

Marjorie Neuhoff Summer Science Research Communities Grant Summer 2014

Goals: The Summer Science Research Communities will provide summer research opportunities for a maximum of six students working with a maximum of three faculty on research projects in any configuration. The hallmark of the program is regular weekly meetings of all participants to present and discuss their work as they progress throughout their projects. While the research is a valuable educational experience, the regular interaction with faculty and students outside the narrower field of science research will encourage cross-pollination of ideas and hopefully some integration of knowledge. Students and faculty will receive a stipend, as well as funds to support their work and student travel.

The College has begun work on establishing a Center for Women in Interdisciplinary Science and Mathematics, or CWISDM. This Center will sponsor many opportunities to showcase interdisciplinary and collaborative science. This Center will expand to include other scientific disciplines which have connections with natural science, such as mathematics, speech pathology and neuroscience. Among its activities will be the solicitation, review, and recommendation of applications for the Marjorie Neuhoff Summer Science Research Communities.

Eligibility: For the summer ahead of us, i.e. 2014, any full-time faculty member in Biology, Chemistry or Physics is eligible to participate. They will function as faculty mentors with students on a distinct project. Students must have completed work at least through the sophomore level (that is, has junior standing in their major). They must have had course work or experience that supports their role in the project.

Application process:

- 1) Project plan – Should describe the overall project and include descriptions of plans for each participant (faculty and students). Faculty are expected to both direct the project and provide mentorship in the program. Plans should demonstrate how the student will be an active participant in the research. Include in the proposal a plan for how the project team will foster the collaborative aspects of the Neuhoff program.
- 2) Faculty-student teams who plan to collaborate on a project are encouraged to submit a joint application rather than individual applications; however, they should also clarify the distinctiveness of each faculty-student project.
- 3) Schedule – include a broad preliminary schedule of the work to be accomplished over the 10 weeks
- 4) Proposed budget –Should include number and name of students and faculty proposed, professional meeting to attend, and possible materials needed. Interesting, collaborative and/or creative combinations, which preserve the distinctiveness of each faculty-student project, are encouraged.

Applications will be reviewed by a committee of faculty (in the departments of Biology and Chemistry and Physics for Summer 2014 applications) and the Director of CFAI. This committee will make recommendations to the Dean of Faculty regarding the finalists for these summer communities. The configuration of the review committee will be recommended by the chairs of the Chemistry/Physics and Biology departments from the faculty in the departments to the Dean of Faculty. Projects will be judged on their scientific merit, the quality of the proposal and the integrative possibilities of the proposal.

Start Date: In order to optimize the inter-group interactions, projects should all begin within one week of each other and have duration of 10 weeks.

Group Meetings: Group meetings are expected to occur once per week so that all participants will have an opportunity to present to the total group. A small amount of money is provided for food/refreshments for the meetings. Use of this money is at the discretion of the faculty mentors. The presentation styles and organization is left to the faculty mentors to decide. Failure to meet may result in disqualification of the faculty for future awards under this program. Initial meetings are encouraged to focus on laboratory safety and ethics, while others should be focused on the research. If the faculty mentors wish to invite others to participate, they are encouraged to do so.

Post-project presentations: Students will present the results of their work in fall semester following their summer work. This will be a poster session scheduled jointly by the departments. All of the Saint Mary's community will be invited to attend, and especially chemistry, physics, and biology faculty and students, to further disseminate their work and the benefits of the program. This poster session may also include work of students other than those of the program.

Materials and Equipment: Money is available for the purchase of materials and small equipment needed to conduct the research (up to \$500 per student). While the money is normally distributed proportionate to the number of student participants, teams are encouraged to spend the money collaboratively and creatively, although this is not a requirement.

Travel: A specific amount of money is provided for student travel to a disciplinary meeting to present the results of the work. Money will be provided to pay for meeting registrations, travel costs, and lodging. Travel is expected, but not required. Travel money cannot be redistributed for other uses. Faculty mentors are encouraged to attend the meeting with the student.

Other Work: The time devoted to the research in these summer community project approximates a full-time commitment. Normally, faculty may not teach during the summer. Students may not enroll in courses (including online) or commit to internships during the research period.

Stipends and Benefits:

- Faculty will receive a taxable stipend of \$5000. This requires presence on campus to direct the students for 10 weeks.
- Students will receive a \$4000 taxable stipend plus on-campus housing.

Application

To apply for this opportunity:

Please complete the application found at:

<http://www3.saintmarys.edu/chemistry/stem-scholarships>.

If required, please make yourself available to attend an interview with the Neuhoff Summer Research Communities Review Committee.

Deadline: March 21, 2014