

Great Lakes Center for Occupational Health and Safety

PI: Susan Buchanan, MD, MPH

JULY 27, 2022



UNIVERSITY OF
ILLINOIS CHICAGO

School of Public Health

Illinois ERC/GLC OHS - <https://glcohs.uic.edu/>



Mission: Every person has the right to healthy work – a job that pays a living wage, a workplace that is safe, a work environment where everyone is treated with respect, and qualified occupational and environmental health professionals who advocate for their health.



Students – 2021-2022

Industrial Hygiene – 6 MPH, 3 MS, 2 PhD

Occ Safety – 7 MPH, 2 MD, 2 PhD

Occ Medicine – 6 MPH

Occ Enviro Epi – 8 PhD

Ag Safety – 7 MS, 1 PhD

Interdisciplinary Activities



Travel to Conferences

Attend conferences with your fellow trainees using your travel award



Networking

Participate in professional organizations that will help you land a job after graduate school



Interdisciplinary Field Trips

Connect what is being taught in the classroom to real world facilities and processes

Personnel Changes



Occupational Medicine Residency: Dan Bakston → **Kim Hargis**

Industrial Hygiene: Lorraine Conroy → **Margaret Sietsema**

Occupational Safety: Lorraine Conroy → **Tessa Bonney**

Occ and Enviro Epidemiology: Leslie Staynor → **Mary Turyk**

Agricultural Safety and Health: Bob Aherin → **Josie Rudolphi**

CE: Marilyn Bingham → Anahi Gaytan

PPRT: Lorraine Conroy and Sal Cali → Susan Buchanan and ERC coordinator

ERC Coordinator: Caitlin Donato → TBN

Agricultural Safety and Health CE and Outreach

18 training sessions – 874 attendees

- Grain Handling and Storage
- Grain Bin Entry
- Machine Hazards and Guarding
- Ag Confined Spaces
- Winter Hazards
- Near Miss Training

On follow-up survey

- 83% indicated they have implemented at least one new safety practice at their facilities
- 42% replaced or reported equipment for safety reasons (missing machine guards, frayed cords/ropes, inadequate rope, broken anchors/ladders/stairs, etc.)



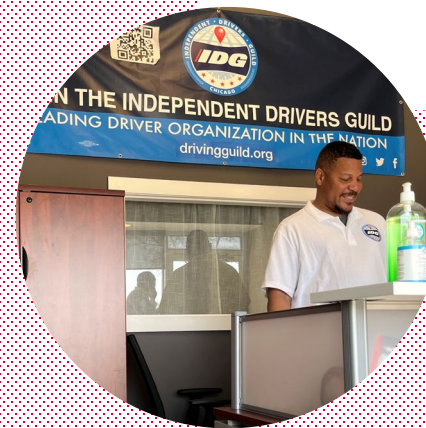
COVID-19 Outreach – see presentation July 27!

- Workers' rights advocacy groups
- Community-based organizations
- Labor unions
- Workers centers
- Employers
- Workforce development programs



Workplace Safety Report/ing Card

Work Safe during COVID 19!



Artificial Intelligence/Machine Learning

Building an AI lab:

- For CE courses – practicing IH/Safety professionals
- For ERC student curriculum

Taught by Houshang Darabi, co-director of ERC Occ Safety program

First CE pilot class – September 2022

First UIC student class – Spring 2022

UIC Artificial Intelligence in Occupational Safety and Health Applications (AIOSHA) lab

- hardware component - set of sensors and their necessary hardware to collect OSH data from real world applications and report them to AI computer programs
- software component - used to design and implement AI computer programs



<https://medium.com/applied-machine-learning-for-manufacturing/how-can-technology-improve-workplace-safety-be37bf9209b4>

<https://aws.amazon.com/blogs/machine-learning/automatically-detecting-personal-protective-equipment-on-persons-in-images-using-amazon-rekognition/>

