







2015 Summer Research Mentorships in Climate Change and Dairy Production Systems.

Scientists associated with the Sustainable Dairy project are working across disciplines and institutions to identify alternative management practices for use in dairy production systems typical of the Great Lakes Region. Much of this work is focused on finding ways that the industry can adapt to the effects of climate change and mitigate the production of greenhouse gases.

Are you interested in learning more about this research?

Are you considering future studies or a career in agricultural science research?

We are excited to offer three research mentorships for undergraduate students in the summer of 2015. All internships will include competitive compensation, travel support, and professional development in skills that students will be able to use in future studies or careers in the sciences.

Project Location:

Cornell University, Ithaca, NY and Musgrave Research Farm in Aurora

Project Title:

Evaluating manure management in grain corn, grass and alfalfa to mitigate greenhouse gas emissions.

Internship Description:

Appropriate manure management is a critical element of sustainable diary production systems. This project will compare manure application sources, methods, and rates on crop yield, quality, soil pH, organic matter, nutrient accumulation and soil greenhouse gas emissions. The intern will be trained in sample collection, sample processing, and laboratory analyses of soil samples and will be mentored in summarizing data related to soil moisture, temperature and crop yield, and soil analysis.

Project Location:

Pennsylvania State University, State College, PA

Project Title:

Measuring & interpreting greenhouse gas emissions from soils and manure storage in dairy systems.

Internship Description:

This project will compare nitrogen sources for corn fertilization in dairy cropping systems with the goal of reducing on-farm inputs, environmental impacts, and nitrous oxide emissions. The intern will learn to measure nitrous oxide emissions and relevant soil data from a number of cropping system treatments. They will participate in data analysis and interpretation, and will also have the opportunity to assist with greenhouse gas measurements from a range of manure storage systems. *"To a large degree, agriculture's future lies with the students. It's gratifying to impart a strong set of skills to them, no matter their particular future direction."*

> Dr. Quirine Ketterings, Cornell University

Applications are due by March 1, 2015

Click Here to Apply or get more information at www.sustainabledairy.org

at

Questions? Email Allison Dungan, adungan@wisc.edu

Project Location:

University of Wisconsin - Madison Madison, WI

Project Title:

Impact of dairy cow nutrition on milk production, manure excretion and greenhouse gas emissions.

Internship Description:

This research aims to determine the effects of animal genetics and associated feed efficiency on cow performance, nitrogen efficiency and emission of methane with the goal of increasing dairy sustainability. The intern will be trained in sample collection, sample processing, and laboratory analyses of feed and biological samples as is typically conducted in nutritional studies with dairy cows. The intern will be mentored in summarizing and presenting data related to the research.