice, providing specific problems and encounters from our presenters' own case files. That session will be capped by a discussion with our expert panelists who will address your questions.

Learning Objectives:

- Recognize environmental medicine opportunities in everyday medical practice
- Incorporate specific tools relevant to environmental medicine practice
- Assume responsibility for environmental medicine cases and issues

Faculty:

Constantine J. Gean, MD MS MBA FACOEM – Regional Medical Director, Liberty Mutual Insurance Co.

Arch "Chip" Carson, MD PhD – VP ACOEM Environmental Section, ACOEM

Warren Silverman, MD FACOEM – Principal, Workplace Forensics LLC

William Brett Perkison, MD MPH FACOEM – Program Director, UT Houston Occupational and Environmental Medicine

319 Public Safety Medicine Latest Updates

May 4, 2021 12:45 p.m.

This session will highlight three of the new topics that have been developed for public safety workers. New endocrine guidance will address thyroid and adrenal issues and how they impact public safety workers. This is new material that is not published as of yet. A whole new chapter on gastrointestinal issues is being developed and attendees will get a look at this pre-publication. Post traumatic stress disorder (PTSD) is affecting many public safety workers (as well as many in other professions) and this session will help the attendee navigate fitness for duty for these workers. Finally, there will be a panel of some of our most experienced public safety physicians who will present and discuss with the audience several actual cases that the Task Group has gotten from ACOEM members. Then there will be time for audience members to present their own cases to the panel.

Learning Objectives:

- Evaluate persons in safety sensitive jobs for duty fitness as relates to thyroid and endocrine issues
- Evaluate persons in safety sensitive jobs for duty fitness as relates to gastrointestinal issues
- Evaluate persons in safety sensitive jobs for duty fitness as relates to PTSD

Faculty:

Daniel G. Samo, MD – Medical Director - Public Safety Medicine, Northwestern Medicine

Pam Allweiss, MD, MPH, MD, MPH – Consultant, self employed

Michael Levine, MD MPH FACOEM – Occupational Physician, Private Practice

Thomas R. Hales, MD, MPH – Medical Officer, NIOSH

Fabrice Czarnecki, MD, MA, MPH, FACOEM – Chief Medical Officer, Transportation Security Administration

Jim Hill, MD, MPH, FACOEM – Medical Director, UNC-Chapel Hill

321 Employers Taking Action on Workforce Substance Use Disorders

May 4, 2021 2:45 p.m.

The former Medical Director of U.S. Steel Corporation (USS) will describe a first-of-its kind agreement between a company, a substance use disorder (SUD) provider and its health plan to improve the treatment of USS employees with SUD. This session will include a description of amplified dangerous impact of SUD in a safety-sensitive workplace; baseline description of gaps in SUD treatment being received by employees; medical claims/costs and disability claims/costs associated with employee SUD; first person account of on-site visits to SUD providers and participation in group sessions; key points of new, unique contract with SUD provider that guarantees no-cost follow-up care for insureds if they relapse within 12 months of discharge from treatment facility; and action items for employers to improve management of SUD in their workforces.

Learning Objectives:

- Describe the imperative for recognizing and treating SUD in safety sensitive work environments and have a safer return to work process
- Assess the clinical competencies of the SUD treatment programs/centers utilized by employers
- Advocate for SUD benefits designs that hold SUD providers more accountable for measured treatment outcomes

Faculty:

Mohannad Kusti, MD, MPH – Medical Director and CMO, Pivot Onsite-Innovations

L. Casey Chosewood, MD, MPH – Director, Office for Total Worker Health, NIOSH/Centers for Disease Control and Prevention

322 Everything is Bigger: Derm Diagnoses Unique to Texas and the Southwest

May 4, 2021 2:45 p.m.

Dr. Brown will discuss dermatoses that are common in Texas and the Southwest. This session is useful for practicing occupational medicine physicians as well administrative medicine physicians who review established workers' compensation claims. She will review skin manifestations of infectious diseases such as coccidioidomycosis, hantavirus, plague, and Dengue fever as well as phytophotodermatitis or "Margarita burn." Of course, she will address skin conditions that are common in SARS-CoV-2. Finally she will elaborate on skin diseases/complications of the oil/gas/solvent industry--irritant contact dermatitis, contact leukoderma, squamous cell carcinoma (in chronically inflamed, burned or scarred skin) as well as malignant changes such as Marjolin ulcers.

Learning Objectives:

- Recognize and treat skin manifestations of exposure to oil/gas/solvents: Irritant contact dermatitis, contact leukoderma, squamous cell carcinoma (from chronically inflamed, burned, or scarred skin) and Majolin ulcers
- Prevent, recognize and treat phytophotodermatitis "Margarita burn"
- Recognize the skin manifestations of infectious diseases such as coccidioidomycosis, Hanta virus, plague, Dengue fever and SARS-CoV-2

Faculty:

Margaret Brown, MD – Dermatologist, Ascension Health

323 Healthcare Worker Burnout and Safety Culture

May 4, 2021 2:45 p.m.

Healthcare worker burnout was a topic of increasing interest in the years preceding the Covid-19 pandemic. Now, it is a topic of critical importance. Prior to the pandemic estimates were that at least half of physicians are feeling at least one of the symptoms of burnout including: emotional exhaustion, a feeling of detachment, or a diminished sense of personal accomplishment. This is twice the rate of the general public (Michael Blanding 2019).

This phenomenon of occupational burnout has been categorized by 3 key dimensions: emotional exhaustion, feelings of cynicism and detachment from work, and a sense of low personal accomplishment. The consequence of this is negative clinical outcomes, decreased productivity, increased absentee rates, reduced work hours or exodus from the medical field (Han et al. 2019).

This session will explore methods of burnout intervention and recovery. Including evidence-based strategies from industrial organizational psychology, psychologic first aid, and patient safety. Ethical and legal implications of current practices of licensing boards regarding mental illness treatment, will be explored.

Learning Objectives:

- Identify the key feature of burnout and its causes
- Describe the evidence-based practices for organizational change that reduces burnout
- Explain the power and limitations of state medical boards to monitor individual mental healthcare

Faculty:

Sarah Diekman, MD, JD, MS – Resident Physician, Johns Hopkins

325 Social Determinants of Health: The Injured Worker and Employer-based Resources

May 4, 2021 2:45 p.m.

The major focus of the worker's compensation system is to treat the injured worker, and it is clearly focused on clinical aspects of an injury or illness. Over the past decade, both the employers and the worker's compensation systems have identified that certain social, economic, and environmental factors can influence the injured worker's healing process and impact their ability to return to work.

Social Determinants of Health are a set of social, physical and environmental domains (e.g. demographics, socioeconomic, transportation, support, etc.) that identify factors that impact our lives, including where we work.

This presentation will provide a Review of the Social Determinants of Health in the setting of an injured worker and will seek to explain how this can benefit health outcomes and return to work by the injured worker, along with positively affecting the worker's wellbeing.

Four case studies will be presented.

Learning Objectives:

- Define Social Determinants of Health and describe 3 - 5 domains
- Describe the uses and benefit of Social Determinants of Health to injured workers and impact on their wellbeing
- Explore different domains of the Social Determinants of Health and their potential impact injured worker's health outcomes and return to work

Faculty:

Kevin F. Smith, MD, MPH – Medical Director, ProMedica 360 Health

326 Social Media 101 - Strategies for Maximizing Engagement

May 4, 2021 2:45 p.m.

Whether you are brand new to social media or already have your own hashtag, Social Media 101 will demystify the various platforms, provide an overview of posting, following, and interacting, and offer guidance for developing engaging content. This session will empower you to create an online presence and learn strategies to maximize and engage with potential audiences, share stories, and be part of the conversation.

Learning Objectives:

- Demonstrate a general understanding of social media platforms, including Twitter, Facebook, and LinkedIn
- Explain the mechanics of social media postings (@, #, and more!)
- Employ strategies to engage audiences and be part of the conversation

Faculty:

Erin L. Ransford, BSPH – Director of Engagement, ACOEM

Manijeh Berenji, MD, MPH, FACOEM, MD, MPH, FACOEM – Occupational & Environmental Medicine Physician, Assistant Professor, Dept of Orthopedic Surgery, Boston Medical Center

327 The Future of Back Pain Treatment: Clinical Evidence of Novel Digital Therapeutic Mobile Applications

May 4, 2021 2:45 p.m.

Are you only using in-person physical therapy for your back pain patients? Do you know at-home mobile programs have shown to be twice as effective as in-person sessions for back pain treatment? This session will examine the clinical evidence of using novel mobile application (mHealth) as a therapeutic approach for back pain management. We will discuss clinical studies in this innovative field, including the Rise-Up study which is the largest randomized clinical trial ever conducted in digital back pain management, and compare the efficacy of digital therapeutics with traditional treatment programs such as in-person physical therapy. We will also review the advantages and drawbacks for patients and providers in utilizing an at-home digital back pain treatment program. We will briefly experience a digital back pain mobile application and its content at the end of this session.

Learning Objectives:

- Define multidisciplinary at-home, app-based digital therapeutic back pain treatment program
- Describe the clinical evidence and trial results of digital, app-based back pain management program
- Demonstrate an understanding of using at-home digital back pain treatment program in clinical practice

Faculty:

Chih Chao (Justin) Yang, MD MPH – Medical Director, Atrius Health/ Harvard Vanguard Medical Association

General Session

May 4, 2021 4:00 p.m.

Our May 4 General Session Lecture features John Howard, MD, MPH, JD, who will discuss mandatory vaccination and immunity certificates. Dr. Howard is director of the National Institute for Occupational Safety and Health (NIOSH) and administrator of the World Trade Center Health Program, U.S. Department of Health and Human Services.

401 Achieving Better Medical Outcomes: An Alternative to Workers' Compensation

May 5, 2021 7:45 a.m.

Conversations about Medical Outcomes in Workers' Compensation tend to focus on the negatives: treatment failures, recovery delays, opioid addition, permanent disability and dispute resolution. What if there was an occupational injury model where there is open communication, prompt, quality medical treatment, active employer engagement, better wage replacement benefits, fewer disputes and dramatically better medical outcomes? There is: Texas Injury Benefit Plans. There is a lot of data, with well-over one million Texas injury benefit claims successfully resolved in the past three decades. This course will detail the methods used to achieve exceptional outcomes in occupational injury cases, ranging from minor soft tissue strains to catastrophic head injuries. We will discuss the importance of establishing the extent of injury early, and demonstrate how, and when diagnostic imaging is performed impacts the outcome. We will review claim data and published studies. Learn how three decades of experience with an alternative in Texas could be used to pivot workers' compensation law, practice and research to focus on Job #1: Achieving better medical outcomes.

Learning Objectives:

- Define ERISA, and explain the differences between Workers' Compensation and Injury Benefit Plans.
- Discuss the impact of timely injury reporting, and how a focus on determination on the extent of injury impacts outcomes.
- Discuss the conclusions of published studies on the topic, such as a 2016 study from Stanford University's Institute for Economic Policy Research which found that claims handled under Texas Injury Plans: The frequency of severe, traumatic employee injury claims is cut in half, and the percentage of employees disabled drops by a third.

Faculty:

Melissa D. Tonn, MD, MBA, MPH – President, OccMD

402 Essential Leadership Skills: Creating Constant and Never-Ending Improvement

May 5, 2021 7:45 a.m.

Why do some people seem to be natural born leaders? Why can't or won't they tell you how they did it? What makes the difference? What indeed creates an extraordinary leader, one who leads effortlessly? How does a leader gain Mastery of Leadership Skills and Techniques

Great Leaders Are Made Not Born

Learn the strategies, and techniques you need to gain Mastery over your business process, team, and the bottom line. Have your management team gain skills to improve relationships and optimize time by taking control dramatically.

Quality Management, Skills, Techniques and Personal Development provide the foundation for your team to Move to Mastery.

Constant improvement is the key to personal and professional development. With the skills, techniques, and motivation, you have no choice but to find Mastery.

Learning Objectives:

- Describe the seven roles of a leader
- Discuss the importance of effective delegation
- Create accountability and ownership

Faculty:

Glenn Daniels II, Pulitzer Prize-nominated Author, 30+years as a coach and speaker – Chief Operating Officer, Touch Stone Publishers

403 Hands on Musculoskeletal Ultrasound Examination of Shoulder and Elbow

May 5, 2021 7:45 a.m.

This is a hands on MSK US mini one hour workshop during the AOHC conference.

Learning Objectives:

- Perform diagnostic ultrasound of a specific joint
- Diagnose MKS injuries
- Provide improved clinical outcomes to their patients by improving treatment strategies based on their imaging examination and utility of ultrasound guided interventions

Faculty:

Yusef A. Sayeed, MD, MPH, MEng, CPH, CMRO, CME, RMSK, DABPM – Director of Pain Medicine and Functional Rehabilitation, United States Air Force/Department of Defense

Girish Gandikota, MBBS – University of Michigan

Michael Schaefer, MD – Case Western

404 Marijuana State Rules: What an MRO Should Know

May 5, 2021 7:45 a.m.

Today thirty-five states authorize the use of medical marijuana and fifteen states authorize the personal use of marijuana for those over 21. This session will dive into the details of these state rules and discuss how they can impact the MRO's practice.

Learning Objectives:

- Identify state medical and adult marijuana use rules in the United States
- Identify when a state medical or adult use of marijuana law impacts their MRO practice
- Identify when a state medical or adult use of marijuana law impacts the MRO's workplace clients

Faculty:

William J. Judge, JD, LL.M. – Research, Drug Screening Compliance Institute

405 Mental Health Literacy and Employee Health

May 5, 2021 7:45 a.m.

The CDC defines Health Literacy as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.” Improved Health Literacy, the focus of both academic research and employee wellbeing programs, is intended to improve health outcomes; however, mental Health Literacy (MHL) is frequently ignored. Given that mental health (MH) disorders not only affect roughly 20% of Americans, but also constitute the leading causes of disability and lost work time, improving MHL has obvious relevance to the workplace. According to the WHO’s World Health Survey, most mental health problems are either untreated or receive ineffective treatment. Despite the availability of evidence-based MH treatments, knowledge about them continues to be hindered by stigma, media misrepresentations, and confusing jargon. MHL utilizes plain language to help patients recognize, address and prevent MH disorders. This program will examine the global MHL literature, provide suggestions for additional research, and offer ideas that can easily dovetail into existing wellbeing programs.

Learning Objectives:

- Utilize plain language to help afflicted patients understand common mental health disorders (depression and anxiety)
- Minimize and/or avoid key causes of mental health stigma by using plain language when recommending evidence-based treatment options to workers with depression and anxiety
- Describe non-psychotropic, evidence-based treatment options to workers with mild depression and anxiety

Faculty:

David Frances, Ph.D. – Vice President, Training & Development, Quadrant Health Strategies, Inc.

C.O. Sappington Lecture

May 5, 2021 9:15 a.m.

AOHC concludes on May 5, with the C.O. Sappington Lecture presented by esteemed epidemiologist Michael T. Osterholm, PhD, MPH. This annual lecture honors Clarence Olds Sappington, MD, DrPH (1889-1949), an expert in occupational diseases and industrial hygiene and first American to hold a DrPH degree. This lecture serves as a forum from which to address major issues in the field.

Dr. Osterholm is Regents Professor, McKnight Presidential Endowed Chair in Public Health, and director of the Center for Infectious Disease Research and Policy. In November 2020, he was appointed to incoming President Biden's Transition COVID-19 Advisory Board. He has served as science envoy for health security for the U.S. Department of State. He is a distinguished teaching professor in the Division of Environmental Health Sciences School of Public Health, professor in the Technological Leadership Institute College of Science and Engineering, and adjunct professor in the medical school, all at the University of Minnesota. Dr. Osterholm will address the epidemiology of infectious diseases.

ACOEM Membership Meeting

May 5, 2021 10:15 a.m.

407 Contracts, Benefits, Negotiation, and the Interview: What the Mid-Career and Recent Graduate

May 5, 2021 11:45 a.m.

This session will delve into the intricacies of contract negotiation, benefits, interviewing, and best practices to succeed as an Occupational Medicine Provider. This session will focus on both, the new provider to the field, as well as the mid career transition. During the conclusion of the session we will open the session up to allow the audience to ask questions of the panel on how to best navigate employment and create longevity in their career.

Learning Objectives:

- Explain a fundamental understanding of how to best present themselves, both in person and via their Curriculum Vitae when applying for a job
- Explain contract negotiation, their rights, and pitfalls to avoid when entering into employment
- Describe how to incentivize their individual efforts to better reflect their productivity which will add value to their contract negotiations

Faculty:

Ada Egbuji, MD, MSPH – Physician, Urgent Care Plus

Kenji Saito, MD, JD – Chief Medical and Science Officer, MedLawPractice.com

Andy Chern, MD, MPH, FACOEM – Physician, Guthrie Ambulatory Health Clinic

408 Informatics as a Source of and Solution for Clinical OEM Burnout

May 5, 2021 11:45 a.m.

Physician administrative demands have been recurrently identified as a challenge to delivering clinical care effectively, leading to increased work outside of clinic and consequently physician burnout. Physicians attribute some of their frustrations to technology, particularly the EHR, but in reality, much of the difficulty can be attributed to suboptimal workflows in clinic and in relationship to using technology. This session aims to present common clinical workflow challenges and methods to optimize processes via informatics solutions, both with and independent of technology. In particular, this session will focus on common aspects of clinical OEM, including, but not limited to, examination shortcuts, practice management, clinical documentation, clinical decision support, and data analytics. Through practical examples, the means by which informatics frameworks can improve these processes will become more clear, and the intent is that attendees can return to their clinics with a greater understanding of informatics principles and concrete goals to maximize their clinical efficiency and to minimize their difficulties.

Learning Objectives:

- Discuss the differences between technology and informatics
- Describe clinical process bottlenecks pertaining to technological and non-technological workflows
- Conduct informatics-oriented assessments of clinical workflows to develop concrete improvement strategies

Faculty:

Mason D. Harrell, III, MD, MPH, FACOEM – Chief Medical Officer, Sequoia Port

Zeke J. McKinney, MD, MPH, FACOEM – Faculty Physician, UMN

Ismail Nabeel, MD, MPH, MS – Associate Professor, Icahn School of Medicine at Mount Sinai

409 Occupational Vision Testing: Diligence in Evaluating Visual Fitness for Duty

May 5, 2021 11:45 a.m.

Eye and vision testing is important in fitness for duty evaluations for many occupational roles, such as commercial drivers, pilots, law enforcement officers and members of the military, where good visual skills are critical. This course reviews the various procedures that are used to determine whether an individual meets vision standards from the perspective of why attention to detail on these assessments is important to the safety of the patient and the public.

Learning Objectives:

- Describe the need for careful critical assessment of visual skills for the worker who must meet vision standards for a job
- Describe how color conveys information making it an important requirement for certain occupations
- Explain job-related standards related to common procedures such as visual acuity, color vision, stereopsis and visual fields

Faculty:

Jeffrey L. Weaver, OD, MS – Associate Chief of Staff for Education, Veterans Administration Texas Valley Coastal Bend Health Care System

Gregory W. Good, OD, PhD – Professor Emeritus, The Ohio State University

410 Successful Global Multidimensional Ergonomics Program Flourishes in the Era of Home-Based Work

May 5, 2021 11:45 a.m.

During the COVID-19 pandemic, the World Bank Group's Ergonomic Team (WBGET) successfully pivoted to address the needs of its global workforce and grow the program in breadth and depth. The WBGET has developed agile ergonomic programs to reach over 37,000 staff, representing 176 nationalities, in over 170 offices, and across 133 countries. In March 2020, the program pivoted to address staff's new challenges of home-based work.

Over a 20-year period, the program evolved based on needs and new technology. Initially, the focus was a transition from a paper-based program to a hybrid program with online and in-person multi-faceted services. Limited by its primary reach to the Washington DC Headquarters, the program adapted by standardizing all services, allowing for the expansion to our global community. The experience of the WBGET, results of a staff pulse survey, and recognition from upper management of the value of ergonomics, enabled the team to quickly pivot the individual and group services and step-up educational programs during the pandemic. The program continues to expand for the ever-changing global work environment and behaviors.

Learning Objectives:

- Identify the components of an agile ergonomics program responsive to unexpected challenges
- Develop a skilled team to successfully support a multifaceted program
- Expand knowledge of home-based work ergonomics
- Analyse program components for efficacy and sustainability
- Describe challenges of global environments with limited resources
- Establish efficient tools for efficient tele-ergonomics

Faculty:

Jasminka Goldoni Laestadius, MD, PhD, FACOEM – Senior Occupational Health Specialist, The World Bank Group

Ann-Marie Bolton, PT, DPT – Lead Ergonomist, The World Bank Group

Naomi Abrams, OTD, CEAS – Ergonomist, The World Bank Group

Sophia Woldemicael, MT, (ASCP) – Occupational Health Analyst, The World Bank Group

411 Occupational and Environmental Health in the Developing World

May 5, 2021 1:30 p.m.

Practitioners in Australia, Liberia, and the U.S., describe work to improve occupational health in the developing world and how the work has been impacted by the COVID-19 pandemic. The panel will present information about Workplace Health Without Borders (International) - a not-for-profit group working to improve global occupational health and will discuss a project which will be piloted to provide mentoring to occupational medical doctors in the developing world. The challenges faced by the Liberian healthcare system during the 2014-2016 Ebola outbreak are well known. This session provides follow-up information about Liberian public health efforts to establish national OEH standards from the perspective of the Deputy Director for Environmental and Occupational Health at the National Public Health Institute of Liberia, as well as a discussion of the challenges encountered in the national effort to provide Hepatitis B immunization for the Liberian healthcare workforce, 95% of whom were unvaccinated as of 2018.

Learning Objectives:

- Identify effective and sustainable collaborative strategies and opportunities to help reduce the burden of occupational disease globally, particularly during the current pandemic.
- Identify opportunities and barriers to promoting occupational health and safety in the developing world, and what can be done to improve it.
- Describe the perspectives and priorities of the National Public Health Institute of Liberia as it implements environmental and occupational health interventions.

Faculty:

Rosemary K. Sokas, MD, MOH, MSc, FACOEM – Professor of Human Science and of Family Medicine, Georgetown University

Clare Wood, FACOEM – Occupational Physician, Resile

Amos Gborie, MPH – Deputy Director for Environmental and Occupational Health, National Public Health Institute of Liberia

Benjamin T. Vonhm, M.D., MMed., M.Sc., MBA – Medical Consultant, National Public Health Institute of Liberia

Andrew Lingwood, BSc MBBS (Hons 1), MScTech (Occ Med), FAF0EM (RACP), CIME (ABIME), MRO (AMROA) – Consultant Occupational Medicine Physician, OccPhyz Consulting

Sajjad A. Savul, MD, MS, FACOEM – Associate Program Director, Occupational and Environmental Medicine Residency, University of Pennsylvania

412 Public Safety Medicine - Special Teams and Issues

May 5, 2021 1:30 p.m.

This session will present three new topics in the field of public safety medicine. A special issue that often presents is the public safety worker who is transgender/gender diverse (TGD). While there are very few medical issues involved, there are multiple social, legal and psychological issues that the provider must understand. The session will also present guidance for evaluating workers who are involved in dive teams. This session will give a pre-publication presentation of these topics. As an examiner, you are likely to see tattoos on your patients. What do they mean? Do they signal anything that you need to act upon? Finally, there will be a panel of some of our most experienced public safety physicians who will present and discuss with the audience several actual cases that the Task Group has gotten from ACOEM members.

Learning Objectives:

- Evaluate transgender/gender diverse persons
- Evaluate the significance of various tattoos and their impact on fitness for duty
- Evaluate persons for fitness for duty to be part of a dive team

Faculty:

Daniel G. Samo, MD – Medical Director - Public Safety Medicine, Northwestern Medicine

Will Wong, MD – Medical Director, Chicago Fire Department

Thomas R. Hales, MD, MPH – Medical Officer, NIOSH

Fabrice Czarnecki, MD, MA, MPH, FACOEM – Chief Medical Officer, Transportation Security Administration

Jim Hill, MD, MPH, FACOEM – Medical Director, UNC-Chapel Hill

Michael Levine, MD MPH FACOEM – Occupational Physician, Private Practice

413 TED5: The Cutting Edge of OEM

May 5, 2021 1:30 p.m.

The ACOEM Teaching Academy is pleased to sponsor a fifth TED session, featuring exciting brief presentations by outstanding speakers on cutting edge OEM topics. In 2021, topics will be selected based on relevance to the Virtual AOHC. Each TED5 speaker will present an area of passionate personal interest that demonstrates one of OEM's top contributions to employers, workers and communities. TED5 speakers will demonstrate their mastery of communication effectiveness, having been supported by Teaching Academy coaches to advance from "good" to "great" to "outstanding" presentations. This is not just about OEM facts, this is about those things in our field that inspire the heart of OEM physicians to pursue our noble calling.

Learning Objectives:

- Describe how to create memorably effective communications in which speakers match their own passions to the needs of an audience
- Utilize simple, powerful ideas and effective techniques to quickly explain OEM's unique benefits to workers, employers and communities
- Be inspired by and delight in seeing effective communication from emerging OEM leaders

Faculty:

Constantine J. Gean, MD MS MBA FACOEM – Regional Medical Director, Liberty Mutual Insurance Co.

Kent W. Peterson, MD – Chief Medical Officer, Examinetics

Minh Nguyen, D.O., FACOEM – Vice President of Medical Operations - Pacific Zone, Concentra

Eric Smith, DO– Whatcom Occupational Health

416 What Occupational Medicine Clinicians Need to Know about Air Pollution Health Effects in the Care of Workers

May 5, 2021 1:30 p.m.

This session will highlight what currently practicing occupational medicine clinicians need to know in their everyday practices about air pollution. We seek to characterize current and projected levels of air pollution, better define the health risks that such levels pose, outline occupations that carry higher risks, and summarize general approaches to risk communication and appropriate preventive measures for workers. This session will better equip the occupational medicine physician to approach this important environmental health topic in their clinical practices.

Learning Objectives:

- Characterize the risks that current and projected air pollution levels potentially pose to workers
- Identify workers who are at higher risk
- Engage in better risk communication and prevention discussions with employees

Faculty:

Shilpa Gowda, MD, MPH, CMRO, CDME, FACOEM – Director, Employee Health, Southeast Louisiana Veterans Healthcare System

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