

Undergraduate Research Opportunity Program

The Undergraduate Research Opportunity Program enhances undergraduate education by providing financial support to students who wish to engage in independent research, creative projects, or the presentation of their own research at conferences. Students may independently design their project or propose a project related to some aspect of the research of a supervising faculty member. In either case, a regular faculty member (T&R or SPF) must endorse the proposal and supervise each project.

Participation in the Undergraduate Research Opportunity Program is an intense educational experience that exposes students to the entire process of research, from writing the proposal, conducting the research, and analyzing data, to bringing the project to closure in the form of a written final report. A satisfactory project must be consistent with the standards of good scholarship. It should give evidence of a sophisticated grasp of a problem as well as an effective approach to that problem. The project should involve some new data or information, an original viewpoint, a new synthesis, the application of a new technique, or the use of a new method of analysis.

UROP provides support for research and creative projects through two programs: Research and Materials Grants and Summer Fellowships. Research and Materials Grants provide up to **\$1,500** to be used toward the purchase of materials and supplies, travel, and other project needs. Summer Fellowships provide funding to allow students to concentrate their time on a project without making it necessary to hold also a summer job. Students may apply for one, two, or three months of summer funding at \$1,200 per month (maximum **\$3,600**). The application process is the same for both programs.

Eligibility: All students in good academic standing pursuing an undergraduate degree in the College of Arts and Letters are eligible for participation in the Undergraduate Research Opportunity Program. Students with only a minor in the College of Arts and Letters can apply if the faculty supervisor is a member of the College. Neither a specific grade point average nor extensive experience in the chosen research field is required. Graduating seniors in their final semester of school are eligible to participate in the Undergraduate Research Opportunity Program, but must submit their proposals before their final semester actually begins. For summer fellowships, priority is given to juniors, although projects from sophomores and graduating seniors will be considered.

Grants and Application Procedures: Students may apply for the following types of grants.

- **Individual Research and Materials Grants** support research or creative projects by individual students (**maximum of \$1,500**). To apply, students submit proposals describing the nature of the research or creative work. Proposals must be accompanied by a letter of endorsement from supervising faculty member. Awards are available to students in all areas of research and creative work in the College of Arts and Letters.
- **Research and Materials Team Grants** support undergraduate participation in projects that include two to six undergraduates on the research team (**maximum of \$1,500 per undergraduate, up to six students on a team**). To apply, students must select one member of the team to be responsible for communication between ISLA and the research team, and the proposal identifies this individual as the designated contact. The research team submits the proposal describing the nature of the research or creative work. The proposal must be accompanied by a letter of endorsement from the supervising faculty member. At the completion of the project, **each member** of the research team must submit a report to the ISLA office describing his or her participation in the project.
- **Summer Fellowships** support research or creative projects being carried out by individuals during the summer (there are no team fellowships). These awards provide a stipend (**\$1,200 per month for up to three summer months**) to allow students to concentrate on a project without making it necessary to hold also a summer job. To apply, students submit proposals describing the nature of

the research or creative work. Proposals must be accompanied by letters of endorsement from the supervising faculty member. Awards are available to students in all areas of research and creative work in the College of Arts and Letters.

Application Deadlines:

- Research and Materials Grants - There are no fixed deadlines. Applications will be evaluated as they are received. Grants will be announced within three working weeks of the date of application.
- Summer Fellowships - The deadline is **March 1, 2007, by 4:00 p.m.**

The proposal: To apply, students or research teams submit proposals describing the projects. The proposal for each student consists of a cover sheet, a summary statement sheet, a budget, a five-page double-spaced project description, and a letter of endorsement from the supervising faculty member.

- The **cover sheet** contains general information about the student (one for each member of a research team). All of this information should be correct and complete. If any of the information on the cover sheet changes while the proposal is being reviewed or while the project is in progress, please notify ISLA.
- The **summary statement** should be a clear, concise 100- to 200-word description of the proposed project that is understandable to the general reader. It should include a statement of objectives, methods to be employed, and the significance of the work. This sheet should also include a list of courses in which the student is currently enrolled, and a list of courses completed the previous semester.
- The **budget** should list all materials, laboratory supplies, equipment, travel expenses, and the like that will be required to complete the project, with the estimated cost of each item. Requests for equipment purchases should justify the need for the equipment for the student's project. Equipment purchased with Undergraduate Research Opportunity Program funds becomes the property of the University.
- Your **project description** must not exceed five typed, double-spaced pages in length: minimum margins one inch top, bottom and sides, and minimum type size 10 points or 12 characters per inch. Be sure to check and re-check grammar, punctuation, and spelling before submitting the proposal. We recommend that you save the proposal for use in writing your final report.
- The project description should include five main elements: an introduction, background information, the methods to be used, a schedule, and a description of how the student and faculty supervisor will be collaborating.
- If applying for a project in the visual arts, music, theater or film, you may include two examples of your previous work in the form of slides, photographs, audio, or videotapes.
- Elements of the project description:
 - The **introduction** should provide a statement of the objectives of the proposed work and the anticipated significance of the work in lay terms. It should describe the problem to be investigated, the hypothesis to be tested, or the creative endeavor to be undertaken.
 - The **background** section should provide a brief review of the work that has been done in the area of the project, together with complete references in appropriate professional style. Any previous research the student has done, or experience the student has should also be noted in this section.

- The **methodology** section should give a detailed description of the research methods or creative techniques to be used, and include a justification for this specific approach: How do these methods answer the questions that have been posed, test the hypothesis, or lead to the desired goal?
- The **schedule** should include specific dates for the initiation and completion of each phase of the project.

The research or creative project should be an intense educational experience. For this reason, **close collaboration with the faculty supervisor** is important. This section of the project description should provide information on how the student and the adviser will work together on the problem or how often they will meet. Please also explain in this section how the project relates to the adviser's work.

The **letter of endorsement** from the faculty supervisor should describe the educational significance of the project for the student or research team. It should also describe how the grant will enable the project, or in the case of a senior thesis, change its content compared to what it would be without funding.

Excused Absences: Students whose UROP application includes time away from campus while classes are in session must include a list of classes that will be missed and a signature from each course instructor indicating his or her permission for the student to be absent during this time.

If applying for both a Research and Materials Grant and a Summer Fellowship at the same time, you also need to complete a Joint UROP Application form.

Please submit three copies of the proposal to the director of ISLA in 101 O'Shaughnessy. Copies of the forms (cover sheet, summary statement sheet, and budget sheet) are available in 101 O'Shaughnessy or on the web at <http://isla.nd.edu/undergraduate-research/forms/>

Final Report, Abstract, and Evaluation: At the completion of their projects, each student—whether working individually or as a member of a team—must submit a 5- to 10-page formal report, including a one-page abstract, to the ISLA office. The final report should draw upon the original proposal for the introduction, review of previous work, and methodology.

Naturally, new references should be added, and the methodology section should be modified if necessary, but in most cases the original proposal can remain intact, with results, analysis, conclusions, and suggestions for future work added. The style of the final paper should be appropriate to the standards of the academic discipline. The faculty supervisor must approve the final report before the student submits it.

In addition to the final report, the faculty supervisor will provide an evaluation of each student's work. This final evaluation should assess the student's involvement in the project, his or her technical progress, and refer to any papers or reports the student may have written or co-written.

Acknowledgments: Any publication, public recital or exhibition, or other public display of the student's work must include an appropriate acknowledgment of the Undergraduate Research Opportunity Program. Although no one form is required, we recommend the following:

This [research, etc.] is made possible in part by support from the Undergraduate Research Opportunity Program, Institute for Scholarship in the Liberal Arts, College of Arts and Letters, and the University of Notre Dame.

Human Research Subjects: Any project that involves the use of human subjects must be approved by the University Committee on the Protection of Human Subjects. For details on the procedure, please contact Dr. Richard Hilliard, Director of Research Compliance, The Graduate School, 511A Main Building (hilliard.1@nd.edu, 631-5386). Committee approval must be completed or pending for the program to accept a

proposal, and no award will be made to a project involving human subjects without the approval of the University Committee on the Protection of Human Subjects.

International Travel: Please note that projects involving international travel need to obtain permission from the Office of International Studies. To do so, check the website at: <http://www.nd.edu/~ois>.

Checklist: for the student, - do not include in proposal jacket.

Two copies, collated and stapled, of:

- **Cover page and summary statement:** Completely filled out/or team projects one sheet for each member of the team, but the summary statement only on the first cover sheet.
- **Project budget and courses:** For team projects, one budget for each team member. Courses during present and previous semester/for team project, one list for each team member.
- **Project description:** No more than five pages, double-spaced, with one inch margins and 10-point or 12-pitch type minimum: includes (1) introduction; (2) background; (3) methodology; (4) schedule; and (5) description of collaboration with faculty supervisor.

Joint UROP Application Form: Submit only if applying for both a research and materials grant and a summer fellowship with one application.

Submit to: Institute for Scholarship in the Liberal Arts, 101 O'Shaughnessy Hall.

Targeted Initiatives:

- **Marotta Award for Undergraduate Research on Health Care and Technology:** This fund has been earmarked for projects that focus on health care and technology issues, and could be of special interest to the College's pre-med students. Title of a recently awarded project: "Researching WHO Policy and Its Effect on HIV/AIDS, Infection Rates in Sub-Saharan Africa."
- **Boehnen Award for Interdisciplinary Undergraduate Research and Creative Work:** Funds will be made available for undergraduate capstone projects that combine research with artistic creativity. These awards are similar to awards made through the UROP but separate funds are available.

UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM
Research and Materials Grants and Summer Fellowships
Proposal Checklist

For your use – do not include in the proposal packet

Two copies, collated and stapled, of:

1) Forms (available online at <http://www.nd.edu/~isla/UROP/uropforms.pdf>)

➤ **Cover page and summary statement**

Please complete for Research and Materials Grants or Summer Fellowships – for team projects for Research and Materials Grants, one sheet for each member of the team, but the summary statement needs only to be placed on the first cover sheet.

➤ **Project budget and courses**

Please complete both parts (budget and courses) for Research and Materials Grants or Summer Fellowships – for Research and Materials Grant team projects, one budget and one course listing for each team member.

2) Attachment

➤ **Project description**

No more than five pages, double-spaced, with one-inch margins and 10-pt or 12-pt type minimum.

Includes:

1. Introduction
2. Background
3. Methodology
4. Schedule
5. Description of collaboration with faculty supervisor

Please submit to:

Institute for Scholarship in the Liberal Arts
101 O'Shaughnessy Hall

There is no deadline for Research and Materials Grants. *

The deadline for Summer Fellowships is March 1, 2007 by 4:00 p.m.

* If you are applying for both a **Research and Materials Grant** and a **Summer Fellowship** for the same project, the application due March 1 must reflect your application for both grants (the same application can be used for both grants- see next page.)

UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM

Cover Page

For which program are you applying?		
<input type="checkbox"/> Research and Materials Grant	<input type="checkbox"/> Summer Fellowship	
Student Name		Student ID#
Campus Address		Email
Telephone	Major	Minor
Year <input type="checkbox"/> FR <input type="checkbox"/> SO <input type="checkbox"/> JR <input type="checkbox"/> SR	Expected Graduation Date	GPA
Project Title		
Duration of Project (From –To)	Funds Requested \$ _____	
Have you applied for and/or received funding for this project from any other source? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please list source, amount, and funding status of grant application:		

Student Signature		Date

Summary

Please provide a 100-200 word summary of the research proposal, including: **(1)** its objective; **(2)** the research or creative methods to be employed; and **(3)** the significance of the work to the field of knowledge in general.

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UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM

Budget

Student Name
Project Title

Expense Allowance for Credit or Non-credit Projects

- Research and Materials Grants: Please itemize your expenses, including equipment, supplies, computer services, library or laboratory fees, photocopying, telephone, postage, travel, and the like. Please justify the need for each expense.
- Summer Fellowships: Please list the number of months requested for the fellowship and the total amount requested (\$1,200 per month, maximum of 3 months).

Total Requested \$ _____

Related Courses

Please list any courses that you have taken in the past or are currently taking that are related to this research.

SEMESTER	DEPARTMENT	COURSE NO.	TITLE	CREDIT HOURS

PREPARING A UROP BUDGET

Many students wish to take advantage of UROP funding, so please be responsible in preparing your budget. Here are some guidelines:

Choose a mode of transport that is both economical and efficient. If you are flying, please print out a quote for the fare from an on-line travel company such as Expedia.

If driving, please provide the mileage covered by the round trip. However, you should also investigate the feasibility of taking public transport to your destination. Students whose research takes them to Chicago, for example, are encouraged to take the South Shore Train.

Choose reasonably priced, safe accommodation and provide some indication of the lodging's nightly rate with your application. Bed and Breakfast accommodation can often be purchased in the same neighborhoods as hotels, but at better rates. If you are traveling as part of a group, please keep costs down by sharing rooms.

Only research-related expenses will be reimbursed, so if you make phone calls in the pursuit of your research, please supply a printed log of calls and claim only those that are research related. If it is not possible to provide such a log, please keep your own records of calls made in the course of your research and their duration and submit this with your expense report.

If you need technological equipment for your research, try first to hire or borrow it from the university if that can be done more economically.

Please note: That The Institute for Scholarship in the Liberal Arts must approve any expenses that deviate from the original proposed budget prior to reimbursement.

UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM

Faculty Endorsement Form

To be completed and sent under separate cover by supervising faculty member.)

Supervising Faculty Member's Name	Department
Student Project Title	

Waiver of Access

To be signed by each student applicant for this project; only one student is required to sign for Summer Fellowships)

In accordance with the Family Educational Rights and Privacy Act of 1974.

<input type="checkbox"/> I waive my right of access to this letter of recommendation and any accompanying documents. <input type="checkbox"/> I do not waive my right of access to this letter of recommendation and any accompanying documents. _____ Applicant Signature
<input type="checkbox"/> I waive my right of access to this letter of recommendation and any accompanying documents. <input type="checkbox"/> I do not waive my right of access to this letter of recommendation and any accompanying documents. _____ Applicant Signature
<input type="checkbox"/> I waive my right of access to this letter of recommendation and any accompanying documents. <input type="checkbox"/> I do not waive my right of access to this letter of recommendation and any accompanying documents. _____ Applicant Signature
<input type="checkbox"/> I waive my right of access to this letter of recommendation and any accompanying documents. <input type="checkbox"/> I do not waive my right of access to this letter of recommendation and any accompanying documents. _____ Applicant Signature
<input type="checkbox"/> I waive my right of access to this letter of recommendation and any accompanying documents. <input type="checkbox"/> I do not waive my right of access to this letter of recommendation and any accompanying documents. _____ Applicant Signature
<input type="checkbox"/> I waive my right of access to this letter of recommendation and any accompanying documents. <input type="checkbox"/> I do not waive my right of access to this letter of recommendation and any accompanying documents. _____ Applicant Signature

Faculty Instructions:

In a letter, please address the following questions about this application:

1. The applicant's or applicants' ability to carry out the proposed project
2. The merit of this project and its potential impact
3. The specific benefit that a UROP grant would give this project, compared to a project without a grant.

Please send this form and your letter of recommendation to UROP Program, ISLA, 101 O'Shaughnessy Hall.

_____ Supervising Faculty Member's Signature
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Note: If the student is applying for both the Research and Materials Grant and the Summer Fellowship at the same time, only one copy of this letter of recommendation is needed to support both applications.

Joint UROP Applications

If you are applying for both a **Research and Materials Grant** and a **Summer Fellowship** for the same project, please complete this form and include it after the cover page for each of the applications.

For each application, please submit all required forms and sections, with the following distinctions:

(Check off each description as you have completed it)

- The **COVER PAGES** will need to reflect which copy corresponds to the Research and Materials Grant and which is for the Summer Fellowship (check the boxes at the top of the cover page).
- The **ABSTRACT** can be the same for both applications or modified as needed.
- The items on the **BUDGET PAGES** should reflect the specific needs for the Research and Materials Grant and the number of months and corresponding amount requested for the Summer Fellowship.
- The same **PROJECT DESCRIPTION** can be used for both applications; please ensure that one copy is provided in each application.
- Only one copy of the **LETTER OF RECOMMENDATION** needs to be submitted for both applications.

Please indicate your preference for the following (Select ONLY ONE):

- If I am **NOT** awarded the Summer Fellowship, but I do receive the Research and Materials Grant, I cannot complete the project and will not accept the funds for the Research Materials Grant.
- If I am **NOT** awarded the Summer Fellowship, but I do receive the Research and Materials Grant, I would accept the funds for the Research and Materials Grant.