

Undergraduate Student Research Grant  
MSU Denver Undergraduate Research & Creative Scholarship Program

**Application**

**Application Deadline:** midnight Mountain Time, October 8<sup>th</sup>, 2021

**Maximum Grant Award:** \$500.00

*Make sure that the application is accurate and complete. Incomplete or incorrectly completed applications will not be reviewed.*

**Purpose:** The purpose of this small grants program is to provide support for student-initiated and faculty-supervised research or scholarly/creative activity that is intended to result in an original contribution to the discipline.

**Applicant Eligibility:** Any currently enrolled MSU Denver undergraduate student who is conducting a research or scholarly/creative activities project under the mentorship of a MSU Denver faculty member is eligible to receive funding. We encourage undergraduate students from all disciplines who are engaged in producing undergraduate research or creative projects to apply. Please note there is only one grant award available per research project. For example, multiple projects employing common data collection, IRB protocol, analysis tools or infrastructure, etc. will be considered sub parts of a single research project and will be eligible for only one grant award.

**Specialized Grants:** Students can opt-in to be reviewed for the following grant.

**MillerCoors Endowed Water Steward Fellowship Fund** – The fund will be used to support MSU Denver students specifically focused on capstone or other water stewardship projects. “The Fellowship will enable them to undertake experiential learning opportunities to benefit the Auraria Campus, the Denver metropolitan region, and across Colorado. Special emphasis will be placed on fellowship opportunities that involve interaction with community partners in the water conservation field. Projects may include exploring bold new ideas, artistic endeavors, new research, or other aspects of water stewardship. Students may apply for a fellowship individually or as a small team.” Students must be in good meeting MSU Denver’s Satisfactory Academic Progress (SAP) and cannot be in default or owe any refund/payment of federal, state or institutional aid.

**Application Process:** Student applicants should email a Word document that includes the information requested below to [undergradresearch@msudenver.edu](mailto:undergradresearch@msudenver.edu). **Please put in the subject: URCS Grant Application Form- First and Last Name.**

Only **complete** applications received by the application deadline (midnight, October 8<sup>th</sup>, 2021) via an email to [undergradresearch@msudenver.edu](mailto:undergradresearch@msudenver.edu) will be considered for funding.

**Terms of the Award:** All awardees, including those graduating in December 2021, are required to:

1. Attend the mini-grant recipient welcome event
2. Attend two URCS Program workshops during the 2021-2022 academic year
3. Present the results of their grant-funded research at MSU Denver’s Annual Undergraduate Research Conference, Friday, April 22, 2022.

## APPLICATION

**PLEASE COMPLETE A WORD DOCUMENT WITH THE FOLLOWING INFORMATION. BE SURE TO STRUCTURE YOUR DOCUMENT ACCORDING TO THE FOLLOWING OUTLINE AND LABEL EACH ITEM AS LISTED BELOW.**

### **PART 1. STUDENT RESEARCHER INFORMATION**

- I. Enter your name
- II. Enter your 900#
- III. Enter your @msudenver.edu email address
- IV. Enter your Academic major (entire formal title of major)
- V. Select your class status: Freshman, Sophomore, Junior, Senior
- VI. Enter your permanent mailing address
- VII. Enter your primary phone number
- VIII. Indicate whether you have previously received grant funding from MSU Denver's Undergraduate Research Program.
- IX. Indicate whether you have presented previously at MSU Denver's Undergraduate Research Conference
- X. Indicate whether you are graduating in December 2021

### **PART 2. MSU DENVER FACULTY MENTOR INFORMATION (PLEASE NOTE: Faculty mentors at MSU Denver are the ones under which the work is being completed (not sponsored as is the case for off-campus internships)).**

- I. Enter First and Last name of your MSU Denver faculty research mentor
- II. Enter your faculty mentor's @msudenver.edu email address
- III. Enter your faculty research supervisor's academic department and the campus box for the department
- IV. Enter your faculty mentor's MSU Denver office phone number

### **PART 3. Opt in to be reviewed for specialized grants (Please see page 1 for details).**

- I. Please specify if you would like to opt-in to be reviewed for the MillerCoors Endowed Water Steward Fellowship Fund

All applications for these specialized grants will be reviewed by representatives from the Undergraduate Research & Creative Scholarship Program and the OWOW Center staff.

### **PART 4. IRB/IACUC APPROVAL**

- I. **Please affirm that the MSU Denver faculty member named above has, if appropriate, ensured that the work you are proposing will follow the procedures set forth by MSU Denver's Institutional Review Board (IRB) and/or the Institutional Animal Care and Use Committee (IACUC).**

### **PART 5. Project Description**

- I. Title of Project
- II. Project Abstract: (Limited to 250 words) Provide a brief overview of your proposed project. The goal of your abstract is to provide a concise and complete description of your research project or creative work. As a guide, dedicate 1 to 2 sentences to each of the following components of your project: the purpose, method, and expected results/implications or evidence-based outcomes.
- III. Objective: Describe the precise importance or goal(s) of the project. Clearly state the purpose of your project. What research question/hypothesis, problem statement, or concept will you investigate? (1 paragraph)
- IV. Significance

- a. Review relevant scholarly literature to describe the state of the knowledge in the field. Be sure to explain relevant concepts, methodologies, and questions or controversies. (1 to 2 paragraphs)
  - b. Describe how your project will contribute to this literature or field. Articulate how the outcomes of your project will enhance knowledge and understanding of the topic under investigation. (1 to 2 paragraphs)
- V. Method of Inquiry: explain discipline-based methods or creative techniques you will use to conduct your investigation or exploration.
- a. Provide enough detail to allow non-experts to understand the function and purpose of each step as it relates to the overall goal or importance of the project. (1 to 2 paragraphs)
  - b. Analysis and interpretation: Discuss how you will be able to use the information gathered via your method of inquiry to address the objective(s) you described above. (1 to 2 paragraphs)
- VI. Timeline: Provide a timeline that demonstrates how you will complete the project within the allotted time. Your timeline should provide a schedule of when you plan to begin and complete major steps and milestones in your project. (See example on page 6)
- VII. Budget Justification: In the budget justification, provide a detailed list of proposed expenditures that includes **itemized costs** (do not forget to include shipping, if applicable) and a brief explanation of how each line item will contribute to meeting project goals. (See example on page 5) If the funds will be used as a **stipend**, estimate the number of hours to be spent working on this project and that breaks down as an hourly wage. Explain how the stipend will support the completion of your project. The Undergraduate Research Program is limited to providing \$500 in support. If the costs associated with your project exceed \$500, please indicate in your budget justification the source of supplemental funding that you have obtained.
- a. Indicate whether you would be willing to undertake the project if it can only be partially funded.

**Disclaimer: *Traveling expenses and certain international suppliers are prohibited. The Office of Undergraduate Studies may request additional clarification regarding budget items and will work with students to find alternatives should unique circumstances arise.***

## **Part 6. Level of Student Involvement**

- I. Describe your role in the project.
  - a. Address your contribution to the conceptual development of the project. Specifically, describe the way(s) in which you contributed to:
    - i. Development of the research question/hypothesis, problem statement, or concept exploration
    - ii. Design or methodology of the project
    - iii. Proposed analysis and interpretation of the results, art students may include sketches or digital images of the anticipated finished project.

## **Part 7. Research Products, Dissemination of Your Work, and Skills Development**

The objective of this section is to gather data about the expected products of the research and how participating in the research project aligns with your career and/or educational aspirations.

**Note: Although applicants must respond to these items to submit a completed grant application, the information collected in this section is being collected only to assess MSU Denver's Undergraduate Research Program and will not be used to score grant applications.**

- I. In addition to presenting at MSU Denver's Undergraduate Research Conference, do you intend to publish or disseminate your findings elsewhere? If yes, please indicate the planned publication and/or target audience.
- II. Briefly identify the research skills you hope to acquire from working on the project and explain how acquiring those skills align with your career/educational goals and professional development.
- III. Do you plan to attend graduate school at some point after graduating from MSU Denver?

- IV. If so, please indicate the type of program to which you will apply (e.g., J.D., M.D., M.A., M.F.A., M.B.A., Ph.D.) and the topic you will study.
- V. If you've already been accepted to a graduate program, please indicate the type of program (e.g., M.A., M.B.A., Ph.D.), the name of the program, and the name of the institution.

### **Tips for Creating a Successful Proposal**

- Be sure that the proposal reflects your voice rather than that of your faculty mentor. Even though the project is likely to be a collaborative effort, the grant proposal is not to be co-authored by a faculty mentor. This is not to say that you should not seek feedback on your writing from your faculty mentor (and others as viable). Be sure that you incorporate feedback ways that reflect your understanding of and enthusiasm for the project. Again, as the undergraduate scholar, you must be the sole author of the proposal.
- Many undergraduate projects are offshoots of a faculty mentor's ongoing scholarship. If this is true of your project, it is important that you clearly delineate your role in the research. For example, did you generate the hypothesis(es), problem statement(s), or research question(s)? Were you primarily responsible for choosing the research design, procedures, and processes involved in the research project? Will you complete the data collection or execute other appropriate procedures?
- As much as possible, refrain from using jargon or colloquialism unless accepted as common terminology in your field of study. When you cannot avoid using specialized vocabulary, be sure to provide a clear definition of terms. Keep in mind that although you are writing for educated and intelligent readers, most of them have little to no expertise about your topic.
- It is your job to provide the reader with enough context that he or she understands the problem that your project is investigating. Work diligently at conveying your understanding of the research topic, related methods and processes, and the importance of your project outcomes to your field of study. View the application as your opportunity to convince the readers that your project is original and important.
- Prior to submitting your application seek honest and thoughtful feedback from someone who is not an expert in your field of study. After they read your materials, consider asking the reviewer to explain your project and its importance; that individual's ability to provide an accurate and clear explanation is a good indication of the strength of your writing.

**Questions: please contact the Undergraduate Research & Creative Scholarship Program at the email address:**

[UndergradResearch@msudenver.edu](mailto:UndergradResearch@msudenver.edu)

### Sample Budget Justification

Budget Item	Justification	Detail	Total Request
Cost of using proprietary image database	These visual stimuli are recognized in the literature as the best set of neutral faces, as they are controlled for extraneous variables such as attractiveness and personality ratings.	100 images@\$100 per 50 images	\$200.00
Emotion Interpretation Questionnaire	Previous research demonstrated that this questionnaire is a reliable and valid way to measure research participants' perceptions of others' emotional state.	20 booklets with questionnaire items @ \$50 per 20 booklets.  150 answer sheets @ \$50/150 answer sheets	\$100.00
Acme Image Editing Software	This software provides the features that will allow the researcher to morph male and female faces, as well as to create the specific visual distortions necessary to test the hypothesis.	One license for Acme Image Software@ \$150	\$150.00
		<b>TOTAL</b>	<b>\$560.00</b>
<b>If "TOTAL" exceeds \$500, describe your supplemental funding source:</b>		My faculty mentor has agreed to provide \$40 from a grant she has secured and the department chair has agreed that the department will provide \$20 as well.	
<b>If the Undergraduate Research Program cannot award you \$500, can you still undertake the project?</b>			NO _____ YES <input checked="" type="checkbox"/> X _____
		<b>If you responded, "yes" then explain how the reduced budget would modify the proposed project and specify the implications of that modification:</b>	
		If I received at least \$300 (and received \$60 from the supplemental sources identified above), I could still purchase the questionnaire and the image editing software. Instead of using the propriety database of images of faces, I could use a free version; however, the free version would limit the generalizability of the results as the faces that the free database contains are all Caucasian faces, whereas the propriety face database includes a racially diverse set of faces.	

### Sample Timeline

	Start Date	Completion Date
Order and obtain the imaging editing software, questionnaires, and images of neutral faces.	11/23/16	1/4/17
Write and submit protocol for IRB review	1/4/17	1/8/17
Earn IRB Approval		2/8/17
Run data collection sessions	2/19/17	3/31/17
Score, enter and clean data	4/4/17	4/11/17
Analyze data and create presentation for MSU Denver's Undergraduate Research Conference	4/12/17	4/21/17