**Internship Opportunity- Project WiCCED**

Dates of internship: Fall 2023- May 2024

Location: Townsend 025, Center for Experimental and Applied Economics, this internship would also require some traveling across areas of Delaware that have a high concentration of septic tanks.

Number of positions available: 1

Faculty Mentor: Dr Kent Messer

Postdoctoral Mentor: Dr. Diya Ganguly

**Overview:** Project WiCCED is a multi-institutional project in partnership with National Science Foundation and the State of Delaware aimed at assessing major threats to Delaware’s water quality, and developing viable technological and policy solutions for meeting the challenges imposed by them. Research will involve a combination of laboratory, outdoor field work and/or computational environments. We seek a diverse group of undergraduate students to join our team in a welcoming, collaborative environment.

**Project Title:** The effects of social norm and threat enforcement nudges on willingness to pay for septic tank maintenance

**Research Description:**

This internship pertains to several water related issues and decision-making behavior around receiving information. We outline the project descriptions below:

**Addressing Concerns of Septic Maintenance in Delaware- A Behavioral Economics Approach to Water Pollution and Sustainability**

Onsite septic systems are prevalent across Delaware and the coastal plains of the Eastern United States. However, there is limited monitoring or enforcement of the condition of these systems. Some data suggest that between 20% and 80% of onsite septic systems are not functioning as intended and are causing significant environmental harm. One study of the Chesapeake Bay found that the estimated two million neighboring septic systems contribute about nine million pounds of nitrogen per year to the Bay. We are investigating homeowner behavior with respect to septic system maintenance and information seeking. Using an experimental approach, we will measure homeowner willingness to pay (or willingness to accept) for a pump out of their home system, or for information on the condition of their system.

**Student Learning Objectives: Professional and Research Skills**

This program will help students develop skills that foster future research interest and professional success.  This internship focuses on the development of the following professional and scientific skills.

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| Broad Professional Skills | Specific Skills |
| Planning and time management | Ability to set and complete specific goals of varying scope |
| Express ideas in writing | Write descriptions of research procedures, create a poster of your research, communicate via email professionally and in a timely and consistent fashion |
| Express ideas verbally | Discuss research activity in lab meetings, present poster at symposium |
| Work independently | Independent work ethic – work independently or with peers to problem solve  |
| Develop professional network | Work with lab team and broader Social Dimensions and Project WiCCED team to develop professional network, and utilize peer-groups to problem solve. |
| Maintain professional attitude and work principles (i.e. integrity, responsibility, diligence, following ethical standards) | Be on time, learn procedures, ask questions if unsure, respect everyone you work with, complete and maintain Institutional Review Board (IRB) Certification to work with human subjects in research |

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| Broad Scientific Research Skills | Specific Skills |
| Understand scientific terms  | Behavioral, experimental and environmental economics |
| Locate scientific articles and resources | Conduct searches for literature on environmental valuation |
| Understand research questions | Interpreting real world problems from a research lens  |
| Read and understand research articles | Summarizing research papers and their key contributions  |
| Apply research tools and techniques in research experiments  | Participate in the development of and data collection of surveys to quantify willingness to pay for water quality improvements.  |
| Understand, apply, and explain scientific concepts and theories | In lab meetings, with lab personnel, and during research symposium |

**Prerequisites:**

Introductory experience with economics is preferred.

**Work Environment and Expectations:**

Office/economics laboratory environment: Work will primarily take place in 025 Townsend Hall or on-line. Hours are flexibly determined between student and mentor. You will also be traveling to different parts of Delaware that have a heavy concentration of septic systems. This allows you to get a sense of the experiments the Center conducts and allows us to interact with you to understand what you hope to get out of this position.

**Stipend:**

$5,000 - Direct deposit is required.

**Funding Source:**

National Science Foundation EPSCoR Project WiCCED

**Application deadline:**

September 15, 2023

**How to apply:** https://ugresearch.udel.edu/PUB\_Program.aspx