

# 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.