

Judith A. Strong Scholars Summer Research
College of Science, Health, and the Environment
Application Cover Page
Due the third Friday in February

To be filled out by the student(s):

Student Researcher: _____
If Group Project,
names of group
members: _____
Project Title: _____
Dragon ID Number: _____ Major: _____ Minor: _____
Expected Graduation Date: _____
Email: _____ Phone: _____
Address: _____
Faculty Mentor: _____
Project Begin Date: _____ Project End Date: _____

Total Funds Requested:

Have you applied for or received support for this research project from this committee or another source?

Yes No If yes, please provide the details of that proposal/funding and the results of this work.

Compliance Information: (Check one)

- This Project involves procedures that require Institutional Review Board/Institutional Animal Care and Use Committee approval and will be conducted under already-approved protocol # _____
- This project involves procedures that require Institutional Review/Institutional Animal Care and Use Committee Approval; such approval is in process. (Approval must be finalized before funds can be spent.)
- This Project does not involve procedures that require Institutional Review Board/Institutional Animal and Use Committee Approval.

Student Signature: _____ Date: _____

To be completed by the Faculty Mentor:

I have reviewed this proposal and discussed it with the applicant and confirm that:

- ___ the necessary resources are available, pending funding of this proposal,
___ the student has allotted sufficient time for the funding requested
(i.e. outside work, summer school, weddings, etc. have been considered)
___ the student(s) is/are prepared to undertake the research described.
___ Furthermore, I agree to serve as an active Research Advisor during the duration of this project.

Faculty Mentor: _____ Date: _____

Submit applications electronically to CSHE office, cshe@mnstate.edu. Deadline to submit is third Friday in February.

Strong Scholar Program Overview:

Strong Scholars Summer Research provides undergraduate science students (see specific eligible disciplines below) with a supported opportunity to engage in hands-on, faculty mentored research over the summer term. Awardees work closely with a faculty mentor to design and execute a focused summer project, allowing them to gain dedicated research time, access to university resources, funding for research supplies and travel to research sites, as well as stipends for hourly work. Each Strong Scholar awardee is required to present their work at campus based research events, including the MSUM Student Academic Conference (SAC). These funds are made possible through the generous support of the Judith A. Strong Endowment. Please read below for eligibility requirements and program guidelines.

Applicant Eligibility:

- The project must be endorsed by a faculty supervisor, as indicated by the completed and signed Faculty Mentor block on Application Cover Page. *Please do not submit additional letters of recommendation or faculty endorsements of the project.*
- The applicant must be willing to present their research results at the MSUM Student Academic Conference in the following spring semester.
- Recipients must be majoring in a degree program in Biosciences, Chemistry and Biochemistry, or Physics and Astronomy.

Guidelines for Grant Use:

- Funds must be used for requests outlined in budget of project.
- Use of human subjects or animals in the research must receive approval by the appropriate university committee prior to beginning the project.
- Funds may be used for software, equipment items, other research supplies, travel to and from research sites, and for stipends for hourly work. Funds to support travel to conferences to present results of research must be requested separately through the Travel Support Application found on the CSHE website.
- Funds must be expended following regular University guidelines. Materials purchased become the property of the University.
- Maximum award amounts for supplies are typically \$1000.00.
- Reimbursement rate for travel to and from research sites is 70¢/mile, (rates subject to change).
- Stipends will be paid at the rate of \$16.00/hr up to a maximum of 40 hours per week, up to 10 weeks during the summer (\$6400), (rates subject to change).
- Projects that run beyond the timeline outlined in the proposal require special permission from the dean's office.
- Award amounts are dependent on the number of proposals submitted, funds available and competitiveness of proposals. **Funds must be spent by the end of fall semester.**

Review Criteria:

- Project description is clearly written by the student in their own words, well designed and cost-effective.
- Student shows a strong interest in the project, and it fits into the student's academic and/or career plans.
- Project is realistic for the student's background, the time frame, and the amount of funding requested.
- Faculty supervisor supports the project, has an appropriate background for supervising the project, and will actively supervise the project.
- Project is likely to result in a paper or academic project that can be presented to a professional/peer audience and/or published in a scholarly publication.
- Recipients will demonstrate strong scientific potential as a researcher, and in their proposed project.
- Although they may be related to larger projects already in progress in a faculty mentor's lab, proposals must represent independent scientific ideas and work to be done by the student.

Guidelines for writing your research proposal:

Please write for an interdisciplinary audience of your peers, remembering that not every reviewer is an expert in your area of research. It should be written by you, but should be discussed with your mentor. The proposal should not exceed five pages in length, including the references cited. It should be double-spaced, have one-inch margins, and use a font 11 pt or larger. It should consist of the following sections:

- **Title:** On cover sheet.
- **Project Summary:** The Project Summary should state the objectives of the project, the methods to be used, and the “intellectual merit” of the work being proposed. This section should be 200 words or less.
- **Introduction:** This section should state the research problem, provide background information, and explain the goal of the research. Be sure to discuss the significance of the research and provide a prediction of the results of your work and your hypothesis. You should provide references from the literature in your field.
- **Methods:** This section should describe the experimental approach to be taken and any equipment needed. Your explanation of the methods should allow a reviewer to understand how your experimental approach will allow you to address the research problem you stated in the introduction. If two or more people are going to be working on the project, please state the role for each person.
- **Budget:** Use a table format to list your itemized budget, include description of items, quantity, unit costs and subtotal cost, and the total cost of your project. Include a brief justification of why each item is needed. Money may be spent on approved items only, as determined when the grant is awarded.
- **Project Time Line:** Use a table format for this section. Indicate the period of the proposed work, noting proposed landmarks throughout the period including when the project will be completed, when and where you will present the results of your work, and when your final report will be submitted to the committee. Please be realistic – if you are taking summer classes, etc. during your research, the hours you can realistically dedicate to research during that time may be substantially less.
- **Bibliography:** This section will contain the citations for each of the key literature references included in the Introduction and Methods sections. It is suggested that you use the format most appropriate for your discipline when listing your references.