

HARVARD T.H. CHAN | SCHOOL OF PUBLIC HEALTH

SYNAPSE 2022

ANNUAL REPORT



OCCUPATIONAL AND ENVIRONMENTAL MEDICINE RESIDENCY

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PROGRAM DIRECTOR'S WELCOME

Welcome to the 15th edition of the Occupational and Environmental Medicine Residency (OEMR) Annual Report, our 2022 OEMR Synapse. We are pleased to review our achievements and celebrate our current residents, 2022 graduates, incoming residents, and distinguished alumni. Closing out 2022, the state of our program continues to be quite strong. We graduated six outstanding residents, have a current census of nine superb residents (8 categorical and 1 complimentary), and have accepted an exceptional class of four new residents for July 2023.

The program's tradition of excellence continues in faculty and resident activities, secure program funding, our 100% first-time pass-rate by graduates on the ABPM exam since 2013, and various resident awards and other accolades (see page 16).

2022 continued the successful return of all in-person classes and activities at the school, but often with hybrid options for seminars and grand rounds. We confirmed great news of a new anonymous donation of \$300,000 (Three hundred thousand dollars) to the Nyla Medlock Endowment, which supports occupational medicine residency training at Harvard Chan. The fund began with an original \$250,000 anonymous donation in 2014 and with your generosity had grown to about \$380,000. This new donation almost doubles the fund's principle to nearly \$700,000 and smashed our past goal of reaching \$500,000. Our next goal will be to reach \$750,000 with your help.



Stefanos N. Kales
MD, MPH, FACP, FACOEM (OEMR '93)

Please consider joining me in making a tax-deductible gift to support resident training. You can donate online here: [Harvard T.H. Chan School of Public Health | Make a gift and select the Nyla Medlock OEM Fund](#)

In these times of uncertainty, tuition costs and expenses continue to grow rapidly. If you prefer an alternate way of giving, rather than Medlock, please consider supporting our program through our "OM Gift fund", which allows us to support residents' travel stipends and events such as graduation.

In closing, once again we invite competitive students, residents, and mid-career physicians to read our annual report and consider our specialty and the Harvard Chan OM program. To our alumni and friends, we are grateful for all your support to continue this world-renowned program. We again wish everyone the best of health and hope to see you all soon!

Warm regards,
Stefanos

CURRENT RESIDENTS:

2nd YEAR:



Joseph Abrams, DO, MPH

Joseph Abrams, DO (MPH '22, OEMR '23) was born and raised in Liberty Lake, WA, enjoying outdoor adventure and sports of all varieties. Prior to medical school he was employed as a graphic designer, landscape installer, door-to-door salesman, and gym manager. His education took him to Brigham Young University in Provo UT (BS Exercise Science) and Western University in Pomona CA (Doctor of Osteopathy). His growing family includes his wife Cristin, son Jonas (3) and daughter Lux (1). Dr. Abrams served as a Flight Surgeon in the US Air Force and was stationed in Texas, Korea, and Germany. He was embedded with C130J and Intel units. He has deployed to Afghanistan (2), Poland, Senegal, and Morocco. His research aims to identify factors that contribute to musculoskeletal injury in remote work.



Kevan Lutchman, MD, MPH

Kevan Lutchman, MD (MPH '22, OEMR '23) was born in Trinidad and Tobago and spent most of his life in Canada. He immigrated to the United States in 2011 with his family, settling in Dallas-Fort Worth. He earned a BS in Biology from the University of Texas at Dallas and matriculated to the University of Texas Southwestern Medical Center, where he earned his MD. He completed residency in family medicine at John Peter Smith Health Network in Fort Worth, Texas and actively participated in management of employee health, helping to establish a COVID-19 testing clinic and respirator protection program at the onset of the COVID-19 pandemic. He became board certified in family medicine in 2020 and subsequently sought independent clinical experience in urgent care prior to joining the program. Dr. Lutchman hopes to integrate clinical medicine into the prevention of repeat workplace accidents in heavy industry through shared learning platforms. In his time at the Harvard OEMR, he has completed work with non-profit mobile clinic organizations to expand care to migrant workforces, has participated in the education of community health workers, and has conducted resident board review sessions through the '22-23 academic year. He is also the teaching assistant for the Introduction to Occupational and Environmental Medicine course at the Harvard T.H. Chan School of Public Health. Outside of work he enjoys hiking, basketball, amateur photography, and spending time with his family.



Rachael Zacks, MD, MPH

Rachael Zacks, MD (MPH '22, OEMR '23) is the current chief resident at Harvard's OEM residency. She is a board-certified internal medicine physician who joined OEMR after completing the two-year Epidemic Intelligence Service Fellowship at the Centers for Disease Control and Prevention. She is experienced in international humanitarian disaster preparedness and response, medical epidemiology, and working with refugee and disadvantaged populations. During her OEM residency she expanded her interests to include public responder safety, data visualization and lifestyle medicine. Her previous education includes a B.A. in Ecology and Evolutionary Biology from the University of Colorado-Boulder and certificates in global health and wilderness medicine during her internal medicine residency at Brown. When she's not working you can find her

hiking, taking photographs on random adventures, deal hunting in TJ Maxx, or publishing non-fiction stories. She's grateful to be a part of a program that has encouraged her to participate in Bio hazmat emergency response exercises, medical resident safety research, and quality improvement projects in healthcare worker monkeypox surveillance.

COMPLEMENTARY PATHWAY RESIDENT



Vasileia Varvarigou, MD, MPH

Vasileia Varvarigou, MD (OEMR '23) is a Board-Certified Primary Care Physician with a special interest and work experience in Occupational Medicine and Environmental health. As a post-doctoral research fellow at the Harvard T.H Chan School of Public health from 2010-2012 and under the supervision of Professor Kales, she had the opportunity to investigate various associations of cardiovascular disease risk with fitness and sleep in a multi-state cohort of career firefighters. After completing her training in Internal Medicine, she worked as a primary care clinician in a community health center in Dorchester MA, a health facility serving Boston's immigrants and other underserved communities. She continued her work as a primary care doctor at Brigham and Women's Hospital during the first year of the COVID -19 pandemic which

highlighted the importance of including one's employment and the environment when addressing the social determinants of health. She joined the Occupational Health Department at CHA in March 2021 focusing her practice on workplace safety, work-related injuries and exposures and disease prevention. She is currently in the MPH program in Epidemiology at Harvard Chan. Upon completing her training, she would like to continue her work as a clinician/public health researcher creating strong partnerships with the industry and policy makers to develop wellness and injury prevention programs for workers and communities. As a member of the occupational health community, she wants to work towards health and safety at the workplace through preventive programs that promote worker health and reduce workplace hazards.

1st YEAR:



Jacob R. Berry, MD

Jacob R. Berry, MD, (MPH '23, OEMR '24) was born and raised in Idaho Falls, ID. He enjoys outdoor adventures, food science, and bush crafting. He is a graduate of Brigham Young University in Provo UT (BS Biology) and Uniformed Services University of the Health Sciences. He was a missionary in South Korea for 2 years and speaks fluent Korean. Dr. Berry is a well-known flight surgeon in the USAF where he supported the first combat deployment of F35s. He also worked directly supporting, U-2, F-16, UH 60, and A-10 flight operations. Major Berry has given Aerospace Medicine lectures on disaster response, decompression sickness, and aeromedical evacuation all over Asia to include Singapore, Thailand, Philippines, Korea, and Malaysia. He served as the

Chief of Aerospace and Occupational Medicine at Osan Air Force Base, S. Korea. He has published on numerous topics but most prominently aviation base barotrauma and dysbarism. He has a young family and loves spending time with kids.



Matthew Hamm, MD

Matthew Hamm, MD (MPH '23, OEMR '24) graduated with Highest Honors from the University of California, Davis, with a bachelor's in cell biology, after which he joined a state research laboratory with an emphasis on zoonotic viruses. Dr. Hamm commissioned into the U.S. Air Force, earned his medical degree from the Uniformed Services University, and trained in internal medicine at the San Antonio Military Medical Center. He served three operational assignments with two combat deployments as a Flight Surgeon in his role as Medical Director and Senior Medical Officer for aerial operations. Major Hamm received the Air Medal for his contributions to aeromedical evacuation, with thirty-eight career military awards. Noteworthy accomplishments include pioneering occupational injury prevention in combat rescue aircrews and special

forces, investigating seventeen occupational mishaps including fatalities alongside other federal departments, and leading medical operations for the DOD's first major combat deployment during the COVID-19 pandemic. Following his military years, Dr. Hamm worked in private practice as an occupational medicine specialist. He and his wife, Sally, are the first couple ever to attend a U.S. Occupational Medicine Residency together. Dr. Hamm enjoys motorcycling, playing music, and having adventures with their four children.



Sally C. Hamm, MD

Sally C. Hamm, MD (MPH '23, OEMR '24) comes from Washington, D.C., and grew up as an Army kid on the move, including a stint in Brookline. Prior to medical school, she researched biowarfare countermeasures at the U.S. Army Medical Research Institute for Infectious Diseases. Dr. Hamm studied chemistry at Carleton College, earned her MD from the Uniformed Services University, and completed a transitional internship at San Antonio Military Medical Center. As an Air Force Flight Surgeon and Medical Director, she optimized health for pilots and operators of helicopters and fighter, bomber, refueler, intel, remotely piloted, and command and control aircraft. Highlights include testing thermal stress of stealth-fighter biodefense PPE, mitigating fatigue in combat shift workers, investigating breastmilk lead contamination in law enforcement

officers, advising the base commander on human performance optimization, leading international medical operations for a dozen large-force aerial exercises at the Air Force's highest-volume airfield, and serving on the federal regulatory council that governs occupational health for the largest industrial workplace in the DOD. Outside of work you'll find Sally pulling her husband and children off key in sing-alongs and mobilizing them for family dance-offs. The Hamms welcomed their fourth child in the fall, who has been great sport about being kangaroo-carried through both MPH classes and dance-offs.



K. Ray Motoyama, DO, MPH

K. Ray Motoyama, DO, MPH (OEMR'24) is from Pittsburgh, PA, and attended undergraduate studies at George Washington University followed by graduate studies at the University of Pittsburgh Graduate School of Public Health. He completed medical training at Lake Erie College of Osteopathic Medicine. As an active-duty Naval Officer, he completed an internal medicine internship at Walter Reed National Military Medical Center. He then served 7 years as a Flight Surgeon, completing two tours in Atsugi Japan and one tour in San Diego supporting Carrier and Rotary Wings. As the Senior Regional Flight Surgeon in Japan, he ensured safety and compliance of infection control measures during the COVID-19 pandemic crisis and oversaw contact tracing and isolation among 1000 aviation personnel. He plans to use his clinical and

leadership experience in the military to advocate for worker health in the civilian sector after completion of residency. Ray enjoys travel and photography, and lives with his loving wife Kay, son, and daughter.



Saad Salman, MD, MPH

Saad Salman, MD MPH (OEMR '24) is from Islamabad, Pakistan, and spent part of his childhood in Toms River, NJ. He completed his medical education in Islamabad, graduating from Shifa College of Medicine in 2011. While working as a physician in Pakistan, he became increasingly drawn to the field of public health. He completed his MPH with a focus on Global Health at Harvard in 2017, where he developed an interest in Occupational Health while working with SHINE (Sustainability and Health Initiative for NetPositive Enterprise). During this time, he traveled to Pakistan, China, and Cambodia to interview and develop strategies to improve healthcare outcomes for factory workers. He completed his training in Internal Medicine at St John's Riverside Hospital in Yonkers, NY in 2022. His past research includes the use of machine learning to improve

access to organ transplantation in Pakistan. Currently, he is interested in improving primary healthcare delivery to low-income occupational groups. Outside of work, Saad enjoys playing and recording drums, hiking, and cooking South Asian cuisine.

2022 GRADUATES:



Alexander Jobrack, DO, MPH

Alexander Jobrack, DO, MPH (OEMR '22) is a native of Northern California. He graduated medical school from Midwestern University's Arizona College of Osteopathic Medicine in Glendale, AZ. After graduation, he completed an internship in General Surgery at Keesler Medical Center, Keesler AFB, MS. Following his internship, he was selected for a competitive research fellowship in which he studied wound healing where he eventually developed a wound care device, which was patented in 2018. At the completion of his research year, Alex decided to leave General Surgery and pursue Flight Medicine. He served as a Flight Surgeon on the C-17 airframe with the 62 Airwing at Joint Base Lewis-McChord in Washington State for 2.5 years. As a Flight Surgeon, Alex had the opportunity to lead as a temporary Surgeon General of

Preventative Medicine, a co-lead Competent Medical Authority for medical monitoring of members on nuclear duties in the Air Force, heading the absorption of security forces into Flight Medicine, and chairing the Occupational and Environmental Working Group at McChord Air Base. Since graduating the OEM residency, Alex has been serving as the Public Health Emergency Officer and Installation Occupational and Environmental Medicine Consultant at Beale AFB in California. This summer, he will be assuming the role of Chief of Aerospace Medicine at Beale. He has been happily married to his wife Valerie for nearly 11 years and has two children: Emily (7years old) and Adrian (4 years old). He enjoys spending time with his family, cycling, exercising, and going on hikes in nature.



Shane Joseph, MD, MPH

Shane Joseph, MD, MPH (OEMR '22) was born and raised in south San Francisco, CA. He has undergraduate degrees in Psychobiology and Biochemistry for the University of California, Los Angeles and San Francisco State University, respectively. He earned his medical degree from the Uniformed Services University after accepting a commission into the U.S. Navy. Following completion of his medical degree, Dr. Joseph completed an internship in General Surgery at Naval Medical Center San Diego. Following his internship, Dr. Joseph went to serve as a General Medical Officer among a variety of operational military units within the Department of Navy. Earning the rank of Lieutenant Commander, Shane participated in multiple military deployments, both combat and non-combat, to different theaters of engagement. After graduation, Dr.

Joseph was assigned to the Navy Medicine Readiness and Training Command Guam as its Head of the Occupational Health Department as well as its Public Health Emergency Officer. Besides his military work, Dr. Joseph has served as the medical director to several medication-assisted treatment facilities treating patients with opioid use disorders.



Samuel Ko, MD, MPH

Samuel Ko, MD, MPH (OEMR '22) grew up in Hudson, Wisconsin. He attended undergraduate studies at University of Wisconsin in Madison. He continued to the University of Wisconsin School of Medicine under the Navy Health Profession Scholarship Program. Starting Active Duty, he completed a Transitional Year internship at Naval Medical Center San Diego. Following completion of training as a Naval Flight Surgeon, he completed 3 tours with different units ranging from Marines, Carrier-based, Tactical Jet Aircraft and Rotary Wing. In addition to Occupational Medicine, he is pursuing his interests in Aerospace Medicine and Wilderness Medicine. After graduation, Sam continued his service in the Navy Reserve as a flight surgeon for VR-64, a Fleet Logistics Squadron based at Joint Base

Dix-Mcguire-Lakehurst, NJ. After returning from a Detachment to Atsugi, Japan, he moved his family to Chicago to support his wife, Susie, in her career as a pediatrician and bring their daughter Aria closer to family, particularly her great-grandmother. Due to unexpected health issues, he paused in seeking a permanent position. Sam recovered from open heart surgery just in time to take the Occupational Medicine board and was grateful to pass along with his classmates. While resuming his search for the right career opportunity, he keeps his clinical skills sharp with Concentra part-time and continues ongoing research projects and independent consulting. Filling the time this spring, he started following his interest in Systems Engineering through Johns Hopkins Whiting School of Engineering's Master's program. Most importantly, he is discovering Lifestyle Medicine by spending time with family, focusing on health and fitness, and returning to his passions of sailing and martial arts.



James M. Medeiros, DO, MPH

James M. Medeiros DO, MPH (OEMR '22) is a native New Englander who grew up in Fall River MA. After graduating from James Madison University in VA, he entered medical school at Philadelphia College of Osteopathic Medicine on a US Air Force (USAF) health professional scholarship. Before entering the Harvard OEM residency, he served 8 years as a Flight Surgeon in the USAF with an initial assignment to Robins AFB GA then Osan AB S. Korea and Hanscom AFB in Bedford MA. During residency, James completed a well-received MPH capstone project on environmental noise pollution and currently sits on the scientific advisory council for the non-profit Quiet Communities. After graduation, James was assigned to Edwards AFB base located on the fringes of the Mojave Desert in California. He serves as the Installation Occupational and

Environmental Medicine Consultant providing numerous services for a 10K+ strong civilian workforce including medical surveillance, preemployment exams, risk assessment, policy development and regulatory compliance. Additionally, he was selected as the Operational Medicine Flight (OMF) Commander overseeing four different clinical sections involved in military readiness and primary care. Pictured is Jim completing an occupational shop visit at Edwards Air Force Base's Explosive Ordnance Disposal (EOD) unit where he got to experience the weight and limitations of operating in a bomb suit. On a personal note, his interests include the outdoors, backpacking, skiing, gardening, and spending time with family. He is looking forward to returning to New England in the not-too-distant future.



J. David Sterns, MD, MPH

J. David Sterns, MD, MPH (OEMR '22) is from Nashville, TN, and completed his undergraduate studies in Biochemistry at Lee University prior to his medical training at Georgetown University School of Medicine in Washington, DC. As a United States Navy medical officer, he went on to complete his internship in Pediatrics at Naval Medical Center San Diego and was selected for Naval Flight Surgeon training and designation in Pensacola, FL. He first developed an interest in Occupational and Environmental Medicine during his tour with Marine Unmanned Aerial Vehicle Squadron 2 of the 2nd Marine Aircraft Wing at Cherry Point, NC. Upon graduating from residency, David moved with his family of four up the New England seacoast to beautiful Portsmouth, NH, to begin work at the Navy Medicine Readiness and Training Unit at the Portsmouth

Naval Shipyard. He furthered his education with training in public health emergencies and radiation health and now serves as head of the Occupational Medicine Department, overseeing a team of occupational medicine providers, an audiologist, an optometrist, nurses, technicians, and industrial hygienists to further the shipyard's mission of the safe overhaul, repair and modernization of the U.S. Navy's nuclear-powered attack submarine fleet. Since taking on this position, his department has undergone major change, transitioning from the Department of the Navy to the Defense Health Agency, losing and hiring personnel, and rolling out a new electronic medical record in early 2023. Adding in board studying and hand surgery after a freak accident, it has certainly been a busy half year, but family continues to be a priority. When not at work, he enjoys his free time exploring the beaches of New Hampshire and southern Maine, apple picking, learning to ski with his oldest daughter (Lizzy), hosting out of town guests, meeting other families on nearby playgrounds, and attending his new church home at Middle Street Baptist Church



Jose Villa, MD, MPH

Jose Villa, MD, MPH (OEMR '22) earned a Bachelor's degree from MIT, an MD from Weill Cornell Medical College, and completed a residency in Emergency Medicine at UMass-Baystate Medical Center. He served as medical director at an occupational medicine clinic for several years prior to joining the Harvard OEM residency program. Jose currently works as a patient safety physician at Boehringer Ingelheim Pharmaceuticals.

2023 INCOMING RESIDENTS



Derek O. Stewart, DO

Derek Stewart, DO (OEMR '25) grew up in Santa Clara, UT. He served as a missionary in Finland for 2 years and speaks Finnish. After his missionary service he graduated from Brigham Young University with a degree in Exercise Science. Sports and exercise have always been an important part of Derek's life while playing soccer in college, becoming an Ironman triathlete and avid surfer. Derek completed medical school at the Lake Erie College of Osteopathic Medicine in Bradenton, FL where he also received a master's degree in Health Services Administration. After medical school he completed a General Surgery internship at UC Davis Medical Center in Sacramento, CA. Since that time, he has been a U.S. Air Force Special Operations flight surgeon at Hurlburt Field, FL where he has enjoyed the blend between optimizing health and

human performance. Derek has also been the medical director for Own My Health, helping people develop healthy lifestyles and improving wellbeing. He enjoys spending time at the beach with his wife, Mandy and four children, Charlie (8), Eloise (6), Penelope (4) and Freddie (1).



Kangwook Huh, DO

Kangwook Huh, DO (OMER '25) is originally from South Korea, where he spent most of his childhood. He also lived in Cape Town, South Africa for one year. Since then, he spent a significant amount of his time in Southern California. He received a bachelor's degree in Chemistry with an emphasis in biochemistry at Pepperdine University. He then completed his medical education at Western University College of Osteopathic Medicine of the Pacific in Pomona, California. During his residency in internal medicine at the University of Connecticut, he had the opportunity to learn more about occupational and environmental medicine. In addition to environmental health, he was drawn to the emphasis on prevention within OEM. He is expected to complete his Internal Medicine training in June 2023. Outside the hospital, he is an avid jogger and enjoys cooking Korean cuisine.



Christopher Leopardi, DO

Christopher Leopardi, DO (OEMR '25) is originally from New Jersey and graduated from Touro College of Osteopathic Medicine, Middletown NY. He completed an internship in Family Medicine at Naval Hospital Jacksonville, FL. He went on to receive further training in Hyperbaric and Undersea Medicine at Naval Undersea Medical Institute, and became Undersea Medical Officer at the submarine base in Groton, CT. His main role included occupational screening for submarine candidates, which is where he became interested in OEM. Outside of work, Chris enjoys spending time with his wife and kids. He is an avid hiker, mountain biker, and surfer.



Jenny Shao, MD

Jenny Shao, MD (OEMR '25) grew up in Chicago, IL and completed her undergraduate studies at Columbia University in New York City. She earned her medical degree with special qualifications in biomedical research from Cleveland Clinic Lerner College of Medicine at Case Western Reserve School of Medicine. Following graduation from medical school, she completed a surgical internship at Mount Sinai in NYC prior to joining Harvard OEMR as a member of the class of 2025. She is a prolific physician-scientist, and has authored over 65 total publications, including 22 peer-reviewed papers, 16 national podium presentations, 22 abstracts, and 5 book chapters. Her research portfolio includes development and identification of ALS

pharmaceuticals, development of a novel microscopy technique still used in Nobel Laureate Eric Kandel's lab, and construction of a mathematical model of tumor-immune dynamics. She has also participated actively in global health and served as the executive editor of the Journal of Global Health at Columbia University and led the expansion of JGH from 8 students on Columbia's campus to 40 institutions in 10 countries and 5 continents over 2 years. Her interests are lifestyle and prevention medicine, and she is passionate about expanding access to mental health care. She also enjoys exploring the outdoors with her dog.

FROM THE CHIEF RESIDENT:

One of my favorite parts about growing up in the Midwest was watching the seasons change. Summer was full of fireworks and barbecues, fall was football games and the start of school, winter was roasting marshmallows in our family fireplace and spring brought the promise of sunshine and soccer practice. The residency program has similarly been migrating through seasons of change, but instead of weather, Covid waves have been our touch points. Although our experience living and training during Covid has ranged from hope and ingenuity to frustration and loss we've been able to find beauty and learning opportunities in each season.

Highlights from 2022 have centered around the Occupational and Environmental Medicine (OEM) residency family. We started off in winter with a voluntary resident retreat to Stowe, Vermont. It may have been the coldest temperatures of the year, but it was a wonderful opportunity to forge long lasting camaraderie within the program. Even taking remote patient calls on Saturday morning didn't deter our eagerness to head out into the snow and on the slopes.



Rachael Zacks, MD, MPH
Aboard a Boston MedFlight ride along

Spring brought with it the opportunity for many residents to connect with alumni and the vast OEM network at the American Occupational Health Conference (AOHC) in Philadelphia. Residents not only learned from a diverse array of subject matter experts during sessions, but many participated in podium and poster presentations. This in-person experience sparked a new enthusiasm for the field, and an excitement for the diverse directions OEM careers can take.

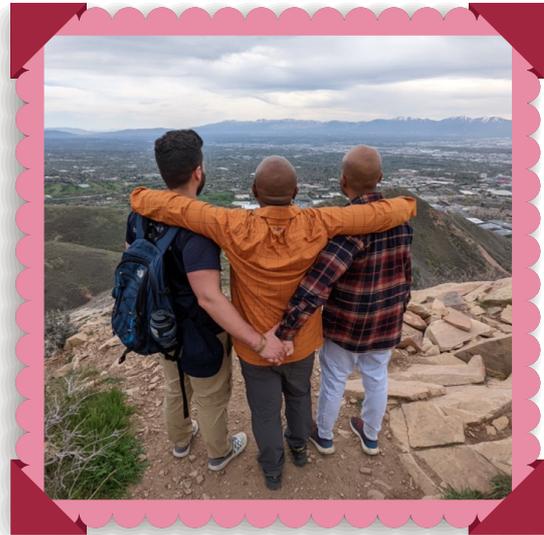
The summer was bittersweet. We watched a wonderful class head off to their respective future placements, both military and civilian, and we welcomed a brand-new class of residents. Along with new faces came new opportunities, such as the Lifestyle Medicine residency curriculum. Our discussions with American College of Lifestyle Medicine (ACLM) President Dr. Bethany Frates have been both educational and invocative, highlighting the importance that nutrition, exercise, social connection, and sleep play in maintaining a healthy workforce and environment.

By fall our first-year residents enjoyed a more traditional MPH experience, sans masks, and the second years found themselves in-person at a majority of their rotations. We also got to present and collaborate with local OEM experts at the annual New England College of Occupational and Environmental Medicine (NECOEM) conference and introduced the youngest, "future resident" to the family (see a photo of the Hamm's newborn in resident life).

Overall, 2022, in all its seasons, was a year to remember and celebrate, but it couldn't have happened without the work of many individuals. As I close out my thoughts in this year's synapse, I wanted to take a moment for gratitude. A moment to thank my co-residents, who always manage to make me laugh even with deadlines or emergencies looming. To thank the Harvard OEM mentors and staff, who have guided my research and experiences to opportunities beyond the traditional classroom. And lastly, to thank the city of Boston itself, who has hosted my family through these past two years with some incredibly breathtaking moments. To the incoming class and next chief, WELCOME, I challenge you to continue to embrace each season, test the limits, and build upon the legacy that is the Harvard Occupational and Environmental Medicine Residency.

With love and hope,
Rachael

RESIDENT LIFE PHOTO JOURNAL:



RESIDENT LIFE PHOTO JOURNAL:



ALUMNI SPOTLIGHT:



Michael Chin, MD, MPH, FACOEM, DipABLM (OEMR '18)

Senior Medical Advisor, Amazon Pharmacy

Dr. Michael Chin (OEMR '18) has shaped a career in occupational and environmental medicine (OEM) that embraces transition, lifelong learning, and a holistic view of health as an interplay of mind, body, and environment. His interest in well-being began early in life, fostered by his mother, Dr. Lilian Cheung who is Director of Mindfulness Research and Practice in the Department of Nutrition at the Harvard T.H. Chan School of Public Health, and author of several health promotion books including *Savor: Mindful Eating*, *Mindful Life*. As a young adult, he already recognized the importance of healthy eating, mindfulness, and meditation, including through participating in weeklong retreats led by his mother's *Savor* co-author, the late Zen Master Thich Nhat Hanh.

With so much public health exposure at a young age it came as no surprise that Dr. Chin pursued a medical career. During his plastic surgery residency at UMass, he spent extra time focusing on research, with over three years dedicated to investigating the relationship between ionizing radiation exposure and wound healing. It was through his research that he realized a surgical career in a highly specialized field may not be the best fit for the full scope of his interests. His passion involved improving the health of communities in addition to treating the whole individual.

Dr. Chin transitioned from surgery to OEM in 2016 at the Harvard Occupational and Environmental Medicine Residency program, serving as Chief Resident in his second year. The switch allowed him to gain more training in public health and expand his research interests, culminating in two published projects that evaluated the mind-body interaction of breathwork, the autonomic nervous system, and peak performance.

Dr. Chin's initial position post-residency took him to Vanderbilt University Medical Center as the Assistant Director of Occupational Health. In this role, he and his colleagues oversaw the health of over 40,000 Vanderbilt Medical Center and Vanderbilt University employees. He described his work as "the full range of clinical occupational medicine in a top-tier academic medical center, plus the full breadth of epidemiology-driven policy." Duties included clinical work such as pre-placement exams and work injury management in addition to opportunities to research employee health and wellness. He partnered with Vanderbilt's HealthPlus health promotions program to analyze data from employee health assessments to investigate the relationship between lifestyle behaviors, stress, and productivity. When COVID hit during his tenure, he pivoted, making sure that contact tracing, up-to-date clinical guidelines, and vaccinations were available to Vanderbilt employees.

In 2021, Dr. Chin felt a calling to make a difference beyond academia at a much larger scale. He underwent further certification as a Lifestyle Medicine physician and transitioned to a corporate position as a Senior Medical Advisor at Amazon, lending his expertise and leadership to Amazon Pharmacy. His role focuses on policies and programs to safeguard employees within pharmacy fulfillment operations and says, "I have the invaluable opportunity to learn directly from respected leaders in the field including residency alumni, Dr. Peter Lee and Dr. Al Rielly. I am very fortunate to be able to call them my mentors at Amazon."

Currently, Dr. Chin sees the future of OEM driving toward a more holistic vision of the worker, caring not only for the physical health, but extending to mental and emotional health, the community, and environment. Taking care of worker's injuries will always be a primary goal of OEM, but he sees the field expanding to encompass overall employee well-being. This will remain a challenge that OEM physicians will be poised to take on, requiring the development of new strategies to educate corporate and institutional leadership on the importance of both health and well-being.

Dr. Chin emphasized, "The strength of the OEM specialty is in the diverse backgrounds we all bring to it." He remains passionate about mentoring young OEM physicians through these hurdles and guiding them through transformation in their own careers. Mentorship, a dedication to lifelong learning and embracing career transitions has allowed Dr. Chin to build an exciting OEM career, and he looks forward to paying it forward to the next generation.

PROGRAM UPDATE:



Justin (Chih Chao) Yang, MD MPH FACP MPH '12, OEMR '19

Justin (Chih Chao) Yang, MD MPH FACP (MPH '12, OEMR '19) assumed the position of Assistant Program Director of the Occupational and Environmental Medicine (OEM) Residency in late Spring 2022. Additionally, Dr. Yang is an Assistant Professor of Medicine at the Boston University Chobanian & Avedisian School of Medicine and he is triple Board certified in Occupational Medicine, Internal Medicine and Addiction Medicine.

Dr. Yang has been part of the Harvard OEM program since he was an MPH student in 2011. He started out his journey in OEM with Dr. Rose Goldman which led to a published study on Food and Chemical Toxicology. Between 2012 to 2014, as a research fellow, he worked with Dr. Stefanos Kales and published several high-impact studies on firefighters' diet, nutrition, and cardiovascular disease. He completed his Internal Medicine residency training at Tufts/ St. Elizabeth's Medical Center in 2017 and the Harvard OEM residency program in 2019. During the OEM residency, he worked with Dr. Kales and published a paper on push-up capacity and future cardiovascular disease risk among young active men in JAMA Network Open, which received global media coverage and was the #1 read paper on JAMA in 2019. After graduating from the OEMR program, he became the Medical Director of Manet Community Health Center, a Boston Medical Center HealthNet affiliate, where he led several programs including Urgent Care, Occupational Health, Medication Assisted Treatment (MAT) Program and LGBTQ+ Health across seven clinics in the organization between 2019 to 2021. Dr. Yang also served as the Medical Director for the Department of Employee Health at Atrius Health/Harvard Vanguard Medical Association until the end of 2022, when the department was absorbed after a post-merger by Optum Care into Optum's national enterprise program.

Besides employee health and academia research, Dr. Yang has a passion for health technology and digital health. During his Internal Medicine residency, he co-founded MobioSense, a portable medical diagnostic device company utilizing semiconductor nanowire technology for molecular detection. Between 2020 to 2022, Dr. Yang served as the U.S. Chief Medical Officer for Kaia Health, a post Series C company focusing on virtual musculoskeletal disorder recovery treatment with mobile phone camera motion analysis. Dr. Yang now serves as the Medical Director for Quit Genius, a virtual substance use disorder clinic and management platform for employees, where he established a national care team providing substance use treatment for more than 150 companies and 3 million employees across the U.S. Through the virtual corporate medicine rotation precepted by Dr. Yang and Dr. Harrell-- a rotation unique and exclusive to the Harvard program-- residents experience first-hand clinical directorship via an innovative, virtual care pathway that has been an integral part of practicing medicine since the COVID-19 pandemic.

RESIDENT RECOGNITION

J. David Sterns, MD, MPH (OEMR '22)

The COVID-19 pandemic highlighted the severity of healthcare worker burnout and shone a spotlight on how burnout threatens sustainable and effective healthcare domestically and abroad. During his residency, Dr. David Sterns (OEM ~22) focused his research efforts on understanding the societal, systemic, and individual factors that contribute to burnout amongst healthcare workers and testing solutions on relevant factors to mitigate burnout's negative outcomes.

Dr. Sterns began collaborating with Dr. Kerri Palamara McGrath, Director of the Center for Physician Well-Being at Massachusetts General Hospital, and several other investigators, to study the impact of peer-to-peer physician-led health and wellness coaching on burnout. All coaches were physicians who underwent professional training and worked at the same healthcare center as the physicians undergoing the intervention. The research led to a successful pilot project involving over 100 physicians within the Mass General Brigham healthcare system, a completed manuscript currently under review for publication and collection of longitudinal data that is still undergoing additional analysis.

Additionally, Dr. Sterns championed the well-being of employees outside of the healthcare sector. While rotating at the Massachusetts Department of Public Health during his second-year rotation, he co-led a virtual discussion titled "Burnout in the Workplace" with Dr. Justin Yang as part of their Working on Wellness Expert Series. Dr. Sterns continues his passion for worker well-being in his current employment at the Portsmouth Naval Shipyard, promoting initiatives that ensure the safety and well-being of the thousands of shipyard workers whose efforts directly impact the operational readiness of the U.S. Navy.

RECENT ALUMNI AND RESIDENT PUBLICATIONS AND PRESENTATIONS:

Zacks, R.L.T. and Backus, A. (2022) To Your Health: make preventing hypothermia a habit. *Landings*.30(3): 25.

Zacks, R.L.T. (2022). The Chair in the Bathroom [Creative non-fiction]. In *Short Édition*. Short Édition.
<https://short-edition.com/en/story/creative-nonfiction/the-chair-in-the-bathroom-3>

Zhang, J. X., **Berry, J. A.**, Kim, N., Gray, J. S., Fotheringham, S., & Sauerwein, T. J. (2022). Two Fifth-Generation Fighter Pilots Discovered with Latent Autoimmune Diabetes. *Aerospace Medicine and Human Performance*, 93(2), 106–110.
<https://doi.org/10.3357/amhp.5901.2022>

Sterns, J. D. (2022, May 11). Burnout in the Workplace [virtual presentation]. Massachusetts Department of Public Health Working on Wellness Expert Series.

Jobrack, Alexander DO, MPH. Case Report: Post-Traumatic Stress Disorder in a Student Pilot. *Federal Air Surgeon Bulletin*. June 2022.

Lan FY, Scheibler C, Hershey MS, Romero-Cabrera JL, **Gaviola GC**, Yiannakou I, Fernandez-Montero A, Christophi CA, Christiani DC, Sotos-Prieto M, Kales SN. (April 2022 accepted). Effects of a healthy lifestyle intervention and COVID-19-adjusted training curriculum on firefighter recruits. *Scientific Reports*. 2022;12:10607
<https://doi.org/10.1038/s41598-022-10979-2>

Parenteau M, Chen CJ, Luna-García B, del Pilar Asmat M, Rielly A, Kales SN. Fatigue in NTSB-investigations 2013-2019: evidence of accidents and injuries. *International Journal of Occupational Safety and Ergonomics*. 2022 [online first] DOI: 10.1080/10803548.2022.2075639

Lan FY, Suharlim C, Kales SN, **Yang J**. Association between SARS-CoV-2 Infection, Exposure Risk and Mental Health among a Cohort of Essential Retail Workers in the USA. 2021;78(4):237-243. Doi: 10.1136/oemed-2020-106774. PMID: 33127659. Epub 2020 October 30.

Hsu YT, Lan FY, Wei CF, Suharlim C, Lowery N, Ramirez A, Panerio-Langer J, Kawachi I, **Yang J**. Comparison of COVID-19 Mitigation and Decompression Strategies Among Homeless Shelters: A Prospective Cohort Study. *Annals of Epidemiology*. 2021;64:96-101. Doi: 10.1016/j.annepidem.2021.08.023. PMID: 34517110. Epub 2021 September 10.

Wei CF, Lan FY, Hsu YT, Lowery N, Dibona L, Akkeh R, Kales SN, **Yang J**. Risk of SARS-CoV-2 Infection Among Essential Workers in a Community-Based Cohort in the United States. *Frontiers in Public Health*. 2022 May 17;10:878208. doi: 10.3389/fpubh.2022.878208. PMID: 35677773.

Hsu YT, **Jobrack A**, Lan FY, Wei CF, **Yang J**. The Association Between Mental Wellbeing, Job Fulfillment and Organizational Support During the COVID-19 Pandemic Among Healthcare Workers. American Occupational Health Conference Poster Session. May 2022.

OUTSTANDING CLINICAL AND ACADEMIC TEACHING AWARDS

Each year, OEMR residents elect one clinical preceptor from their clinical rotations and one faculty instructor from their master's in public health courses who have had an especially meaningful impact on their training and education to receive awards of recognition. In 2022, residents also recognized a member of the clinical support staff at Cambridge Health Alliance Occupational Health Clinic for her outstanding assistance to our residents.



Dennis LaCroix, BS, MPAS

Received the 2022
Outstanding Clinical
Faculty Award



Fan-Yun Lan, MD, PhD

Received the 2022
Outstanding Academic
Faculty Award



Jenna Cherenzia, BS, MS

Received the 2022 Out-
standing Clinical Support
Staff Award

Thank you all so much for your support of the program and the personal attention you give to the education of our residents!

IN THE NEWS:

Nathan (Nate) Jones, MD, MPH (OEMR '20) was recently named to the ACOEM Board of Directors as the Young Physician Director. Congratulations, Nate!

Greg Wagner (MD, MPH), an esteemed colleague, recently received the John Peters Award from the Assembly on Environmental, Occupational and Population Health at the Annual American Thoracic Society Meeting in San Francisco in May 2022. This award is given “In appreciation of a lifetime of leadership, research, and devoted service to the pursuit of respiratory health.” Well deserved, Greg! Congratulations.

Fan-Yun Lan, MD, PhD, who was a post-doc in the PhD program and also TA received the 2022 “Unsung Hero” award from his alma mater, National Cheng Kung University in Taiwan. This award is given in recognition of excellent service and contribution to the alumni association and alma mater. Congratulations, Fan!

Sachin Kapoor, DO, MBA, MPH, FACOEM received 2022 Cecil Cutting Leadership Award to recognize exceptional leadership at The Permanente Medical Group. Congratulations!

The Medlock Endowment Fund which was started by the late Nyla Medlock and supports occupational medicine training at HSPH received a large anonymous donation this year. We are extremely grateful and thankful for this unsolicited donation. For information on donating to our program, please see page 3.

Rachael Zacks, MD, MPH (current Chief Resident) recently received the 2021 Paul C. Schnitker International Health Award. This award is presented by the CDC to an EIS Officer for an extraordinary contribution to improving international public health. Congratulations, Rachael!

AOHC - 2022

The 2022 ACOEM American Occupational Health Conference (AOHC) was held May 1st thru 4th in Salt Lake City, UT. Residents and faculty attended the conference and maintained a Harvard OEMR table to promote and recruit for the program. Several of our residents were selected for scholarship awards to attend the conference. Conference podium and poster presentation contributions by the residents were the following:

King, P., **Abrams, J.** (2022, May 1-4) Using Google Trends as A Novel Surveillance Tool for Workplace Injuries in the United States.

Ko S., Joseph S., Lan F., Sidossis A., Kales S. (2022, May 1-4). Two-year post academy graduation follow up of health and fitness in a cohort of firefighters during their early career.

Berenji M., Jacobs J., **Sterns J.D., Joseph S.,** De M. (2022, May 1-4). Telemedicine and the burgeoning virtual occ health clinic: The new way of practicing occupational medicine.



NECOEM - 2022

The 2022 New England College of Environmental and Occupational Medicine (NECOEM) conference was held November 29th thru December 2nd and included the following resident contributions.

Dr. Joseph Abrams - Mobile health Applications for Occupational Medicine

Dr. Kevan Lutchman - Mobile healthcare: An Opportunity to Better Serve Migrant and Rural Workers

Dr. Rachael Zacks - Evaluation of Monkeypox Surveillance System Among Healthcare Workers in Massachusetts Healthcare System – July-October 2022

DONOR RECOGNITION:

This list reflects donations to the HSPH OEMR for the 2022 Fiscal Year.

\$1,000 - \$5,000

Dr. Stefanos and Mrs. Ana Kales
Dr. Samuel Forman

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Dr. Kenneth R. Spaeth ACOEM
Ms. Melissa Ehrenreich Occ Med Consulting
Dr. James Tacci OEHN
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Please make a note that your gift is for the HPSH OEMR Program (Nyla Medlock Endowed Fund or the OEMR Gift Fund) or you can complete the following section and enclose it with your payment. Please contact **Mr. John Yong at jyong@hsph.harvard.edu or 617-432-2219 for assistance.**

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 Harvard School of Public Health
 665 Huntington Ave
 Boston, MA 02115

We want to hear from you!

Did you relocate and accept a new position? Have you been promoted? Do you have family or other news that you would like to share? Let OEMR and your colleagues know what you are up to and stay connected by emailing: crodriguez@hsph.harvard.edu

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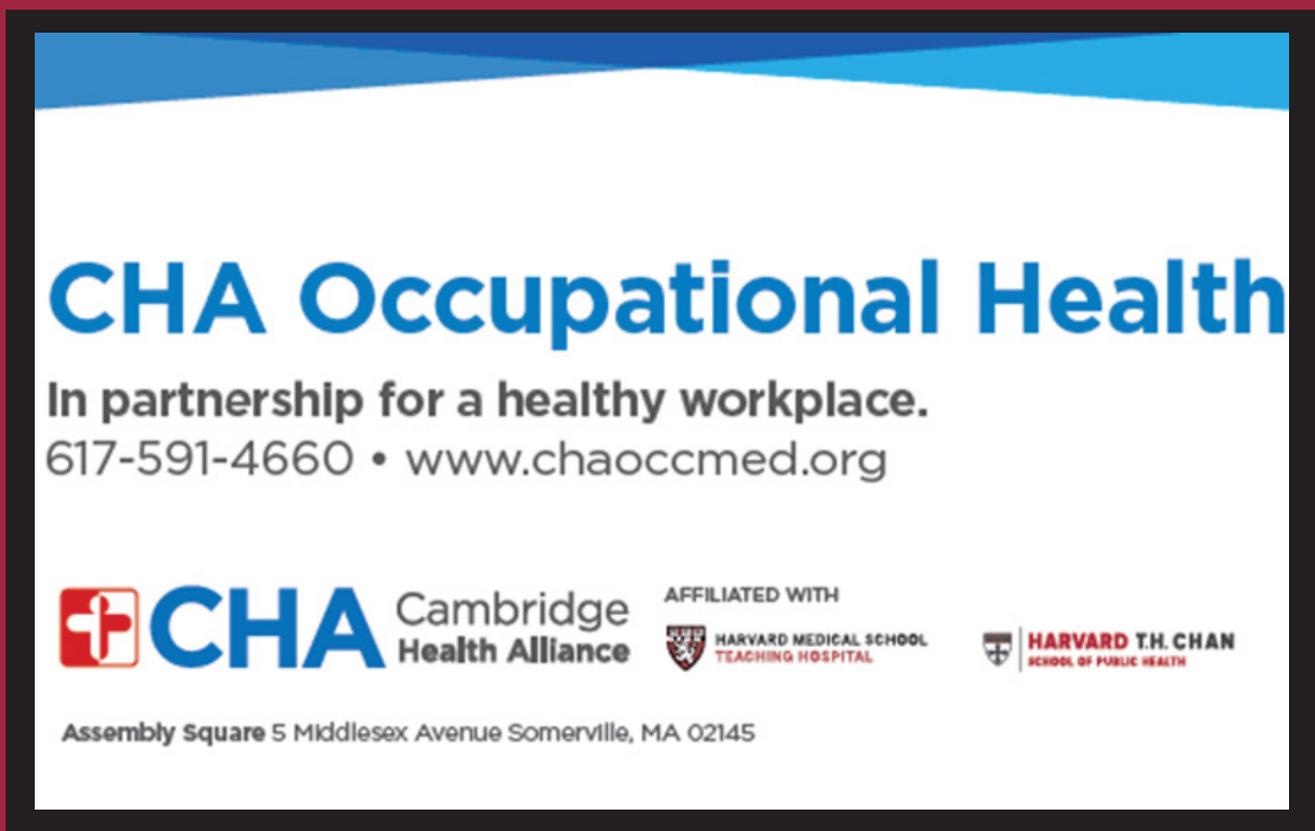
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Best wishes to the OEM Residents and Graduates at Harvard School of Public Health

Thomas H. Winters, MD, FACOEM, FACPM
Lee Okurowski, MD, MPH, MBA
Deborah N. Barbeau, MD, PhD, MSPH
and Team

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