

## **Harvey Mudd College—Faculty Research in the Quantitative Life Sciences Call for Proposals**

As a result of a grant from the Keck Foundation, we are initiating a new program of faculty and student research. The primary objective of the grant is to encourage new interdisciplinary research activities in the quantitative life sciences, such as mathematical and computational biology. The program is intended to advance faculty research, and projects ideally will involve undergraduates.

### **Eligibility**

Proposals may be submitted by any HMC faculty member who is a full-time regular appointee. Proposals for joint research projects will be accepted if at least one of the participants is a full-time regular HMC faculty member. Co-investigators who are not full-time HMC faculty are not eligible for support. Investigators receiving funding will be required to submit a final report on their project.

### **Number of Proposals**

Eligible faculty may submit one proposal per year. Submission of a proposal does not preclude submission of the same proposal to other appropriate agencies. Faculty are encouraged to seek funding outside this program.

### **Award Size and Duration**

The size of an award will generally not exceed \$10,000, unless more than one student is involved. Faculty stipends up to \$4,000, along with allocation for fringe benefits, may be requested. Awards are normally granted for one year.

### **Research Eligible for Support**

*Proposals eligible for support include:*

- Proposals to enhance or develop research programs in the quantitative life sciences. Eligible items and activities include stipends for students (priority given to HMC students), stipends for faculty, joint research projects (with an HMC faculty member as principal investigator), research supplies, and research-related travel for students.

*The following items and activities are not eligible for support:*

- Student research that is not related to specific faculty research projects.
- Organizing research conferences.
- Course development.
- Support for outside (non-HMC) investigators.
- Stipends or equipment for graduate students.
- Equipment needs are not included in the Keck grant. However, if equipment is essential for a project, this should be mentioned in the proposal, and may be supportable from other funding sources.

## **Proposal Evaluation**

Proposals will be evaluated according to (1) the quality of the proposal, (2) the significance of the proposed research, (3) the feasibility of the research within time and budget constraints. Whenever possible, the work should be performed at HMC.

## **Other Considerations**

The funding available to the Quantitative Life Sciences Research Program is provided by a grant from the Keck Foundation. While proposals are evaluated according to the criteria listed in the previous paragraph, restrictions on the Keck funding may limit the number of stipends that can be awarded.

## **Conditions**

- Additional information may be requested as needed to evaluate a proposal.
- At the completion of the research project, the principal investigator is required to submit a final report. In addition, investigators may be asked to present their work to the community at large in the form of a public lecture or discussion.
- Acknowledgment of the funding source should be made in any publication or presentation resulting from sponsored research.

## **Proposal Preparation and Format**

Please see the attached application form.

## **Proposal Target Dates:**

Tues. Nov. 26	<b>Call for Proposals</b>
Wed. Jan. 15	<b>Due Date</b> (In the office of the Dean of Faculty by 5:00 PM)
Fri. Jan. 24	<b>Confirmation of Receipt of Proposal</b> (Distributed by Dean of Faculty)
Mon. Mar. 3	<b>Notification of Awards</b>

## **1. Title and Abstract of Proposed Research**

State, *in one concise paragraph*, the importance of the project, the originality of the approach and the contribution it will make if successful, in a manner intelligible and informative to a non-specialist in the sciences.

## **2. Starting Date, Duration and Location of Proposed Research**

## **3. Proposed Budget**

Budget items may include summer salary for the principal investigator, summer wages for students, equipment, supplies, travel and publication costs. Each budget request must be justified. Faculty compensation may not exceed \$5000 (stipend \$4000, \$1000 fringe benefits at 25%) for two full months of effort may be requested. Student wages should conform to the current pay scale available from the Dean of Faculty. Student wages are taxable. Include California sales tax (8.25%) for equipment purchases from California vendors, and California use tax (8.25%) for purchases from out-of-state vendors.

## **4. External Funding**

Indicate external agencies and foundations from which funding has been sought for *this* project and for all other projects during the last academic year.

## **5. Resume of Principal Investigator and any Co-investigators**

Include a list of proposals, publications and projects completed within the past five years that pertain to the proposed research. The resume may be attached at the end of the proposal.

## **6. Narrative**

### **a. Proposed research**

In no more than 4 single-spaced pages, including tables and graphs, give specific details of the central question and the approach to the study. (References do not count towards the 4-page limit.) The research should be described in a manner intelligible to a non-specialist.

### **b. Significance of the research**

In no more than 1/2 single-spaced page, describe the significance of your project according to *one or more* of the following criteria.

- 1) The project extends existing work in a field in an important way.
- 2) The project breaks new ground in terms of methods, theory, creativity, etc.
- 3) The project enables important applications to other fields.

### **c. Feasibility**

In no more than 1/2 single-spaced page, establish the feasibility of your project by demonstrating the likelihood of completion given time and budget constraints. Please provide a brief timeline.

### **d. Benefit to HMC students**

In no more than 1/2 single-spaced page, explain how students will be involved in, or will benefit from, this research project.