

# GROUPS SCHOLARS PROGRAM

## CALL FOR SUMMER RESEARCH PROJECT PROPOSALS

*The Groups Scholars Program STEM Initiative* invites Faculty, Postdoctoral researchers, and PhD candidates to mentor students during the Groups Summer Research Experience Program (SREP). In response to the COVID-19 pandemic, the Groups STEM Summer Research Experience Program (SREP) will offer hybrid programming for Summer 2021. Tentatively, the program will consist of exploratory research activities during the summer. We have outlined the program components and tentative schedule below. We invite Faculty, Postdoctoral researchers, and PhD candidates to submit project proposals by March 1, 2021.

### PROGRAM DETAILS

#### Groups Summer Research Experience Program -

<https://groupsscholars.indiana.edu/resources/stem/summer-research.html>

The purpose of the program is to train first-generation, underrepresented minority students, as well as students with limited financial resources from all racial backgrounds, in scholarly research. The program also serves to enhance student learning, promote a culture of research, and foster collaboration between researchers (faculty, graduate students, etc.) and students. Up to twenty incoming freshmen who have been accepted in the Groups Scholars Program and meet the criteria for selection in the STEM SREP (a declared STEM major or interest, 3.0 or higher GPA, and A's and B's in science and math courses) have been chosen as research scholars.

#### Eligibility

All full and part-time faculty members, researchers, or graduate students at Indiana University who are actively engaged in research are eligible. Individual faculty members are encouraged to include at least one research group member (current postdocs, graduate and/or undergraduate researchers) in some capacity. For example, in the past, graduate students have supported STEM Scholars with troubleshooting for their research projects. Individuals with experience mentoring undergraduates and underrepresented minorities in STEM (women, students of color, first-generation, disability, etc.) are strongly encouraged to apply.

#### Funding

Each mentor will receive \$1,000.00 supplemental funds to go towards the cost of lab materials/fees that the scholar might incur as a member of the lab. Mentors will be expected to provide a departmental account to which the stipend will be transferred by the second week in August. The Groups Scholars fiscal manager might request a summary of expenses at the conclusion of the summer program.

#### Program Components:

- Student will be enrolled in Educ-L 490 Groups STEM Seminar.
- Student will be expected to engage in five weeks (15-18 hours per week) of weekly project activities through literature review, seminar talks, and other relevant activities as determined by the project supervisor.
- Student will be expected to have weekly contact with supervisor for a minimum of two meetings per week via Zoom or other platforms as agreed upon by supervisor and scholar.
- At the end of the program, students will present their research in a poster symposium.

**Mentor role:**

Direct weekly research activities during the summer by providing relevant resources and materials that align with the themes for Weeks 2- 7 below. Meet with research scholars directly or assign a graduate student to meet twice each week - once at the beginning of the week to assign/discuss weekly tasks and once at the end of the week to evaluate/provide feedback on the tasks accomplished.

**Educ-L 490 Components:** Scholars will be enrolled in a 3 credit hour research seminar taught by Groups Scholars Program STEM Graduate Assistant.

	<b>Theme</b>	<b>Goals</b>	<b>Activities</b>
<b>Week 1 June 14 - 18</b>	Orientation What is science? Who are scientists?	Getting to know the cohort; Inquiry and Identity	At home inquiry project; STEM portrait
<b>Week 2 June 21 - 25</b>	Important people	Explore key people in the area of study.	Lab interviews; Research background of authors of important literature in the field
<b>Week 3 June 28 - July 2</b>	Research questions	Learn how to develop and what makes a good research question.	Literature Review and beginning to think about research question(s)
<b>Week 4 July 5 -9</b>	Exploratory research	Learn ways of exploring research through quantitative, qualitative, and mixed methods approaches.	Research design including initial research question
<b>Week 5 July 12- 16</b>	Tools and Resources	Discover tools used in the field to gather data relevant to the research question and design.	Equipment, Processes/Procedures, Surveys
<b>Week 6 July 19- 23</b>	Managing Data	Learn ways of coding data in your field of study.	Coding
<b>Week 7 July 26- 30</b>	Science Communication and Evaluation	Communicate the goals of the research project.	Poster presentation; Exploratory research plan; Program evaluation

## PROPOSAL GUIDELINES

SREP proposals are expected to support student learning and development through guided research experiences and projects that include research design, research methods, data collection, analysis, and presentation. Proposals are welcome from all life and physical sciences, computing and informatics, psychology and neuroscience, and health-related disciplines. Proposals are encouraged from individuals or from research teams.

### Proposals that have one or more of the following characteristics will receive priority consideration:

1. Student participation in the development of a research plan and timeline.
2. Student participation in data collection and analysis.
3. Guidance on presenting scientific work.
4. Support of the development of practical research skills and instrumentation.

### Proposals that have the following characteristics are discouraged:

1. Proposals that exclusively focus on administrative and/or laboratory maintenance duties (e.g. filing paperwork, preparing gels, etc.) are **discouraged**. While these tasks may be important in the day-to-day operations of the lab, and may train the students in common laboratory work, the focus of the Groups SREP is for STEM Scholars to gain a holistic research experience.

## APPLICATION and PROGRAM IMPLEMENTATION TIMELINE

Proposals include work conducted in the assigned time period and may not include work performed during the semester. In all cases, the proposals must be approved no later than May 31.

January 25	<b>Call for project proposals opens</b>
March 1	<b>Project proposal deadline</b>
May 31	<b>Notification of Final Decision</b>
June 10	<b>Mentor orientation</b>
June 15	Student orientation

June 21	First day of research
July 1	Ignite Presentations
July 27	Last day of research
July 29	Virtual Poster Symposium
July 30	Faculty and student evaluations due

## RESEARCH PROPOSAL SELECTION PROCESS

### Two Proposal/Selection Periods

#### 1<sup>st</sup> Call for Proposals — Winter:

Submission period: January 25 to March 1

- Selection period: March 1 – March 15
- Notification Period: Recipients will be notified on or about March 31.

#### 2<sup>nd</sup> Call for Proposals — Spring:

Submission period: April 1 to May 15

- Selection period: May 15 - May 30
- Notification Period: Recipients will be notified on or about May 31.

# PROPOSAL APPLICATION

*Adapted from Minnesota State Colleges and Universities Proposal Template*

**Submitting Proposal:** Please save your proposal as a PDF or Word document. Upload via Microsoft Forms: [Groups STEM SREP Project Proposal Submission](#). **Note:** Must log in with @iu.edu credentials.

**Include:**

- Cover sheet
- Project narrative
- Budget summary

## Groups SREP Research Proposal Cover Sheet

### Primary Mentor Contact Information

Name:
Title/Position:
Department:
Address:
City, State, Zip:
Phone:
Fax:
E-mail:

### Supervising Faculty Contact Info (if applicable)

Contact Name:
Title/Position:
Department:
Address:
City, State, Zip:
Phone:
Fax:
E-mail:

### Project Information

Title of the Project: \_\_\_\_\_

### Signatures

Based on the criteria for eligibility in the Groups SREP Research Proposal Guidelines, I am eligible to apply. I understand and agree that I or the appointed mentor will be expected to attend Groups SREP-related activities including, but not limited to Groups Campus Visit, Mentor orientation, and the SREP poster symposium. I understand and agree that a written final evaluation is due at the conclusion of the SREP.

\_\_\_\_\_  
Applicant Printed Name

\_\_\_\_\_  
Applicant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervising Administrator Printed Name  
(if applicable)

\_\_\_\_\_  
Supervising Administrator Signature  
(if applicable)

\_\_\_\_\_  
Date

**PROJECT NARRATIVE** - All applications must follow the format below.

<b>Proposal Section</b>	<b>Proposal should address:</b>	<b>Suggested Length</b>
<i>Project Description and Rationale</i>	<i>What issue or problem is being addressed? What is the significance of the project? What are your goals and methods? How does the project fit into your current research? What are the conditions or contexts in which the project will be taking place, i.e. who will be the immediate supervisor of the project and how will the SREP student fit with the research group?</i>	<i>[1 PARAGRAPH]</i>
<i>Timeline of Activities</i>	<i>When are activities planned? Can the project be completed within the proposed timeframe?</i>	<i>[1 PARAGRAPH]</i>
<i>Student Learning Outcomes</i>	<i>What specific outcomes do you want to achieve? How will your planned activities achieve these outcomes? How will your plan promote excellence in student learning? What kinds of hurdles or limitations do you expect to encounter? How would you address them?</i>	<i>[1 PARAGRAPH]</i>
<i>Evaluation plan</i>	<i>How will you know that you have achieved your outcomes?</i>	<i>[1 PARAGRAPH]</i>
<b>Total</b>	<i>Successful proposals generally range from 1 to 2 pages in length.</i>	

**BUDGET SUMMARY**

How might the \$1000.00 supplemental funds be used to support the student? Please use the table below to organize your proposal’s budget information, or create your own grid using the budget categories below.

**Budget Summary**

<b>Budget Category</b>	<b>Brief Description</b>	<b>Total Budget</b>
Equipment		
Materials/Supplies		
Other		
<b>TOTAL</b>		