

## COHSE Success Stories for 2021

### *COHSE program faculty influence national, state and local policy*

**Christopher Friese**, Professor and Associate Director of our **Occupational Health Nursing Program**, was appointed by President Biden to the **National Cancer Advisory Board**, which guides national policy on cancer research, including actions by the National Institutes of Health (NIH) National Cancer Institute.



**Rick Neitzel**, Professor and Director of our **Industrial Hygiene Program** received the **Threadgill Leadership and Service Award** from the National Hearing Conservation Association in recognition of his research and service to improve hearing conservation. In addition, he was re-appointed for a second 3-year term as **Chair of the American Conference of Governmental Industrial Hygienists Threshold Limit Values - Physical Agents Committee**, which sets widely used limits for toxic exposure.

*Michael Beall*



**Xin Wang** joined our **Occupational and Environmental Epidemiology Program** as a Research Investigator. He studies the health effects of metals and persistent organic pollutants.

Accolades to our world-leading **Occupational Safety Engineering** faculty included: **Thomas Armstrong** received the **Meritorious Achievement Award** from the American Council of Governmental Industrial Hygienists; Program Director **Leia Stirling** was inducted as an **Associate Fellow in American Institute of Aeronautics and Astronautics** and she received the **University of Illinois Recent Alumna Award**. **Nadine Sarter** was selected as a member of the **National Research Council Transportation Research Board (TRB) Committee on Emerging Trends in Aviation Safety**.

**Stuart Batterman**, Professor and COHSE Center Director, received the **National Institute of Health Director's Transformative Research Award** for new work on "Developing Novel Strategies for Personalized Treatment and Prevention of Amyotrophic Lateral Sclerosis (ALS)" with colleagues in the UM Medical School. He was reappointed by Governor Whitmore to a second 3-year term on the **Statewide Drinking Water Advisory Council** addressing lead contamination in Michigan's drinking water.



### *Pandemic responses continue with research and training*

Our faculty members in the **Industrial Hygiene Program** assist with local, state and federal response the pandemic. As examples, our faculty have appointments through the intergovernmental Personnel Act (IPA) with the **National Institute of Occupational Safety and Health**. Professors **Aurora Le** and **Rick Neitzel** are assisting the agency in its response to COVID-19 among construction workers. In addition, these and other faculty are conducting surveillance of the SARS-CoV-2 virus in campus environments, including in air and wastewater.

Our 2020 **Occupational and Environmental Epidemiology Program** PhD graduate, Zoey Laskaris, is researching physical and mental health impacts of the COVID-19 pandemic on residents and auto-workers living and working in Michigan.

Given the high demands on medical staff, instruction in our **Occupational Nursing Program** shifted to hybrid and remote course delivery – important since nearly all program trainees continue to work in primary care as they study. In 2021, we restored student clinical placements that were largely halted by affiliating agencies in 2020 due to the pandemic.

## Innovative research provides the scientific basis to decrease workplace injury and disease

The groundbreaking **Apple Hearing Study**, a nationwide study on sound and music exposures and impacts on hearing and cardiovascular health, has been renewed for 3 more years. Headed by **Rick Neitzel**, the study uses cell phones to amass the largest-ever dataset of sound and music exposures and hundreds of thousands of hearing tests.



**Marjorie McCullagh**, Director of our **Occupational Health Nursing Program**, published in a new textbook, **Environmental Health in Nursing**, addressing the hazards of noise on health and implications for nursing (Alliance of Nurses for Healthy Environments: Mt. Ranier, MD).



## COHSE outreach to business and industry shares research advances and best practices

Our **Continuing Education Program** conducts a wide range of live courses and webinars by top faculty and leaders in the field. Our programs were attended by over 4,000 people in 2021. Many of the webinars are also available afterwards for viewing. In 2021, all courses were offered virtually using a combination of synchronous and asynchronous content. Often, case studies and supplementary examples were used during synchronous sessions to provide the opportunity for attendees to interact with each other, the instructors and apply the course material. Examples of our courses include:

- **Comprehensive Industrial Hygiene Review**
- **Human Factors Engineering**
- **Using the 3D Static Strength Prediction Program™**
- **Ergonomics Principles for Workplace Assessment and Design**
- **Updates in Nursing and Physical Assessment for the Occupational Health Nurse.**

We co-sponsored the **Michigan Industrial Ventilation Conference**, the **Multi-Professional Oncology Safety Simulation and Training**, and the **Workplace Mental Health Conference**.

## Our training and our graduates make the workplace safer and more productive

Undergraduate, masters and doctoral students are assisting Assistant Professor **Aurora Le** in our **Industrial Hygiene Program** on research entitled "**Evaluating Occupational Biohazards, Stress, and Readiness for Uptake of Total Worker Health Interventions in U.S. Waste Workers.**" Her team is collecting data at three Midwest waste sites.



COHSE graduates in occupational health and safety are in demand. As one example, most of our students obtain jobs well before graduation. As another, a "fresh" graduate of our **Occupational Health Nursing Program** outcompeted in a large group of highly experienced providers for an emergency department position due to her specialized training in occupational health and her ability to provide care for work-related injuries and illnesses.

We are dramatically increasing our on-line offerings through our new **Michigan-Ohio Occupational Research Education Program**, sponsored by the National Institutes of Health. In the next 5 years, we will develop and deliver training and research experiences for students and practitioners in several areas: (1) emerging technologies in exposure assessment; (2) home health care; (3) sustainability and occupational health and safety practices; and (4) ergonomics and aerosol exposure. The highly multidisciplinary team involves experts from the **University of Michigan, University of Cincinnati, and Michigan State University**. Stay tuned!