TARGETED RESEARCH TRAINING

Overall Goal: Interdisciplinary research training in the frameworks of one common theme.

Current 5 years: assessment and control of cumulative health and safety risks among home healthcare workers

Next 5 years: continue with home healthcare workers; include organization psychology
Benefits to students

- Funds for PhD stipends (also for non-ERC students)
- Funds for supplies, local travel, and conference travel.
- Gaining experience in working in interdisciplinary research project using innovative new technology.
- Mentoring from faculty from other ERC disciplines.
- **PhD thesis project**, MS thesis, summer internship, special topics, independent research, or capstone project.
Why home health care workers?

• Health care is primary employer in our region
• Home health care is fastest growing public sector industry.
• Work-related risk factors include multiple exposures, but comprehensive evaluation of multitude of exposures is missing.
Specific Aims

• **Specific Aim 1:** To quantify HHCWs' exposures, including ergonomic and physical hazards (Drs. Davis and Gillespie)

• **Specific Aim 2:** To apply emerging technologies for assessing and controlling home healthcare workers' exposures to aerosol and chemical hazards (Drs. Grinshpun, Reponen, and Reichard)

• **Specific Aim 3:** To quantify HHCWs' stress and burnout and their relationship with the exposure to physical, biological and chemical hazards (Drs. Barrett and Davis)

Building a model of factors that contribute to the overall stress
Pilot Studies

• Hindered by COVID-related restrictions on human studies (Yao Addor, Ashley Turner)

• Online survey on home healthcare workers stress and burnout due to COVID-19 (Dr. Clare Barret, Bowling Green State University)

• Cortisol measurements using self-sampling (Dr. Jun Wang)
  – Mail-in mail-out (MIMO) saliva collection kit; pilot test on UC faculty
  – The daily stressors will be recorded through diary entry; mobile app in the future.