WORKSHOP: SYNERGIES BETWEEN ACTIONABLE RESEARCH & IMPLEMENTATION SCIENCE

Tuesday, Oct. 10, 4-6 pm, 116 Kaven Hall

With Professor Janet G. Hering

Director Emerita, Swiss Federal Institute of Aquatic Science and Technology
Elected Member, U.S. National Academy of Engineering and of Academia Europaea

Program:

4:00	Welcome
4:05	Presentation by Prof. Hering: *Synergies between Actionable Research and Implementation Science*
4:30	Q & A
4:40	Erin Bryan (MS student, CCA): *Staffing Needed to Implement Climate Adaptation in Worcester County Agriculture*
4:50	Lightning talk, Varun Bhat (PhD student, CCA): *Implementing a Climate-Ready Workforce in our Society: Barriers and Considerations*
5:00	Breakout discussion
5:20	Return to group discussion
5:50	Reception, refreshments

Professor Hering's research interests include biogeochemical cycling of trace elements in natural waters, technologies for removal of inorganic contaminants from drinking water, and knowledge exchange at the interface of science with policy and practice. She is actively engaged in promoting diversity in academia, particularly in supporting women in academic leadership.

The goal of *actionable research* is to be useful in informing policy and practice. Fulfilling this intention requires research design that incorporates several aspects.

1) Desired project outcomes should be explicitly included in project design and planning. Target outputs that would foster such desired outcomes should be identified and incorporated as goals for the project.

2) Integration and synthesis should be explicitly identified as necessary activities throughout the project and as a goal for the project.

3) Milestones that can be linked to eventual uptake of project results should be identified and tracked during the project and also after its completion.

Designing *effective* actionable research requires serious attention to the needs and interests of potential implementation partners (and ideally direct involvement of their representatives) at formative stages of project development. These aspects are also characteristic of *implementation science*, which offers a variety of frameworks and tools to promote the sustainable uptake of research into practice. These overlapping approaches will be examined in the context of climate change mitigation and adaptation.

Time and resources must also be budgeted for knowledge exchange, which may benefit from involvement of (non-academic) knowledge brokers. Equitable acknowledgement of contributions made by project participants with varying background and expertise can help to foster the partnerships needed for effective actionable research. Contact with non-academic project partners and stakeholders can also support early career researchers in identifying alternative career tracks. Finally, diversity in project teams should be fostered as a source of innovation.