Summer Undergraduate Research Experience (SURE) at Emory University

Atlanta, GA
May 31 – August 4, 2016

<table>
<thead>
<tr>
<th>PROGRAM DESCRIPTION</th>
<th>AWARDS</th>
</tr>
</thead>
</table>
| The Undergraduate Research Program’s Summer Undergraduate Research Experience (SURE) Program has trained undergraduates in cutting-edge science research, ethics, and professional skills for 26 years. During the ten-week summer program, SURE Fellows live on the Emory campus and conduct full-time mentored research. Fellows receive 20 hours of research ethics training and have the opportunity to develop crucial skills for success in PhD-level study. Fellows may attend informal lunches with Emory faculty scientists throughout the program. Fellows present their research in a formal Poster Symposium at program close. The SURE Program receives support from multiple funding partners, including the generous support from individual faculty mentors and the following: CCHF, CNTG, Endocrine Society MAP, GDBBS, IMSD, NSCOR, PERSE, SUPERR, Oxford College, Emory Scholars, and Alzheimer’s. | • financial support for 10 weeks
• on-campus housing |

Applicants will be notified of their status by April 15, 2016. Details of financial support depend in part on funding partner (see partner websites for details and contacts).

Participants may be eligible for travel assistance to present their research at a future professional meeting.

<table>
<thead>
<tr>
<th>STUDENT RESPONSIBILITIES</th>
<th>MENTOR RESPONSIBILITIES</th>
<th>APPLICATION REQUIREMENTS &amp; DEADLINE</th>
</tr>
</thead>
</table>
| • dedicate 40 hours/week for 10 weeks to their research projects
• participate in all weekly seminars, workshops, discussion groups and activities as scheduled
• post a research proposal by the third week of the program
• participate in laboratory meetings, journal clubs, safety training, and other such academic activities as requested by the mentor
• present a poster during the SURE poster symposium
• routinely consult the updated program schedule
• complete a program evaluation
• update program organizers of future academic developments for program assessment purposes | • communicate expectations to the student (work hours, how performance will be evaluated, share laboratory protocols)
• help define the student's project goals and deadline
• meet with the student at least every other week to provide feedback and guidance on the progress of the student's project
• offer guidance and constructive criticism while the student prepares his/her poster for the end-of- program symposium
• designate additional contacts within the laboratory or department to assist the student if the mentor is temporarily unavailable
• attend the SURE poster session
• apply for NSF or NIH grant supplements if at all possible | ** online application, see http://www.cse.emory.edu/SURE (available December 2015)
** course transcript (unofficial is fine)
** research proposal describing work to be accomplished over the summer (guidelines attached)
** statement of purpose
** resume
** letter of support from the faculty mentor who will supervise the student’s research |

Application materials must be submitted online by midnight, February 1, 2016.

For additional program information, visit http://www.cse.emory.edu/SURE
SURE Program
Guidelines: WITH Research Proposal

The following materials must be received by midnight, February 1, 2016.
All materials will be submitted online (application available December 2015).

Application Instructions

**Log on to the CSE website.** Go to the heading APPLY to create a login/password that enables you to enter academic, demographic and contact information. Check on the status of your application. Save but do not submit your application until you have confirmed that every item is correct. You may save work over many sessions, but once you submit you may no longer make changes.

**Enter contact information for your letter writer (proposed research mentor).** You can send a request to the recommender through the application system, as well as reminders, if necessary.

**Upload your Transcript**

**Upload your Resume**

**Upload Statement of Purpose**

**Upload Research Proposal**

Application Tips

- **LETTER OF SUPPORT:** The faculty mentor with whom you plan to work should write this letter. Provide a copy of these guidelines to your mentor to ensure he/she understands the program’s schedule and commitments. Your mentor will be better able to write a strong, supportive letter if he/she is familiar with your laboratory performance, work ethic, academic background and intended career path. If your mentor has applied for an NSF or NIH supplement that might support your work, have him/her mention this in the letter. We strongly encourage all eligible mentors to apply for supplements. If there are things you wish to address that don’t “fit” anywhere else in the application, let your letter writer know.

- **SURE LAB PLACEMENT:** Provide contact information for the faculty mentor (PI) sponsoring your SURE research proposal. You certify that you developed this proposal with your PI’s input.

- **COURSE TRANSCRIPT:** an unofficial transcript is acceptable

- **FUNDERS:** Consult with your PI about which program might fit your research interests. You can only choose one funder.

- **RESUME:** One page maximum length. You may wish to include academic awards and honors, including honors projects, independent research experiences, publications and presentations, volunteer and extracurricular experience, internships and work experience, and membership in professional and academic organizations.

- **RESEARCH EXPERIENCE:** List relevant research experiences. Include the title of project, your specific responsibilities and role, length of experience, supervisor, and location.

- **STATEMENT OF PURPOSE:** One page explanation of how participation in SURE will advance your academic & career goals. Specifically address how research fits into your goals.

- **RESEARCH PROPOSAL:** Emory students and returning students from other institutions must submit a proposal as part of their application. Visit our web page at [http://www.cse.emory.edu/projects/students/researchmentors.html](http://www.cse.emory.edu/projects/students/researchmentors.html) for suggestions on how to identify a research mentor. The research proposal may be your original idea, it may be a project proposed by your mentor, or a combination of both. Your proposal should follow the guidelines on the next page. Remember to ask if you are eligible for support under supplements to your mentor’s research grants (see attached note regarding NSF and NIH grant supplements). The final version must be approved by the mentor.

Selection and Award Process

A selection panel will identify finalists; notifications will be sent via email. We will make offers by April 15th.

If you have any questions about your SURE application, please email ec.sure@emory.edu.

Additional program information is available at [http://www.cse.emory.edu/SURE](http://www.cse.emory.edu/SURE)
SURE Research Proposal Guidelines & Checklist

**Length:** 3 pages maximum (with one additional page allowable for figures but not required); your proposal should include all items outlined below.

**Margins and Font:** 0.75 inches minimum margins; 10 point and larger

**Spacing:** Single or space and a half

**Other:** applicant's name and page number should appear on each page

You will need to upload your completed proposal to the SURE application website. Consider saving the file in pdf format to ensure your chosen formatting is preserved.

**Applicant's Name:**

**Applicant's E-mail address:**

I. Proposal Title

II. Proposal Abstract (200 word max.)

III. Proposal Detail
   
a. Background

   b. Clearly stated hypothesis or project goal

   c. Methodology / Experimental design

   d. Data analysis (proposed statistics)

   e. Foreseeable technical difficulties

   f. Timeline (week-by-week breakdown of activities)

   g. Project goal – whether publication, presentation, senior thesis, etc.

   h. References / Literature cited (5 items maximum)

IV. Resources Needed – briefly address the following:

   a. Technical assistance (Expertise contacts for background, statistical analysis, etc.)

   b. Budget (Briefly outline the actual cost of your research; ask your mentor to estimate the cost of reagents, access to facilities, animal care, etc. This is an awareness exercise, not a funding request.)

   c. Other logistics (transportation, time constraints, assistance or equipment needed)

   d. Institutional approval – radiation safety training, use of animals training, scientific collection permits, vaccinations or titers required, etc. Your faculty mentor will help you determine what is needed. All requirements must be met before you begin working on your project.

V. Mentor's Name and Department (You certify that the mentor has seen the final draft of the proposal and his/her approval is implied with the submission of a letter of recommendation)
Mentors: Please Seek Student Support via Grant Supplements

Last updated: November 2014

The SURE program at Emory University began in 1990, supporting 10 Emory biology majors. As of 2014, SURE has served over 1500 participants (~60% of which were Emory College students). Most of these SURE awards were funded by the Center for Science Education’s Howard Hughes Medical Institute (HHMI) grants. The number of Emory applications has grown significantly in the last 5 years (to more than 500 in 2014). Mentor contributions and collaborations with new funding partners have allowed us to extend many more offers than otherwise possible. PIs with existing grants may be eligible for supplemental awards to their students. Please see below.

Mentors: If you have submitted a supplemental request for your SURE applicant, please note this in your letter of support. For questions regarding faculty grant supplements, contact Dr. Pat Marsteller at pmar@emory.edu.

Faculty Grant Supplements support undergraduate research year-round (including summer).

The National Science Foundation (NSF) and National Institutes for Health (NIH) make competitive awards to scientists in a variety of disciplines. Many of their research grants allow the primary investigator (PI) to request additional funds beyond the original award for the purpose of creating research and training positions for undergraduate and graduate students, among others. We are asking Emory faculty to seek this kind of funding when available, to help us create more paid opportunities for Emory undergraduate scientists. Note that this funding can support research year-round, not just during the summer. Please initiate your supplement request asap, since it can take months for the funds to become available.

- NIH's Research Supplements to Promote Diversity in Health-Related Research are open to faculty holding NIH grants (see http://grants.nih.gov/grants/guide/contacts/PA-12-149_contacts.html), and will fund underrepresented minorities, students with disabilities, and students from disadvantaged backgrounds. Supplements can be submitted at any time. Recipient students must be US citizens or permanent residents. Before submitting, please contact the current grant administrator at the NIH at http://grants.nih.gov/grants/guide/pa-files/PA-12-149.html - 3. Additional Information. Per the first link above, applications can be received at any time, applications should be done within 6 months of the projected starting date, and notifications will be made within 10 weeks of submission (i.e., please complete application by mid-March to ensure funds will be available as SURE begins).

- NSF Research Experience for Undergraduates (REU) Supplements are available to PIs with ongoing research projects, and can be included in new grant submissions and renewals. Recipient students must be US citizens or permanent residents. For a description on how to submit a supplement request via FASTLANE (or add REU lines to a grant you are submitting or renewing), please copy and paste the link http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund. International REUs will support collaborations where students may work abroad. Please contact your grant program officer for submission deadlines and notification times (http://www.nsf.gov/crssprgm/reu/reu_contacts.jsp).

Student Grants by professional organizations may also be available.

In recent years, several SURE students have received partial support from organizations such as the National Fragile X Foundation (http://www.fragilex.org/research/funding-opportunities/).

Students: consult your mentor about potential funding through professional organizations. Also, take advantage of your Emory access to create profiles and be alerted to funding opportunities through GrantForward (https://www.grantforward.com/index).

Please share this information with your potential SURE mentor. Dr. Gillian Hue and Dr. Folashade Alao can provide a brief program description and assist mentors in determining how much funding to request to cover housing, stipend, and registration fees.