

STANFORD UNIVERSITY OFFICE MEMORANDUM

DATE: October 2nd, 2007

TO: Department Chairs and Program Directors;
Directors of Stanford-Affiliated Research Centers

COPY: University Cabinet, Undergraduate Studies Directors, and Department and Program Administrators

FROM: John C. Bravman, Freeman-Thornton Vice Provost for Undergraduate Education

SUBJECT: VPUE Departmental Grants for Undergraduate Research

EXECUTIVE SUMMARY

This memorandum is a call for proposals for VPUE Departmental Grants for Undergraduate Research. Grants allow departments, interdisciplinary programs, and research centers to sponsor undergraduate research programs during the summer or academic year. Grants typically range from \$10,000 to \$120,000, depending on the number of students and faculty involved and the length of the research program.

There will be two proposal submission deadlines in Academic Year 07-08:
Wednesday, November 7th, 2007 (for funding through the end of summer 2008)
Wednesday, April 9th, 2008 (for funding spanning Academic Year 08-09)

Future years will feature one deadline in the Spring Quarter, with funding available for use over the subsequent academic year.

Proposals should be submitted via the web form at <http://vpuedepartmentalgrants.stanford.edu>.

PROGRAM GOALS

The VPUE Departmental Grants program aims to create opportunities for undergraduates to work closely and individually with faculty on their current research and scholarly projects. Departments are often best equipped to design effective ways to engage faculty and students in common research projects, and this grant program provides the financial resources to support departmental and program initiatives in undergraduate research.

Departmental research programs commonly aim to provide a bridge between introductory coursework and more advanced independent study. In some cases, the departmental program will allow undergraduates to develop research skills under close faculty mentorship in preparation for undertaking a subsequent honors or senior project. In other cases, the program will enable undergraduates to experience a summer-long or term-time research internship with a faculty member. We aim to be flexible and responsive to the individual needs of each department and program that wishes to participate.

ELIGIBILITY AND SELECTION CRITERIA

This year we again anticipate high demand for these grants, and it is unlikely that we will have sufficient resources to fund all worthy proposals. Departments should make every effort to identify matching funds from deans' offices or other sources to supplement VPUE allocations.

Funds may only be used to support current Stanford undergraduates. Funds may not be used to support honors thesis research. Students conducting research intended for an honors thesis should instead apply for funding through the VPUE Student Grants Program, administered by Undergraduate Advising and Research (UAR). More information is available at <http://studentgrants.stanford.edu>.

Proposals for VPUE Departmental Grants are reviewed by the Undergraduate Advisory Council, a faculty committee that advises the Vice Provost on allocation decisions. The Advisory Council places high value on evidence of the following when reviewing proposals:

- Strong mentorship from faculty members
- A plan for training students in methodologies that could eventually allow for subsequent independent research activities, such as senior projects, honors theses, and graduate study
- The students' regular engagement with larger research questions (the "big picture") and debates with the field, relating to their specific research tasks
- A plan for ensuring good matches between proposed research projects and individual student participants' intellectual interests and programs of study

PROPOSAL GUIDELINES

There will be two proposal submission deadlines in the academic year 2007-08:

Wednesday, November 7th, 2007 (for funding through the end of summer 2008)

Wednesday, April 9th, 2008 (for funding spanning Academic Year 08-09)

Funds awarded in the November review will be available January 1st through August 31, 2008; funds awarded in the April review will be available at the beginning of Fiscal Year 08-09 (September 1, 2008 – August 31, 2009). Funds must be used by the end of the fiscal year in which they are made available. Funding cannot be applied retroactively, or carried forward.

Note that in response to an interest in better aligning VPUE programs with the academic and fiscal calendars, we are instituting a change in the VPUE Departmental Grant cycle. Beginning with Academic Year 08-09, we will once again offer only one deadline per year. Deadlines for proposal submission will be in the Spring Quarter, and funds allocated in that review cycle will be available for the entire subsequent academic year.

We encourage proposal authors to consult with Brian Thomas in advance of submitting proposals. He is available to provide feedback on proposal drafts up to one week before the submission deadline. Drafts should be sent via email to bthomas@stanford.edu.

Proposals must be submitted online via web form at <http://vpuedepartmentalgrants.stanford.edu>. You may paste electronic text into the online submission form, and you will have the option of saving your work in-progress and returning later to complete and review the proposal before final submission.

The proposal submission web form requests the following:

I. *Contact Information*

II. *Executive Summary*

This form will serve as the cover sheet to your proposal and will be the first document reviewed by the UGAC committee. The Executive Summary summarizes key points about proposal such as number of students and faculty, quarters in which funding is requested, total budget, etc.

III. *Renewals*

If your proposal is a request for renewed funding, you will be asked for numbers of past faculty and student participants, as well as an assessment of program outcomes and planned improvements.

IV. *Research Program Description*

A discussion of the program's goals, followed by a succinct description of the program's structure and organization including:

- faculty member(s) and administrative staff designated to oversee the development and implementation of the program
- research or scholarly activities in which undergraduates will be engaged
- mentoring roles of faculty members
- requirements and procedures for student application and selection

Departments proposing new research programs may wish to consult the appendix containing examples of best practices in current departmental research programs.

V. *Student Products*

A description of the student products to be completed during the research experience (written reports, posters or oral presentations, curricular materials, or proposals for future research such as honors theses).

VI. *Relation to Students' Educational Program*

A discussion of how the research will enhance the student participants' educational program and goals. This may include preparations for senior projects or honors theses, exploration of potential majors, or introduction to advanced study in defined areas of interest within the major.

VII. *Evaluation*

A plan to evaluate the project based on stated programmatic goals. Note that the Advisory Council requires all students supported by VPUE Departmental Grants to submit final online project evaluations through the web form at

<http://vpue-fmpform1.stanford.edu/URP/evals/eval1.html>. If your proposal is for funding renewal of a past VPUE Departmental Grant, the UAR office will provide completed student evaluations to the Advisory Council for inclusion in their review. If your students have not yet completed this evaluation, please instruct them to do so.

VIII. *Line-Item Budget*: Expenditures will be restricted to approved items from the proposal budget. Examples of eligible expenses include:

- *Student stipends or hourly wages*: summer and term-time, for work on the described project. The maximum level at which VPUE funds may support an undergraduate researcher is \$13.00 an hour, or the stipend equivalent thereof. Students may be paid for up to 10 hours per week during the regular academic year or 40 hours per week during the summer. Full-time summer stipends may not exceed \$5,200.
- *Materials costs*: limited funds for the purchase of small equipment, lab supplies, data sets, copying, or other materials directly related to the described student research project. All requests must be for exclusive use of the undergraduate; no infrastructural costs will be covered. Funds generally do not support software purchases. Requests may not exceed \$500 per student.
- *Student travel expenses*: to accompany a faculty member on a group field trip, or to a field site, archive, or other off-campus resource related to the described research project. Travel to sites covered by a U.S. State Department Travel Warning or other safety advisory cannot be funded. Students traveling to a professional or scholarly conference to present their own research should apply for a Conference Travel Grant instead; more information is available at <http://studentgrants.stanford.edu>.
- *Program development*: support for development and delivery of research methods workshops and other program activities.

PROGRAM ADMINISTRATION

The VPUE Departmental Grants for Undergraduate Research program is administered by the office of Undergraduate Advising and Research (UAR).

For questions regarding program goals, proposal content, or review criteria, please contact Brian Thomas (bthomas@stanford.edu; 650/723-0051).

For questions regarding grant or proposal administration or budget, please contact Beth Elliott (belliot@stanford.edu; 650/723-1588).

FREQUENTLY ASKED QUESTIONS

How do VPUE Departmental Grants differ from the Student Grant Program (Major Grants, "UROs", etc.) also offered by Undergraduate Advising and Research?

The difference between UAR Student Grants and support offered through a Departmental Grant is subtle but significant: Student Grants are intended to support student-initiated and student-designed research projects mentored by faculty. The VPUE Departmental Grants generally support faculty-designed projects, which provide undergraduates with supervised experience while they develop research skills. VPUE Departmental Grants may not be used to support students' honors thesis research during the summer between the junior and senior year, or during the senior year; students should apply for Major or Quarterly Grants to support this honors research. Both VPUE and Student Grant programs are administered by the UAR office to ensure coordination of benefits. When a question arises as to which type of support is appropriate, please contact Brian Thomas (bthomas@stanford.edu).

How do VPUE Departmental Grants differ from VPUE Faculty Grants for Undergraduate Research?

Proposals for VPUE Faculty Grants are submitted by individual faculty members to support the expenses of undergraduate participation in the faculty member's current research. These grants generally support one student's (or, occasionally, a small student group's) work with one faculty member. Wherever possible, we encourage departments or programs with VPUE Departmental Grants to incorporate the broadest possible array of faculty projects into their proposals, reducing the need for individual faculty submissions. For more information (including the VPUE Faculty Grant request for proposals), please visit <http://vpuefacultygrants.stanford.edu>.

What about the Summer Research College?

Undergraduates supported by VPUE Department Grants may choose to live in the Summer Research College (SRC). SRC is a 10-week summer residential program for undergraduates participating in full-time research on campus. Benefits of SRC include immersion in a community of undergraduates similarly committed to full-time research, faculty guest speakers, workshops on topics relating to research, and cultural and social excursions. The program is designed to enhance the students' research experience. The number of available spaces for summer 2008 is limited, and we may not be able to meet full student demand. Students interested in living in SRC can learn more at <http://src.stanford.edu>.

What about the budget?

Upon award VPUE sets up and funds a PTA of which the project and task are owned and managed by the awarded department. All administrative staff with authority to view PTAs owned by the department may sign-off on expenses and report on expenses in ReportMart3. The PTA expiration date for Department Grants is the 31st of August which requires that deficits are transferred off by the department administrator.. Unused funds may not be carried forward.

APPENDIX: BEST PRACTICES IN DEPARTMENTAL UNDERGRADUATE RESEARCH PROGRAMS

Successful departmental research programs at Stanford have identified the following programmatic features as contributing to positive undergraduate research experiences:

- A designated faculty member or academic staff member to oversee the program from start to finish, and to serve as a key contact person for students, faculty, and UAR staff.
- Departmental/IDP oversight to ensure that the research projects which faculty design for students have well-defined parameters and are appropriate for the level and experience of the student participants.
- A careful process for selecting students and matching them with faculty mentors to assure maximum mutual interest and benefit.
- Advance preparation opportunities for students to acquaint themselves with background knowledge, research materials, and faculty expectations before the official start of the program. Activities have included spring quarter assigned readings and tutorial discussions, and a spring quarter faculty/student luncheon to become acquainted and discuss projects. One department requires students to write a proposal early in spring quarter (with assistance from faculty and graduate students) for the research they plan to undertake in a lab over the summer.
- Structured group activities that bring undergraduates together weekly or biweekly into a larger departmental community. Several departments sponsor weekly seminars at which one faculty member (or a faculty member and undergraduate) presents current research. Other activities include weekly journal reading clubs or group discussion meetings on topics such as career paths in the field, graduate studies, or weekly student reports on research progress.
- A mechanism for both mid-point and final assessment of student learning and progress. Several departments request that faculty administer a short survey in the middle of the program to gauge student progress and satisfaction. Final program assessments are required for all VPUE funding reallocation decisions and are administered centrally through an online system maintained by the UAR.
- An opportunity for undergraduates to share their research with a broader audience at the conclusion of the program. Several departments/IDPs require students to make a brief oral presentation to peers, faculty, and graduate students. Others host a poster session and invite all departmental affiliates to attend.
- A clearly-defined procedure or set of advice for how students may continue their research in the departmental/IDP honors program or through a senior project.