

Michael and Dorothy Carbon Undergraduate Research Fellowship Program

Request for Proposals

Description

This program is designed to provide Loyola University Chicago undergraduate science students with opportunities to conduct interdisciplinary research projects with faculty for two years, their junior and senior years, on current issues in the fields of math and science. Up to 8 Carbon Fellows will be funded each academic year. Students will receive a \$5,000 stipend and up to \$2,500 for research supplies per year.

Guidelines

Each student will submit a complete application under the guidance of an interdisciplinary team (2 or more) faculty mentors. Students submit their application on March 1 of their sophomore year for consideration of a fellowship that will extend from September of their junior year through May of their senior year (summer research is also encouraged).

To apply, students should go www.luc.edu/lurop and log in to the LUROP online application system using their Loyola ID and password. They should then select to apply to the Carbon Fellowship Program.

Complete applications will include the following components:

- 1) Signed Cover Letters from faculty mentors supporting the student and project.
- 2) Application **Cover Page and LUROP Cover Page** (use forms provided).
- 3) **Abstract** (500 word maximum; use form provided).
- 4) A 2-3 page (single spaced, 12 point font) proposed **Project Description** which provides background to the problem, objectives or hypotheses to be tested, a detailed description of the project including methods and statistical analyses, and plans for a dissemination of results. Include any figures or tables within the 2-3 page limits.
- 5) **Budget** (use budget worksheet provided; up to \$5,000 for student stipend, and up to \$2,500 for supplies, travel, and other research expenses per year).
- 6) **Literature Cited**.
- 7) **Supplementary Documents** may include any documents demonstrating required approval or permission for this research such as letters of support for partnering agencies or collaborators, requirements for use of university space, county sampling permits, IRB approvals, radiation safety application approvals, etc.

Students awarded the Carbon Fellowship present their research projects at the annual luncheon with the Carbon family and are to present their research findings in a form of a poster at the annual LUROP Symposium and are strongly encouraged to publish their work in a scientific journal, and to present their work at a scientific meeting.

If students want to obtain college credit for conducting their research, there are many mechanisms in place that make this possible. The discipline/school/department that the lead faculty mentor belongs to, will list formalized courses or internships in the course offering guide for obtaining credit.

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Eligibility

Eligible Students – Loyola Undergraduate students majoring in Biology, Bioinformatics, Chemistry, Computer Science, Environmental Science, Mathematics, Physics or Statistics are eligible. Students must have and maintain a cumulative GPA of 3.0 or higher. Students must have a junior standing when they enter the program.

Eligible Faculty Mentors – Any FT science or math research faculty mentors are eligible. Since these projects are aimed to be interdisciplinary, 2 or more faculty working across departments is strongly encouraged.

Eligible Research Projects – No priorities or biases are given due to the academic discipline of the proposed project, but they must be interdisciplinary with at least 2 faculty mentors from different disciplinary fields of study.

Evaluation Process

A Carbon Fellowship Review Committee composed of 5-7 science/math faculty and staff will evaluate all submitted proposals and rank them based on the following criteria:

- 1) Is this project appropriate for providing a valuable undergraduate research experience?
- 2) Is the project interdisciplinary?
- 3) Is the proposal clearly written, complete, and well organized?
- 4) Is the project well justified and motivated by the literature and/or preliminary data?
- 5) Are objectives, goals, and/or hypotheses clearly stated?
- 6) Is the project well designed, and are the proposed methods appropriate?
- 7) Are plans for dissemination of the results satisfactory?