TARGETED RESEARCH TRAINING

Overall Goal: Interdisciplinary research training in the frameworks of one common theme: develop and transfer emerging technologies and methods to improve firefighters’ health and safety.

The central objective: assess and control firefighters’ cardiovascular risk factors
Why firefighters?

• Heart attack is the most common cause of firefighter deaths.

• Work-related risk factors for cardiovascular diseases include:
  – Heat stress
  – Ultrafine particles
  – Inactivity and post-event stress
Specific Aims

• **Specific Aim 1:** Heat stress (Dr. Bhattacharya)
• **Specific Aim 2:** Ultrafine particles (Dr. Grinshpun)
• **Specific Aim 3:** Healthy behavior (Dr. Christianson)
Aim 1: Heat stress
Bhattacharya, PI (OH)
Kim (OSHE)
Shanov (OSHE)
Schultz (OSHE)

Aim 2: Particles
Grinshpun, PI (OH)
Reponen (OH)
Kim (OSHE)
Lockey (OM)
McKay (OM)
Christianson (ON)

Aim 3: Lifestyle
Christianson, PI (ON)
Bhattacharya (OH)
Gillespie (ON)
Benefits to 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.
- Working with motivated target population (firefighters).
- Thesis project, summer internship, special topics, independent research, or capstone project.
Students are required to:

• Present in the annual Pilot Project symposium (in October)
• Participate in the annual Research Capacity Building Workshop (in March)
• Present in the annual Students’ Research Findings Symposium (in April)
• Present their findings in other relevant conferences and seminars.
TRT GUIDELINES

- Selection of students (November and May)
- Submitting a new project (October and May 1)
- Continued review of existing projects (January-February)
- Student evaluation of the program and faculty evaluation of students.
- Contact Dr. Reponen (Tiina.Reponen@uc.edu) or other TRT faculty if you are interested in the TRT