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Contact Us: Ann Backus, MS Administrator, OEMR	

Room 1-1402 665 Huntington Avenue Boston, MA 02115

abackus@ hsph.harvard.edu Phone: (617) 432-3327 Fax: (617) 432-0219

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OEMR SYNAPSE 2012 Annual Report

2013, 5th Ed. Editors: Kevin Johnson, DO, MPH; Madeleine Straubel, BA

From OEMR Program Director and Associate Professor: Stefanos N. Kales, MD, MPH, FACP, FACOEM (OEMR 1993)

events. It also summarizes on pages 9-12 of this report. the OEMR's progress, initiaon the field of OEM.

resident poster presentation levels of career distinction. and yet another ACOEM Resident Research Award Unfortunately, substantial OEMR's man, and I directed "Sleep turn away some deserving

of the Harvard School of Pub- Productivity and Health Man- wise train. lic Health (HSPH) Occupa- agement in the 24/7 Global tional and Environmental Economy." The sold-out con-

three more residents-two ference of the New England friends who have donated. from the Categorical Program College of Occupational and

presentation. Our OEMR financial threats still confront Best regards, Stefanos reunion dinner in LA during specialty training in OEM. AOHC was also memorable NIOSH ERC funding remains for great fellowship and net- uncertain and vulnerable, working. In September 2012, while OPSF scholarships we held our second interna- (which ended in 2011) have tional colloquium through not been replaced. These bar-Initiative for riers are especially frustrating Productivity and Health as we attract many strong pro-Management (IPHM). Dr. spective candidates to the Philip Parks, Dr. Sam For- field of OEM, but we must

Welcome to the fifth edition and Shift Work: Optimizing residents that we could other-

The program is constantly di-Medicine Residency (OEMR) ference was a huge success, versifying our funding sources. Annual Report, the OEMR bringing together thought However, all of our graduates Synapse. This edition fea- leaders and participants from should take more action to imtures our 2012 graduates, five continents for an engag- prove the situation. In particucurrent residents, recent resi- ing, informative, and thought- lar, less than 10% of OEMR dent achievements, alumni provoking event. Details on alums currently participate in highlights, and coming this landmark colloquium are annual donations. Please join me in making a tax-deductible gift to support the HSPH tives, and continuing impact Later in the fall, we released OEMR. Matching contributions the brochure from our new from employers are also wel-MD-MBA in Occupational come. Donations of any size For 2012, we are pleased to Medicine initiative spearhead- can support residency activireport a number of major ed by Dr. Erik Won. Then, the ties. We are most appreciative achievements. We graduated December 2012 Annual Con- of those alumni, faculty, and

and our first graduate from Environmental Medicine In closing, let me extend my Complementary (NECOEM) featured presen- wishes for health and success in Pathway. The OEMR was tations by several HSPH facul- 2013 to you and your families. I once again well represented ty and alums. You will also also invite OEMR alumni to at the 2012 Annual American read about other alumni ad- join us for a reunion at AOHC Occupational Health Confer- vances for 2012 featured in 2013 in Orlando on April 28th ence (AOHC) with faculty this report, as our graduates (see page 6), and all our friends presentations, as well as a continue to reach the highest to a dinner/symposium on firefighter health in Orlando on April 29th (see page 13).





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Page 2 OEMR SYNAPSE

Current Residents: First Year



Diane Chen, MD, MPH (OEMR 2014), is a first year resident at the HSPH Occupational and Environmental Medicine Residency program. She majored in chemistry at Haverford College before matriculating to Harvard Medical School. where she received her MD. Diane then completed anesthesiology residency training at Harvard's Massachusetts General Hospital (MGH). She is board certified in anesthesiology and practiced as staff at Harvard's Mass Eye & Ear Infirmary. She subsequently obtained her MPH in environmental and occupa-

tional health from HSPH, and then performed phthalate research in Taiwan as a Harvard Frederick Shelton Fellow.

Diane is now furthering her clinical training in occupational and environmental medicine, with interests in environmental health, sleep medicine, and pain control. Her extracurricular activities include gardening, cooking, tennis, bicycling, swimming, and spending time with her daughter, husband, and cat. In the future she hopes to synthesize her various research and clinical interests both domestically and internationally.



Sharon S. Lee, MD, MPH (OEMR 2014), is a native New Yorker and graduate of SUNY Binghamton University and SUNY Downstate Medical School. Prior to medical school, she worked in cancer research at Weill Medical College of Cornell University and the NYU Cancer Institute. She completed two years of clinical training in pediatrics at NYU Medical Center and then finished her residency in General Preventive Medicine and Public Health at the University of Rochester Medical Center, where she also earned her MPH.

During her preventive medicine training and rotations at Xerox, Finger Lakes Occupational Health Services, and Strong Health Occupational and Environmental Medicine Clinic, Sharon developed a passion for occupational medicine. Her research interests in occupational medicine focus on workplace health promotion programs.

Outside of medicine, she enjoys reading, cooking, kickboxing, and traveling. Being new to New England, Sharon has also been enjoying exploring the Boston area.



Michael Shusko, MD, FAAFP (HSPH MPH 2013, OEMR 2014), is originally from Long Branch, NJ and is completing his residency as a US Naval Scholar. Michael enlisted in the Marines in 1985 and served for 13 years before receiving a commission in the Navy after earning his undergraduate degree in Middle Eastern Studies and Arabic from Rutgers University. He earned his MD at Wake Forest University School of Medicine before completing a transitional internship at the Naval Medical Center in Portsmouth, VA. After a tour with the Marines and a year in Iraq, he re-

turned to finish a Family Medicine Residency at the Naval Hospital at Camp Lejeune, NC. He is board certified in Family Practice. After residency, he was assigned to the newly established Marine Forces Special Operations Command as a Regimental Surgeon, deploying on 14 missions throughout the globe before transferring to the International Security Assistance Force in Afghanistan to serve as the Officer in Charge of the NATO Clinic in Kabul. Most recently, prior to Harvard, he was the Senior Medical Officer at the Naval Branch Health Clinic in Bahrain, Michael lives with his wife and 12 year old triplet boys on the South Shore.

Current Residents: Senior Year

Kevin Johnson, DO, MPH (HSPH MPH 2012, OEMR 2013), is from Owatonna, MN and is completing his residency at HSPH as a US Naval Scholar. He has served as Chief Resident for the 2012-2013 academic year, leading weekly board review sessions at HSPH.

In 2003, Kevin was commissioned as a Medical Officer in the United States Navy and went on to earn a DO at Des Moines University, where he was also inducted as a member of the National Osteopathic Honor Society "Sigma Sigma Phi." After completing an Internship in Internal Medicine at the National Naval Medical Center in Washington DC, Kevin qualified as an Undersea Medical Officer (UMO) in Diving and Hyperbaric Medicine. As a UMO, he served as the sole physician in Saratoga Springs, NY, playing an integral role in the health of submariners, divers, marines, airmen, and soldiers.

Kevin's research investigates vehicle operation risks associated with fatigue and inadequate sleep in transportation workers. He has two sons with his wife Ahna. His personal interests include running, cycling, Nordic skiing, scuba diving, and travel.



Dennis Teehan, MD, MPH (HSPH MPH 2012, OEMR 2013), came to the OEMR from Tufts Medical School. He is from Dedham, MA and is completing his residency at HSPH as a two-year, ACOEM OPSF Scholar. Prior to entering medicine, he was a social worker for the Commonwealth of Massachusetts.

Dennis completed an internship in internal medicine at St. Vincent Hospital in Worcester and gained additional experience working in clinical research at Brigham and Woman's Hospital in Boston in the Emergency Medicine Department. He has also completed a one year certificate program in psychoanalytic psychology. Additional interests include clinical prevention, nutrition, wellness, and mind-body medicine.

Outside of medicine, Dennis enjoys writing and exercise and serves on the Board of Directors for the Town of Dedham's youth commission. Finally, without a doubt, he is one of the biggest New England Patriots fans ever to grace the halls of HSPH.



Occupational Medicine Research and Special Clinical Fellow

Vasileia Varvarigou, MD (HSPH Research Fellow 2012), is currently a visiting scientist at HSPH and an Internal Medicine resident at St. Elizabeth's Medical Center, Tufts University. She earned her MD from the National University of Athens, Greece before spending two years as a Post-Doctoral Research Fellow at HSPH under the mentorship of Dr. Kales.

Her research focuses on cardiovascular disease epidemiology in firefighters and other emergency responders, as well as on-duty sudden cardiac deaths in police officers. She was one

of four recipients of the 2012 HSPH Post-Doctoral Association Travel Awards, and she presented her research at the ACOEM conference in Los Angeles, where she received an ACOEM resident research presentation award. She has also participated in preventive medicine and public health research projects in Uganda, Tanzania, and South Africa. In the future, she would love to combine her occupational medicine interests with Global Health, humanitarian studies, and health outcomes for the protection and promotion of workers' health in underserved populations.



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2012 Graduates



M. Christine David, DO, MPH (OEMR 2012), is a New York City native who majored in Romance Languages at NYU. She went on to the New York College of Osteopathic Medicine and completed an internship at Long Beach Medical Center. Christine completed a Preventive Medicine Residency at UMASS, where she also earned her MPH. At UMASS, Christine focused her preventive medicine research on obesity and maternal-child health.

A rotation with Dr. Celona at the Fallon clinic proved to be a pivotal

point for her, where she could combine prevention with direct patient-care, thus finding her passion for occupational medicine. Christine maintains an interest in workplace wellness and health promotion. Her residency research focused on methylmercury, as an environmental reproductive hazard.

Christine is happy to be combining her preventive and occupational experience as an occupational medicine physician at Concentra. She and her husband Brian are enjoying Boston and spending time with family.



Paul Medrek, MD, MPH (Complementary Pathway, OEMR 2013), attended Holy Cross College and UMASS Medical School. He is board certified in Emergency Medicine and earned an MPH at the Medical College of Wisconsin.

He has extensive experience, serving as Director of Occupational Health at Baystate Health. He has also been Medical Director at the Center for Occupational and Environmental Health and Seabrook Nuclear Power; and previously was a Clinical Instructor in Medicine at Harvard Medical School. He is currently Medical Consultant and Physician Reviewer at Blue Cross Blue Shield Massachusetts, Associate Medical Director of the Occupational Health Service at Brigham and Women's Hospital, and Medical Director at Lenox Tools Division of Newell Rubbermaid.

Paul resides in Somers, CT with his wife Rachel and two young sons, Jack and Ben. He enjoys spending time with his family. Paul is a trail-blazer as the first resident to enter the HSPH OEMR under the Complementary Pathway. His residency research examined the effects of exercise intensity on firefighters' risk profiles.



Al Rielly, MD, MPH (OEMR 2012), is board certified in Internal Medicine, General Preventive Medicine, and Occupational Medicine. He was named the Boston Fire Department Medical Examiner (through Cambridge Health Alliance (CHA)) in October 2012. He also works as staff for CHA in Internal Medicine as well as Occupational Medicine.

Last year, he co-edited the International Fire Fighters' Association's "A Guide to the Recognition and Prevention of Occupational Heart Disease for the Fire and Emergency Medical Services" (4th ed.) with Dr. Kales. Al was a 2011-12 recipient of the ACOEM OPSF, served as Chief Resident, and has led weekly board review sessions at HSPH while training and after graduation. He also initiated residency research to examine driving simulation for identifying sleepiness and obstructive sleep apnea in commercial drivers.

Most recently, Al has joined "Introduction to Occupational and Environmental Medicine" course at HSPH as a lecturer.

Alumni Highlights

Aaron M. S. Thompson, MD, MPH, FRCPC (OEMR 2008), has been promoted to the role of Program Director of the Occupational Medicine Residency at the University of Toronto, where he is also an Assistant Professor in the Faculty of Medicine with a cross appointment to the Dala Lana School of Public Health. He holds an appointment as a Staff Physician in the Department of Occupational and Environmental Health at St. Michael's Hospital in Toronto. He has also recently been appointed as Medical Director, Occupational Disease, at the Workplace Safety and Insurance Board (WSIB) of Ontario. Dr. Thompson's research interests include occupational disease, hand-arm vibration syndrome, and worker's compensation.

In the ample amount of leisure time provided by his not too onerous clinical, teaching, administrative, and research schedules, Dr. Thompson enjoys spending time with his family: wife Tara and daughters Molly (5) and Olivia (3). He also enjoys skiing, tennis, and avoiding avocational injuries while leading his men's league hockey team to victory on the ice.



Gina Solomon, MD, MPH (OEMR 1996), has been appointed Deputy Secretary for Science and Health at the California Environmental Protection Agency by Governor Edmund G. Brown, Jr. She has been on the faculty in the Division of Occupational and Environmental Medicine at the University of California, San Francisco (UCSF) since 1997 and was promoted to Clinical Professor in 2011.

Dr. Solomon served as a Senior Scientist at the Natural Resources Defense Council from 1996-2012. She was also the Director of the Occupational and

Environmental Medicine Residency and Fellowship Program at UCSF from 2008-2012, and the Associate Director of the UCSF Pediatric Environmental Health Specialty Unit from 2003-2008.

Dr. Solomon's research interests include the health effects of climate change, community exposures to air pollution, and the health effects of pesticides and industrial chemicals.

We wish her success in her new position with CalEPA.



Save The Date: ALUMNI REUNION at AOHC Orlando, FL * Sunday, April 28th, 2013 * 8:00pm

Please join us at the American College of Occupational and Environmental Medicine's AOHC 2013 for an Alumni Reunion as we welcome current and former HSPH OEM residents in Orlando, FL. Drs. Stephen and Michael MacDonald, HSPH OEMR 1996, will serve as local Co-Chairs for the reunion dinner on Sunday, April 28th at 8:00pm at Taverna Opa, a restaurant at Pointe Orlando within easy driving distance of the conference hotel. If you are an OEMR alumnus, please RSVP to Madeleine Straubel at mstraube@hsph.harvard.edu if you have not done so already.

Once again, HSPH will be well represented at AOHC with Resident Award presentations by Kevin Johnson, DO, MPH, and Dennis Teehan, MD, MPH. Thank you to last year's Chair, Dr. Erik Won, for an excellent 2012 alumni reunion in Los Angeles, CA. We are looking forward to this year's conference and reunion, and we hope to see you there!

Page 6 **OEMR SYNAPSE**

Alumni Highlights, Continued



Sam Forman, MD, MPH, MSOccH, MBA, FACOEM (OEMR 1980), gave the Dean's Distinguished Lecture at HSPH on March 21, 2012 about his book, Dr. Joseph Warren: The Boston Tea Party, Bunker Hill, and the Birth of American Liberty. Dean Julio Frenk introduced Dr. Forman as "an exemplar of the scholar-physician," and Atul Gawande, Associate Professor in the Department of Health Policy and Management, discussed some of the highlights of the book before Dr. Forman took the podium.

Joseph Warren was a Boston physician who cared for rich and poor, American and English, free and slave. He was also a patriot; an accomplished writer and speaker; a proponent of high standards in medical care; and a man whose family members played a central role in founding Harvard Medical School, Massachusetts General Hospital, and The New England Journal of Medicine.

Warren probably found out about the British plan to raid Concord in the course of his medical attendance to patients in and techniques in medicine-Loyalist households. It gave him unobtrusive access to privileged information. As president of the Massachusetts Provincial Congress and chair of its Committee of Safety, he used this military intelligence to dispatch Paul Revere and William Dawes on their iconic Midnight Rides.

Warren died during the Battle of Bunker Hill at age 34. Dr. Forman thinks that, had Warren lived, he would likely have gone on to do more great things—perhaps start Harvard Medical School himself; become governor of Massachusetts; or even become president of the new nation.

"Warren is a seminal figure not only for his participation in protopublic health activities, but more generally in the founding of medically related institutions of all types at Harvard," said Dr. Forman in a recent interview. "He was a proponent of disciplined medical education, and pushed for the most up-to-date knowledge

both in individual cases and in public health."

The Dean's Distinguished Lecture Series began in 2001. Over the years, this series has brought experts to HSPH to share their views on the major challenges and opportunities in their disciplines.

Dr. Forman's book is available from Amazon. The full article by Karen Feldscher is available



Atul Gawande (L) and Sam Forman before Forman's Lecture at HSPH



Optimizing Health and Safety

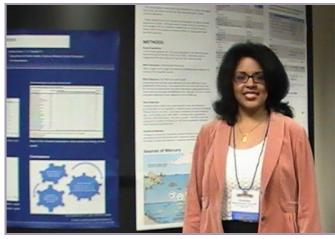
Future success to all the Occupational and **Environmental Residents and Graduates at** Harvard School of Public Health

> From all the employees at Occupational **Environmental Health Network**

Resident Research Awards and Presentations

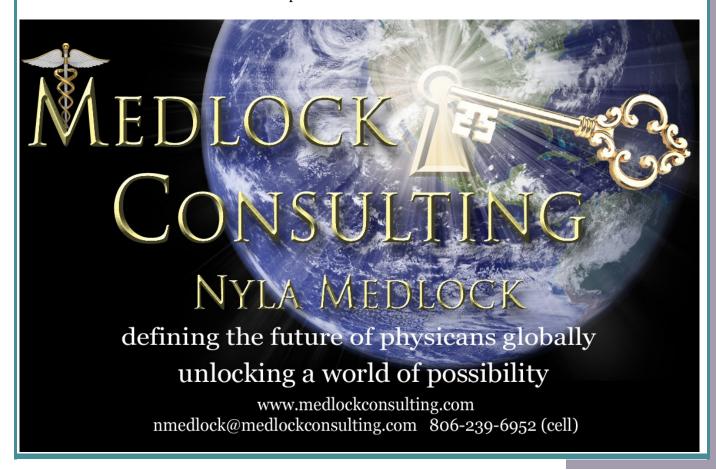
M. Christine David, DO, MPH, presented a poster at ACOEM's 2012 American Occupational Health Conference (AOHC) in Los Angeles. Christine's poster presented her residency research, "Prenatal Hair Mercury Levels and Birth Weight," evaluating the association of methylmercury with fetal growth measures. Congratulations Christine!

Vasileia Varvarigou, MD, received a Resident Research Award for her presentation, "Cardiovascular Deaths in US Police Officers: Duty-Specific Risks," at the 2012 AOHC. She was also one of four fellows selected to present this research at the Fellow and Trainee Friday Forum hosted by the HSPH Program in Cardiovascular Epidemiology. Additionally, her abstract for "Sleep Habits, Work Characteristics and Christine with her poster at the 2012 AOHC Health in Male Career Firefighters," co-first authored



with Genevieve Bergeron, MD, MPH, was selected as one of three finalists for the Cambridge Health Alliance Trainee Poster Award. Well done, Vasileia!

Since 2000, HSPH OEM residents have won a total of 18 ACOEM research awards, and have been on the podium at ten of the last 13 AOHC meetings, and since 2005, HSPH OEM residents have co-authored over 35 publications resulting from their training. At AOHC 2013, our residents will be adding two more ACOEM Resident Research Awards to Harvard's impressive total.



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Resident and Recent Alumni Publications 2012

- Anderson JE, Govada M, Steffen TK, Thorne CP, **Varvarigou V**, Kales SN, Burks SV. Obesity is Associated with the Future Risk of Heavy Truck Crashes among Newly Recruited Commercial Drivers. *Accident Analysis & Prevention*. 2012 Nov; 49:378-84.
- Berger MB, **Varvarigou V**, **Rielly A**, Czeisler CA, Malhotra A, Kales SN. Employer-Mandated Sleep Apnea Screening and Diagnosis in Commercial Drivers. *J Occup Environ Med*. 2012; 54:1017-25.
- **Muzaffar SA**, Christiani DC. Frontiers in Occupational and Environmental Lung Disease Research. *Chest*. 2012 Mar; 141(3):772-81.
- **Rielly A**, Kales SN (Eds). A Guide to the Recognition and Prevention of Occupational Heart Disease for the Fire and Emergency Medical Services, 4th Ed. International Association of Fire Fighters. [2012 in press].
- **Zhang C, Varvarigou V,** Parks PD, Gautam S, Vela Bueno A, Malhotra A, Kales SN. Psychomotor Vigilance Testing of Professional Drivers in the Occupational Health Clinic: a Potential Objective Screen for Daytime Sleepiness. *J Occup Environ Med.* 2012;54:296-302.
- **Zhang C**, Berger M, Malhotra A, Kales SN. Portable Diagnostic Devices for Identifying Obstructive Sleep Apnea among Commercial Motor Vehicle Drivers: Considerations and Unanswered Questions. *SLEEP*. 2012; 35(11):1481-89.
- **Zhang C**, Kales SN, Malhotra A. Diagnosis of Sleep Apnea, Polysomnography, and Portable Monitoring. In: Badr, MS Ed. *Essentials of Sleep Medicine: An Approach for Clinical Pulmonology*. New York City, NY: Springer, 2012.
- *HSPH OEM Resident/Recent Alumni Authors in bold. Listed publications reflect work initiated and/or completed while in the HSPH residency program.

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Sleep and Shift Work: Optimizing Productivity and Health Management in the 24/7 Global Economy

On September 27 and 28, 2012, the HSPH OEMR hosted "Sleep and Shift Work: Opti-Productivity mizing Health Management in the 24/7 Global Economy," the 2nd conference through our Initiative for Productivity and Health Management (IPHM) in collaboration with HSPH's **Executive and Continuing Pro**fessional Education (ECPE). The sold-out conference was a huge success, bringing together leading experts in fields pertaining to sleep and shift work from Harvard and other universities and 58 participants representing thought leaders from across the United States and eight other countries. Co-directed by Dr. Stefanos N. Kales, Associate Professor, Harvard Medical School and Harvard School of Public Health; Dr. Samuel A. Forman, President, Oak and Ivv Health Systems; and Dr. Philip D. Parks, Strategic Advisor & Research Scientist, H21, the conference featured 16 faculty who represented a diverse range of interests and expertise from industry leaders to faculty researchers. We want to extend special appreciation to our sponsor, Occupational and Environmental Health Network (OEHN), for helping to make this event possible.

Following a welcome and introductory remarks from the course directors, Mark R. Rosekind, PhD, Member of the National Transportation Safety Board, gave the opening keynote lecture, "Fatigue, Sleep Disorders, and Shift Work: Key Lessons from Transportation Accidents." Member Rosekind's experience as both a sleep scientist and with the National Transportation Safety Board provided insight into the very real costs-in terms of both dollars and performance, as well as that of human life-of fatigue and sleep disorders to transportation safety, and also helped to lay



Keynote Speaker Member Mark R. Rosekind, PhD, National Transportation Safety Board

the framework for the presentations and discussions to come.

The morning's lectures included "Sleep Loss and Fatigue: Designing Transportation Work Schedules for Enhanced Safety, Health, and Productivity" by Hans P. A. Van Dongen, PhD, Research Professor, Washington State University, Spokane; "Effects of a Comprehensive Program for Sleep Apnea Diagnosis and Treatment on Trucking Accidents and Health Care Costs" by Stephen V. Burks, PhD, Associate Professor of Economics and Management, University of Minnesota, Morris; and "Screening for Obstructive Sleep Apnea and **Excessive Daytime Sleepiness** in Professional Drivers" by Dr. Stefanos Kales. Building on his extensive body of redemonstrating the negative effects of fatigue on work productivity, Dr. Van Dongen proposed an optimi-



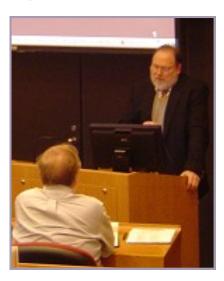
IPHM Conference Faculty, Course Directors, and Attendees

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Sleep and Shift Work: Optimizing Productivity and Health Management in the 24/7 Global Economy, Continued

zation algorithm that considers efficiency, cost, fatigue risk, and other relevant outcomes to determine selected duty schedules. Next, Dr. Burks discussed an ongoing study of the safety and health care costs of obstructive sleep apnea (OSA) in commercial truck drivers, as well as several preliminary findings regarding drivers with undiagnosed OSA. Finally, Dr. Kales presented data on the strong relationship between OSA and obesity as well as functional screens, the psychomotor vigilance test, and driving simulations as potential adjunct modalities for screening high risk populations.

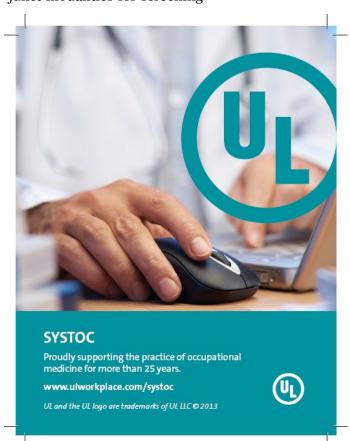
Wrapping up the morning session was a panel on Transportation, moderated by Member Rosekind, and featuring Mark B. Berger, MD, President and Chief Medical Officer, Precision Pulmonary Diagnostics; Thomas C. DiSalvi, CDS, Director of Safety and Loss Prevention, Schneider National Inc.; Stephen Popkin, PhD, Director, Human Factors Research and System Applications, Volpe Center, US Department of Transportation; and Dr. Van Dongen. The experts drew on their diverse experiences in industry and academia to recommend different practices to im-



Dr. Ronald C. Kessler, McNeil Family Professor of Health Care Policy, Harvard Medical School

prove transportation safety for workers and the general public.

After a break for lunch, the conference participants returned for "Insomnia and its Impact Productivity, on and Wellbeing" by Health. Ronald C. Kessler, PhD, McNeil Family Professor of Health Care Policy, Harvard Medical School; "Sleep Disorders: Contributors to Professional Burnout" by Antonio Vela-Bueno, MD, PhD, Professor of Psychiatry, Universidad Autonoma de Madrid, Spain; and "Effects of Shift Work on Patients with Sleep Disorders" by Atul Malhotra, MD, Associate Professor of Medicine, Harvard Medical School, Dr. Kessler presented data on the enormous financial impact of insomnia on the American public and economy, even after controlling for comorbid conditions. Dr. Vela-Bueno then ap-



Sleep and Shift Work: Optimizing Productivity and Health Management in the 24/7 Global Economy, Continued



Stephen V. Burks, PhD, Associate Professor of Economics and Management, University of Minnesota, Morris

proached a different occupational concern: burn-out, recommending that individuals seek integrative psychotherapy, stress management techniques, lifestyle changes, and rational pharmacotherapy to handle insomnia while addressing shift work both at the individual and the organizational level. Lastly, Dr. Malhotra assessed the negative consequences of shift work for individuals with sleep disorders and suggested that OSA likely gets worse in shift workers due to sleep deprivation and further weight gain.

Following these talks was a panel on Sleep Disorders, moderated by Anthony Kales, MD, Professor Emeritus of Psychiatry, Penn State College of Medicine, one of the original founders of modern clinical sleep medicine. The panel featured Drs. Kessler, Malhotra, Vela-Bueno, and John W. Winkelman, MD, PhD, Associate Professor of Psychiatry, Harvard Medical School. The panelists reviewed the consequences of sleep disorders for the workforce and made some suggestions for practitioners as well as employers.

Opening day two were two talks, "Duty Hours in Health Care: Effects on Safety, Performance, and Productivity" by Christopher P. Landrigan, MD, MPH, Research

Director, Children's Hospital and Associate Professor, Harvard Medical School; and "Sleep and Fatigue: Challenges in Law Enforcement and Firefighting" by Steven W. Lockley, PhD, also Associate Professor at Harvard Medical School. Drs. Landrigan and Lockley both drew on extensive bodies of peer-reviewed evidence as well as current research to describe the negative performance effects of sleep deprivation through



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Sleep and Shift Work: Optimizing Productivity and Health Management in the 24/7 Global Economy, Continued

schedules and sleep disorders. Dr. Lockley also discussed Operation "Stay Alert," a comprehensive fatigue management program to combat sleep deprivation.

After a brief break, the conference reconvened with a panel on Labor-Management Perspectives on Mitigating Fatigue in 24/7 Public Safety Operations, moderated by Charles A. Czeisler, PhD, MD, FRCP, Baldino Professor and Chief of Sleep Medicine at Harvard Medical School and the Brigham and Women's Hospital. The panel featured Richard M. Duffy, Assistant to the General President, Occupational Health, Safety, and Medicine, International Association of Fire Fighters; Richard Gist, PhD, Principal Assistant to the Fire Chief, Kansas City Fire Department; Dana Pullman, President, State Police Association of Massachusetts; and George Sherill, Chief of the Holden (MA) Police Department. The panelists' discussion, informed by years of hands-on experience, triggered numerous questions from the audience on how to manage the sleep, exercise, and general health needs of first responders and other shift work employees.

Following the panel, David A. Lombardi, PhD, Principal Research Scientist, Center for Injury Epidemiology, Liberty Mutual Research Institute for Safety presented "Translating Fatigue Research into Technologic Countermeasures." Citing the frightening

tendency of sleep-deprived individuals to underreport their sleepiness, Dr. Lombardi called for technological countermeasures that meet scientific guidelines but also are acceptable to the user for best efficacy.

The closing keynote lecture was "From NASA to the Boston Celtics: Using Chronobiology to Optimize Productivity and Health" by Dr. Czeisler. Dr. Czeisler's presentation drew on his decades of expertise as a leader in sleep, a pioneer in chronobiology, and an innovator in translating these advances into the world of occupational safety and health. He simultaneously looked back at the origins of studies in sleep and shift work, while reaching forward to new and exciting possibilities for improving sleep hygiene and the overall health of the nation's workforce.

Please stay tuned and consult our website at http://www.hsph.harvard.edu/oemr/iphm/ for future groundbreaking conferences on diet, exercise, and other means of influencing health through the workplace from HSPH OEMR'S IPHM.

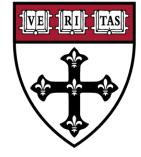


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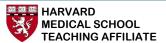
The New England College of Occupational and Environmental Medicine is a not-for-profit, regional component society of the American College of Occupational and Environmental Medicine whose mission is to support the optimal health and safety of workers and workplace environments through educating our members and other health care professionals, encouraging research, workplace safety, and high quality practice, guiding public policy, and promoting the specialty of Occupational and Environmental Medicine.

"The Science and Practice of OEM: Innovations and Challenges"
NECOEM/MaAOHN ANNUAL CONFERENCE
December 5 and 6, 2013.





Division of Occupational and Environmental Medicine



Cardiovascular Physiology & Disease in Firefighting: Translating Recent Research to Clinical Practice



Please join us for an evening of cutting-edge research on firefighter occupational safety and health. A seat, dinner, and wine will be offered for \$25. Attendance will be limited to the first 75 paying registrants. To reserve your place, please contact Madeleine Straubel now at mstraube@hsph.harvard.edu or (617) 432-1634.

Place: Lake Toho Room, Rosen Shingle Creek, Orlando, FL

Date: Monday, April 29th 7:30pm-9:30pm

Presentations:

Cardiovascular Strain of Firefighting: Biochemical and Physiologic Correlates

Denise L. Smith PhD, Professor, Skidmore College

Evidence-Based Rehabilitation & Cooling for the Fire Department Physician

Dave Hostler PhD, Associate Professor, University of Pittsburgh

Lifestyles of America's Bravest (Modifiable Risk Behaviors)

Sara A. Jahnke PhD, Principal Investigator, National Development and Research Institutes, Inc.

Translating Firefighting Cardiovascular Epidemiology into Clinical Evaluations

Stefanos N. Kales MD, MPH, FACP, FACOEM, Associate Professor, Harvard School of Public Health

Objectives:

After attending the session, participants will be able to

- 1) understand the CV strain of firefighting and its interactions with underlying heart disease;
- 2) master best practices for rehabilitation and cooling of firefighters;
- 3) improve screening, education, and counseling practices for high-risk behaviors; and
- 4) translate CVD epidemiology advances into clinical practice (e.g. fitness for duty, return to work, and other clinical risk assessments).

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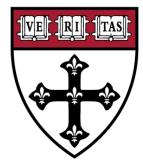
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