

School of Science Institute for Mathematical Modeling and Computational Sciences

GRANT to ENHANCE INTERDISCIPLINARY RESEARCH and EDUCATION 2013-14

(iM2CS-GEIRE 2013-14)

The main objective of the iM2CS-GEIRE program is to invest in innovative and promising ideas that would enhance impact and visibility of the School of Science and IUPUI by attracting external funding or by enriching undergraduate and/or graduate programs through interdisciplinary projects that integrate mathematical and/or computational approaches to address problems arising in various areas of science, engineering and medicine.

ELIGIBILITY

- All **full-time tenure-track** faculty in the School of Science having an appointment of Assistant Professor and above are eligible to apply.
- Groups of faculty members are encouraged to apply.
- Co-Investigators may be faculty at other Schools or Campuses

To ascertain eligibility, please email the co-directors G. Guidoboni and S. Mukhopadhyay at m2cs@iupui.edu.

FUNDING AND PROJECT DURATION

- *Funding requests maybe up to \$8,000* depending upon the type and scope of research being proposed. Projects will be limited to one (1) year in duration.
- *Budgets will be reviewed critically.* The more realistic the budget, the better will be the chances of the proposal's competitive success. All budget items should have written justifications.

NEWS FOR THE 2013 iM2CS-GEIRE ROUND:

- Proposal **budget** must be **pre-approved** by the iM2CS co-directors.
- iM2CS-GEIRE can also support *experimental work, in addition to mathematical and computational work*, if this is needed for the development/validation/calibration of mathematical or computational models.
- The PI must be a member of the School of Science. However, the projects might involve collaborators, including experimentalists, mathematicians and computer scientists, outside the School of Science and IUPUI.
- Former iM2CS-GEIRE awardees are eligible to apply to the 2013-14 iM2CS-GEIRE for a continuation of the same project or for a new project.

APPLICATION DEADLINE

- Budget and budget justification must be submitted in pdf format via email at m2cs@iupui.edu by 5:00 p.m. **Friday, November 8, 2013**.
- Full Proposal must be submitted in pdf format via email at m2cs@iupui.edu by 5:00 p.m. **Friday, November 22, 2013**.

EFFECTIVE DATE AWARDS

Awards will be effective **January 1, 2014** for twelve months.
Applicants will be notified by **December 15, 2013**.

CRITERIA FOR AWARDS

A iM2CS-GEIRE proposal must supply convincing evidence that the following criteria have been met or, in the case of (3) below, will be met:

1. The proposed activities will enhance impact and visibility of the School of Science and IUPUI by *attracting external funding or by enriching undergraduate and/or graduate programs*.
2. The proposed activities suit the review criteria of the targeted funding external agencies. In particular, the **proposers must explicitly address** how the *proposed activities are innovative (NIH) and/or transformative (NSF)*.
3. The proposed activities are *of interdisciplinary nature and integrate mathematical and/or computational approaches* to address problems arising in science, engineering or medicine.
4. **The proposal must** demonstrate *substantial monetary need* to conduct research that would not otherwise be accomplished or immediately funded by external funding agencies. The budget will be reviewed critically: budget realism is strongly encouraged.
5. Since proposals may be reviewed by colleagues who are not specialist in your field, it is VERY IMPORTANT that the significance of the research is conveyed to a *nonspecialist academic audience*.

APPLICATION INSTRUCTIONS

- Use standard paper size 8 ½ x 11 with at least 1/2 inch margins.
- Use an Arial, Helvetica, Palatino Linotype, or Georgia typeface, a black font color, and a font size of 11 points or larger. Charts, graphs, figures and so on may be in color.

PROPOSALS MUST INCLUDE THE FOLLOWING ITEMS

1. **Cover Page** (See below)
2. **Project description (3 page limit)**, including

- a. **Introduction** -- emphasize the importance of the project and summarize previous research in the field.
 - b. **Objectives** -- specific accomplishments and outcomes of the project.
 - c. **Procedures** -- the detail of how the project will be carried out
 - d. **Project Suitability to the program** -- Specify how the proposal will meet the purpose and criteria of the program by explicitly address:
 - i. How the proposed activities will enhance impact and visibility of the School of Science and IUPUI (see criteria for awards #1);
 - ii. how the proposed activities are innovative (NIH) and/or transformative (NSF) (see criteria for awards #2);
 - iii. why and how the money from this award are needed (see criteria for awards #3);
 - e. **External funding sources** -- list funding sources and the date when proposals continuing the project proposed here will be submitted. Summarize the external funding environment for your project.
3. **Budget and budget justification (1 page limit)** – Admissible budget items include, but are not limited to, support for undergraduate students, graduate students, post-doctoral fellow and experimental supplies. Faculty summer salary and teaching release CANNOT be funded by iM2CS- GEIRE. Budget pre-approval must be obtained before full proposal submission.
4. **References (no page limit)**
5. **Previous, current and pending support (no page limit)** - For the previous three years, include a list of current and pending support, both internal and external. Include the title, sponsor, amount, and period of project for the Principal Investigator and if any, co-Principal Investigator(s).
6. **Curriculum Vitae** - Include for all professional personnel who will work on the project. Do not exceed two pages for each individual.

POST AWARD REQUIREMENTS

- If an award is made, a final report must be submitted to the School of Science Center for Mathematical Modeling and Computational Sciences within 30 days of the termination of the award period. Additional follow-up information may be requested outside of the final report submission requirement, to determine the ongoing efficacy of the iM2CS-GEIRE mechanism.
- Grant recipients are reminded to acknowledge receipt of iM2CS-GEIRE support in any presentation or publication of work funded by a iM2CS-GEIRE grant.

School of Science Institute for Mathematical Modeling and Computational Sciences		Leave blank-for internal use only
iM2CS-GEIRE		
PI - Name		Campus Address
Rank/Title		Email Address
School		Telephone Number
Department		Fax Number
Title of Project		
Keywords		
Co – PI s (If any)		Amount Requested
Project Dates		Performance Site(s)
Principal Investigator Assurance The undersigned agrees to accept responsibility for the scientific and technical conduct of the research project and for submission of the final report.		
Signature of Principal Investigator		Date