

College of the Sciences and Mathematics Undergraduate Research Award
DESCRIPTION AND ELIGIBILITY

Deadline Friday, March 4, 2022 at 11:59 PM.

Applications, including the cover page, narrative, supporting letters, and all other necessary documentation and signatures must be submitted by the research mentor, as a single pdf file email attachment with subject line: Undergraduate Research Award to csm@wcupa.edu. Electronic signatures are acceptable. The department chair should be cc'd on the submission. Incomplete or piecemeal applications will be returned without review.

NOTE: Applications that do not use the current format will be rejected without review—student must use the RFP dated for the current semester in the footer. Please do not use older forms/format as questions may have changed.

The College of the Sciences and Mathematics has established an undergraduate student research fund to support student research projects and travel to professional meetings. This fund is supported by the Ruth Blanchard endowed fund, faculty/staff contributions, and Dean's Office funds. The purpose of the fund is to support and encourage student research and professional activity under the guidance of sponsoring faculty members. *Undergraduate majors in the College of the Sciences and Mathematics* are invited to apply for funding for the following purposes.

- to buy materials, supplies, books or small equipment for a specific student research project
- photocopying necessary for a specific student research project
- the cost of data collection or data analysis for a student research project (ex. educational software or data analysis program)
- publication costs for publication in a professional journal
- travel related to a special research project, such as to a library, archive, or museum, or to interview/work with a noted scholar or expert
- travel to a workshop or seminar which will provide special knowledge or skills for a research project
- travel to present a paper or project at an upcoming professional conference in the current or next semester (assuming the student will not have graduated before the travel): Spring 2022 applications cover upcoming conferences/meetings that occur in SPRING 2022 or SUMMER 2022. Presentation must be accepted at time of proposal submission, and documentation of acceptance must be provided with the application (e.g., email notification that abstract was accepted). [See appended Grant Cycle document]
- reimbursement for travel already completed in the current or just-previous term (providing that evidence of the presentation and receipts for expenses are included and that the student has not yet graduated at the time of award). Spring 2022 applications cover conferences that occurred during FALL 2021, WINTER 2021/22, or prior to the application due date in SPRING 2022. [See appended Grant Cycle document]

Amount of Award

The **maximum award is \$500 per request**; that is, one individual may request up to \$500, and one group may request up to \$500 for a group project.

Eligibility and Restrictions

Guidance for preparing a competitive proposal is included throughout the application. Students and sponsoring faculty are strongly encouraged to read and follow the guidelines carefully. Incomplete applications will not be considered.

- ***The funding is restricted to College of the Sciences and Mathematics undergraduate majors with a minimum GPA of 2.5. The research mentor should explicitly note the student's GPA in their support letter. Funding is not provided to majors from colleges other than CSM.***
- Students must be registered for classes when they apply and not yet graduated when they receive the award; students who have graduated may not apply.
- **Graduate students may not apply.** Graduate students seeking funding should apply for the CSM Graduate Research Award or apply to the Graduate Dean for GSA funds for research and travel.
- Students may not apply for more than one award per semester.
- Students who receive a CSM Undergraduate Research Award cannot apply for the next round of undergraduate awards (e.g., a student who gets an award in Spring 2022 cannot apply again [for a new project] until SPRING 2023). All reporting requirement for previous awards must be completed for a new application to be considered.
- The fund supports students working on individualized, long-term research projects of at least one semester in duration, under the careful supervision of a faculty member. Ordinary term paper, laboratory, and other course related assignments or costs associated with required internships are not eligible for support. Course projects required for an entire class and designed by the professor are not eligible for support.
- If two or more students are traveling to the same conference and have the same professor as a mentor for their research, they are considered to be a group and may apply for only one award for the group (rather than separately as individuals). If the students have completed different research projects under the same mentor, each project should be fully described in the application.
- Students who are presenting at an upcoming conference in the current or immediately subsequent semester (as described above) are eligible for funding provided a copy of the abstract acceptance letter/email is included with the grant proposal. Proposals without evidence of acceptance will not be considered.
- Student's past travel to present at a conference in the current or just-previous semester (as described above) may be reimbursed, provided evidence of presentation (e.g., copy of abstract in the program) and receipts for all items in the budget are included with the grant proposal. Proposals without evidence of presentation and receipts will not be considered.
- Conference attendance without presentation is not eligible for funding.
- Students whose faculty advisor for a particular project is currently serving on the awards committee may not apply.
- Duplication with any other internal or external submitted proposals is not allowed. Please contact Dr. Ashlie Delshad at adelshad@wcupa.edu with questions.
- Compliance with the established ethical guidelines specified by West Chester University must be explicitly described for all human and non-human animal research:
<https://www.wcupa.edu/research/researchCompliance.aspx>
- Awardees must present results of their sponsored research at a research-based event (*either a Fall or Spring University Research Day or CSM All Sciences Poster Competition*).
- Awardees must provide a digital copy of their poster to the Dean's Office (limit size to 3 MB).

Notification

The Dean's Office will notify students within four weeks after the appropriate deadline. Students who receive awards will be given instructions on accessing funds.

Reporting Requirement

After the project has been completed, the student is required to submit a brief (500 word) final report and copy of poster detailing what has been accomplished and how funds were expended to the CSM Dean's Faculty Assistant for Student Issues (send to csm@wcupa.edu with the subject line *Undergraduate Research Award Report*). The final report must detail any additional sources of funding for the project. The sponsoring faculty member should sign the report to indicate that they reviewed it.

SAMPLE

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COVER PAGE

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Applications, including the cover page, narrative, supporting letters, and all other necessary documentation and signatures must be submitted by the research mentor, as a single pdf file email attachment with subject line: Undergraduate Research Award to csm@wcupa.edu. Electronic signatures are acceptable. Note that department chair signatures are no longer required, however, the chair should be cc'd on the submission. Incomplete or piecemeal applications will be returned without review.

NOTE: Applications that do not use the current format will be rejected without review—student must use the RFP dated for the current semester in the footer. Please do not use older forms/format as questions may have changed.

Name, address, email address, & telephone number of applicant(s):

Student's CSM major:

Name and department of CSM faculty mentor:

Title of proposed project:

Amount requested:

This proposal is for (please check all that apply):

- Completion of a research project
- Travel to an upcoming conference (student[s] must present, proof of acceptance included)
- Reimbursement for completed conference travel (student[s] must have presented, proof of presentation and receipts included)
- Combination of study completion and travel to present this same study

This proposal (for travel requests this refers to the research project):

- Does not involve human or non-human animal subjects
- Involves human subjects
 - IRB approval #: _____ IRB approval date: _____
 - Application submitted, approval pending
 - Does not require IRB approval (provide explanation in narrative)
- Involves non-human animal subjects
 - IACUC approval #: _____ IACUC approval date: _____
 - Application submitted, approval pending
 - Does not require IACUC approval (provide explanation in narrative)

Project Beginning date: Ending date:
(For research projects give approximate dates during which the research will be carried out; for travel give dates of the conference)

All of the undersigned agree to accept responsibility for the conduct of the project, the expenditure of the funds provided, and the filing of a final project report with the Dean's office.

CSM Student's Signature

Date

Sponsoring Faculty Signature

Date

SAMPLE

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NARRATIVE

The proposal narrative should address explicitly all of the following points, using the given organization (please include the section headings and numbering, but remove the guideline information (i.e., non-bolded text)). Competitive proposals will be well written, well formatted, and free of grammatical errors and typos.

- I. **Budget.** Limit budget plus justification to one page max.
 - i. **Expenses:** Should be itemized as specifically as possible (e.g., manufacturer of equipment and/or vendor, number and size of glassware, airfare from where to where, hotel name if known and for how many nights).
 - ii. **Budget Justification/Explanation:** Justification must include details about any additional source(s) of funding for this project (either received or applied for). It might also include information such as how a given piece of equipment or a reagent will advance completion of the project, were cost comparisons done/how was vendor chosen, how will unmet costs be covered so the project/travel can be completed if the award is made, and so on. In short, provide information to support the idea that the funds are necessary, will be used responsibly, and that there is no duplication of funding.

- II. **Narrative Description** of the proposed research project (2 – 5 pages), which addresses all of the following sections. IMPORTANT: Even if the proposal is for travel, the narrative should describe the research conducted/being presented, not just the conference. In any case, the narrative should be written with a general, non-expert but science-literate audience in mind. Avoid jargon and acronyms (unless defined first); explain all terms; provide enough detail for the reviewers to understand the project and to assess the scientific merit of the research and its likelihood of success. Check for grammatical and typographical errors. All sections should be addressed using the following organization (please include these section headings and numbering, remove any non-bolded guideline information).
 - i. **Purpose (1-4 sentences).** The main focus here should be on the purpose of the research. If the proposal is for travel to a conference, this can be stated in one sentence if desired, but the purpose of the research is the primary concern.
 - ii. **Background and significance, including preliminary results if applicable.** A strong, literature-based justification for the importance of the work should be provided, either from an applied or basic research perspective. Citations should be included and full references provided in a standard style such as APA or MLA. Clear statement of the hypothesis should be provided, as appropriate.
 - iii. **How the project will be carried out (Design and Methods).** The research design and methods should be clearly outlined, including the sample, recruitment procedures (if relevant), study procedures and materials, and ethical precautions (i.e., if the research project involves human or non-human animal subjects, detail how it conforms to the Ethical Guidelines for research at West Chester University; other ethical considerations as appropriate). Analysis plan should be specified. It should be clear that the methodology is reasonable given the stated timeframe and available resources. If the proposal is for funds to support the research, how the funds will aide the methodology should be specified.

- iv. **Expected or achieved results.** If the funds are to complete the research, specific predictions regarding outcome should be made, including the rationale for each prediction. If the funds are for travel to present the research, achieved results should be described. Comments about the practical significance of the findings will typically strengthen the proposal.
 - v. **Contribution the project will make to the student's educational or professional development.** IMPORTANT: Even if the proposal is for travel, this section should describe how the research conducted/being presented, not the conference, contributed to the student's educational or professional development (brief mention of the value of presenting may be made, but should not be the main focus).
- III. **Faculty sponsor letter of support.** A letter of support by the faculty sponsor endorsing the proposal and confirming the student's eligibility for the award (**including current GPA**) must be included. The letter should explicitly address the applicant's ability to carry out the project and the likelihood of completion. It should include a statement regarding the student's independence in conceptualizing the research and writing the proposal. It also should outline how the faculty sponsor will participate in, supervise, or advise the student about his or her project going forward. If the proposed research includes human or non-human animal subjects, the faculty sponsor should affirm the project's adherence to West Chester University's guidelines for ethical research.

Proposals will be evaluated on how well they respond to these guidelines for content and format. The electronic application should include all requested information, the faculty sponsor letter of support, and any necessary documentation for travel requests **AS A SINGLE PDF FILE**. Student proposals without the faculty member's supporting letter or otherwise incomplete will not be accepted. Any additional attachments will not be accepted. Late submissions will not be accepted. Applications using any prior forms/format will be rejected without review.

Grant Cycle	Proposals Due	Decisions	Award Type	Covers
Fall	5 th Friday of Semester	7 th Friday of Semester	Travel to Conference	Current Fall Semester or upcoming Winter Break (assumes presentation is accepted and still a WCU student at time of presentation) OR Previous Spring/Summer presentation (reimbursement with receipts)
			other materials/ research needs	Current Fall Semester or upcoming Winter Break (assumes student still registered at WCU)
Spring	5 th Friday of Semester	7 th Friday of Semester	Travel to Conference	Current Spring Semester or upcoming Summer (assumes presentation is accepted and still a WCU student at time of presentation) OR Previous Fall/Winter conference presentation (reimbursement with receipts)
			other materials/ research needs	Current Spring Semester or upcoming Summer (assumes student still registered at WCU)