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

Objectives

To encourage and strengthen the research activities in mathematical and computational biology at Harvey Mudd College. The program is intended to further 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 funding sources. Faculty are encouraged to seek funding outside this program.

Award Size and Duration

The size of an award shall not exceed $10,000. 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:

• Independent research projects involving mathematical and computational biology. Eligible items and activities include stipends for students (priority given to HMC students), joint research projects (with an HMC faculty member as principal investigator), equipment acquisitions for ongoing or new research activities, research-related travel, and publication and editorial costs for projects supported as part of the proposal.

The following items and activities are not eligible for support:

• Student research that is not related to specific faculty research projects.
• Research conferences.
• Course development.
• Support for outside (non-HMC) investigators, or for equipment that will be housed permanently off campus.
• Stipends or equipment for graduate students.
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. Proposals will be evaluated by the Dean of Faculty, in consultation with faculty members from the Claremont Colleges who have expertise in these fields.

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 above, 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:

Wed. Nov. 25 Call for Proposals
Wed. Jan. 14 Due Date (In the office of the Dean of Faculty by 5:00 PM)
Note: Late proposals will not be eligible for funding.
Mon. Jan. 26 Confirmation of Receipt of Proposal (Distributed by Dean of Faculty)
Mon. Mar. 1 Notification of Awards
**Grant Application for Research in the Quantitative Life Sciences**  
**Harvey Mudd College**  
**For Fiscal Year 2004 - 2005**

### COVER SHEET

**Principal Investigators** (Also list any co-investigators)

**Title of Proposed Research**

Indicate first Year employed as a full-time, regular faculty member at HMC _____

External funding for this and other projects during the past academic year  
(please check all that apply):

- Previous but not ongoing: _____  
  - Pending Applications: _____
- Ongoing: _____  
  - Rejected Applications: _____  
  (Within past 12 months)
- New Funding: _____

Is this a new area of research for the Principal Investigator?  

- YES  
  (If yes, please address this in the “Description of Proposed Research” section of the proposal.)
- NO

**Total Funds Requested** ____________
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. In addition, all “External Funding” categories that have been checked on the cover sheet must be described in this section.

5. Resume of Principal Investigator

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.