SURES
Summer Undergraduate Research in Energy and Sustainability – May 23 – July 29, 2011
Application and Program Information
Application Deadline: March 4, 2011

Background
CWRU is a multi-disciplinary research intensive university with key faculty participating in leading energy related research programs. Energy has been targeted as one of the key strategic and academic thrusts of our university to include the Great Lakes Advanced Energy Institute. SURES is an educational and professional development program exposing students to cutting-edge research in energy and sustainability related topics and introducing them to industrial partners engaged in energy related issues of concern for regional and global industries. The SURES program engages students, staff, faculty, and community members in discussion and debate of energy issues, as well as provide students exposure to technological and policy driven solutions. Students participating in this program are better prepared to enter industry and make a material impact early in their careers.

Acknowledgement
The SOURCE office recognizes and is grateful to the Case Alumni Association (CAA) and the Dominion Foundation for their support of the SURES program.

Goals and Objectives
The Summer Undergraduate Research in Energy and Sustainability (SURES) will expose students to basic concepts in energy and sustainability research, as related to their discipline. Additionally students will learn about the broad area of energy research and attendant societal issues. Finally, students will be exposed to topics central to their professional development as future scientists, social scientists, and engineers. In summary the overall objectives of the program are:

- Expose students to fundamental concepts in energy such as renewable energy sources, energy, policy, and economics.
- Involve students in the research process
- Educate students in the broad area of energy research
- Train students in topics important to their professional development, including:
  - Laboratory Safety and Handling
  - Record keeping and intellectual property
  - Oral and Written Skills
  - Economic Policy Development
  - Team Building
  - Ethics

Eligibility
All undergraduate students at Case Western Reserve University who are continuing as undergraduates at Case in Fall 2011 are eligible to apply to the SURES program. Award recipients must be registered for fall classes prior to beginning the summer project. Projects must be completed at Case, and/or be under the supervision of a Case faculty member. Students who are awarded full research stipends ($3,500) cannot enroll in more than 4 hours of summer course work. Students must be present and/or involved in
their research during the entire 10 week program. While students may apply for funding for different projects, students may not accept funding for 2 different projects (that is, students may not be part of both the SPUR and SURES programs). If you are accepted into more than one project program, you must choose in which project you want to participate.

**The SURES Program**

The 2011 Summer Undergraduate Research in Energy and Sustainability (SURES) program is a ten week program beginning May 23 and continues through July 29, 2011. Each SURES participant will be paid a $3,500 stipend. During the ten week program, students will work closely with their research mentors on their proposed projects. In addition, participants are required to participate in the weekly seminar series.

**Sample Research Areas**

As many CWRU students know, many faculty members in many departments are engaged in energy related research. If you need assistance in identifying a mentor, please contact sheila.pedigo@case.edu. Previous project topics and mentors are posted on our website.

**Weekly Seminar Series**

The weekly seminar series will be divided into two components (1) SURES weekly Thursday seminar (a) featuring industry and faculty guest speakers and (b) student presentations about their work ; (2) SOURCE Tuesday Lunch & Learn Seminars (general education seminars). SURES participants are required to attend all of the SURES weekly seminars. SURES participants are required to attend 4 of 8 of the SOURCE Tuesday Lunch & Learn Series.

1a) Faculty and Industry Speakers

Previous summers’ speaker series were a great success attracting faculty and graduate students as well as undergraduate students. Past schedules are included online. This year’s schedule will be at least as inviting.

1b) Student Presentations

Students will be expected to present about their research projects and their most recent results. The purpose of these presentations is three-fold: to teach the students ways to organize the results and present it to their peers in a concise manner, to expose students to different areas of energy research, and to improve their presentation and communication skills.

2) SOURCE Tuesday Lunch & Learn Seminars

Finally, the SOURCE office provides general educational seminars to all summer research students throughout the summer. Topics include:

- Utilizing Research Databases
- Ethics and Research
- Graduate School Application Process
- How to Develop and Present a Poster

**Application Procedure**

*A completed application file consists of the following:*

1) The SURES summer funding application form
2) An unofficial academic transcript
3) A brief (approximately 3 pages) proposal that addresses the following:

- Project Title, Goals and Objectives, Project Description (including information about methodology), Discussion of time commitment required for the project, Discussion of how this project is part of the student’s overall educational plan and goals, Discussion of how this project meets the goals and
objectives of the SURES program, Budget Justification – If the student is requesting materials support, please include a detailed description and costs of materials needed.

4) A resume (this is required…your application will not be considered without it.)
5) The Faculty Sponsor Form (also available online).

Students may also want to review the funding hints on the SOURCE website: http://www.case.edu/provost/source/opp/SOURCEFundingHints.pdf

Deadline and Notification
The deadline for submitting a completed Application, which includes application form, proposal, and faculty support form, is Friday, March 4, 2011. It is our goal to select and notify students for this program in early April. Please send the application to the SOURCE Office, Sears 451, LC7212. Or email to: source@case.edu.

Please do not hesitate to contact the SURES program director if you have questions.

Sheila Pedigo
SOURCE Director
sheila.pedigo@case.edu
216.368-8508
I. Identification Information
Student Name: ________________________________________________________________

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Email Address ________________________________________________________________
Phone ________________________________________________________________
Home State ________________________________________________________________
Expected Graduation ________________________________________________________________

Academic Major 1 ________________________________________________________________
Academic Major 2/Academic Minor ________________________________________________________________

Cumulative GPA __________ Are you a member of WISER? __________

II. Project Information
Project Title: ________________________________________________________________

Faculty Sponsor ________________________________________________________________
Email ________________________________________________________________
Sponsoring Dept. ________________________________________________________________

Expected number of hours per week to be spent on project? __________

Budget Information
Award amounts are up to $3500.00 for full time commitment.

Total Amount Requested ______________________________

Total amount requested from other sources including faculty sponsor support ______________________________

List all other summer funding sources and or project programs for which you have applied (e.g. SPUR; SOURCE Summer Funding, Experiential Learning Fellowship in the Arts, Humanities, and Social Sciences; etc.).

III. Project Commitment
Signature below (or emailing information) documents agreement to commitment.

Student Commitment
• To participate in the proposed project
• To participate in the SOURCE Undergraduate Symposium & Poster Session, December 2011 or Spring 2012.
• To attend and participate in the weekly SURES meetings, including student presentations and guest speakers
• To attend at least 4 of the SOURCE Tuesday Lunch & Learn Seminars
• To prepare final written report
• To prepare project evaluation

Faculty Commitment
• To supervise and direct the student’s work.
• To prepare project evaluation.

_________________________ Date ___________________________
Student Signature

_________________________ Date ___________________________
Faculty Signature
Faculty Sponsor Form

Student Applicant: Please complete the top part of this form and forward the form to your faculty sponsor.

Applicant’s Name & Email Address

Faculty Sponsor’s Name & Email

Department

Check one:  
_____ I waive my right to inspect this form.

_____ I do not waive my right to inspect this form.

Applicant’s Signature ________________________________ Date ____________________

Attention SURES Faculty Mentors:
The SURES program is funded by donors. These donors often attend our weekly lunch seminar, which features industry and faculty guest speakers. The SURES director expects that our faculty mentors will plan to attend at least 4 of the 8 lunch seminars to assist with the discussion and to meet with those who are funding the program. Please do not hesitate to contact Sheila Pedigo (sheila.pedigo@case.edu) if you have great concerns about this expectation.

1) How long and in what capacity have you known the applicant?

2) Please describe why this proposal deserves to be funded. You may attach an additional page if necessary.

3) Is the applicant’s proposal related to your own research? Yes No

If yes, how much do you plan to financially contribute to this applicant’s work and how will this financial support be utilized? Please note if you cannot financially contribute toward this student’s work.
4) Please complete the following:

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<th>Strongly Disagree</th>
<th>Strongly Agree</th>
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<td>The applicant is capable of executing this proposal.</td>
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<td>The proposed budget for this project is justified.</td>
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<td>Execution of this proposal will broaden the applicant’s experience.</td>
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<td>Execution of this proposal will contribute to the applicant’s education.</td>
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<td>Execution of this proposal will contribute to the applicant’s future plans.</td>
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5) Please add any other comments in support of this applicant’s proposal.

Please email completed form to source@case.edu or through campus mail to SOURCE, Sears 451 or LC 7212 no later than Friday, March 4, 2011.