Undergraduate Research Opportunities: RENEWABLE ENERGY RESEARCH

The Renewable Energy Program at the University of Minnesota West Central Research and Outreach Center (WCROC) in Morris, MN is seeking two Undergraduate Interns for the summer of 2016. The students will be participating in research and outreach related to renewable energy and energy efficient systems for swine and other livestock facilities. The goal of the research is to decrease the amount of fossil energy consumed in production agriculture through the adoption of energy efficient systems and on-site renewable energy generation.

Undergraduate students majoring in economics, business, finance, engineering, mathematics, animal science, environmental science, or related fields of study are eligible to apply. Student interns will work with a team of experienced renewable energy researchers to complete research protocols, help develop outreach materials, and other tasks as needed. In addition, each student will be assigned an intern research project to complete over the course of the summer. Following completion of the student research, a paper will be written and a public oral presentation of the research results will be given by the student. Strenuous work in less than ideal conditions may occasionally be required. These are full-time, summer positions (40 hours per week) with a general duration from mid-May through the end of August 2016. Salary for the positions is $11 per hour. Limited housing may be available on a first-come, first serve basis at little or no charge.

For the first internship position, the research team will direct an undergraduate student intern to project the Return-on-Investment (ROI) for a suite of energy-optimized retrofits for swine production facilities. The student will also evaluate the impact of Minnesota’s new solar incentives on the ROI for swine producers. The student will develop a written report and provide a public presentation detailing the results of the investigation.

For the second internship position, the student intern will assist researchers in collecting data and evaluating results from a 27 kW solar photo voltaic system which was installed on a WCROC swine facility in the summer of 2015. The student intern will develop a written report and provide a public presentation summarizing the results from field tests of the solar PV system.

**Essential knowledge, skills and abilities**
- Undergraduate student majoring in the business, economics, science, or related fields
- Basic computer skills including experience with MS Office.
- Willingness / ability to work in a farm and office environment.
- Must be able to work cooperatively with others and accept direction from supervisors.

**Preferred knowledge, skills and abilities**
- Experience working in a research or agricultural environment.
- Experience in organizing and analyzing data.
- Demonstrated communication and professional writing skills.
- Interest in solar and other energy systems.

To apply, please send a resume and a cover letter to Mike Reese (email: reesem@morris.umn.edu).

For more information, please contact Mike Reese (reesem@morris.umn.edu) or Eric Buchanan (buch0123@morris.umn.edu). You may also call (320) 589-1711 and ask to speak with Mike or Eric.