Institute for Mathematical Modeling and Computational Sciences

Seed grant competition 2020-2021

The iM2CS-SEED program invests in innovative ideas by faculty in the School of Science at IUPUI that integrate mathematical, computational and/or data science approaches to address problems in science, medicine, and engineering and that show promise for successfully competing for external funding.

ELIGIBILITY

- All **full-time tenure-track** faculty in the School of Science having an appointment of Assistant Professor and above are eligible to apply as PI.

- Projects involving interdisciplinary groups of faculty are strongly encouraged.

- Co-Investigators may be faculty at other Schools or Campuses.

- **FUNDING AND PROJECT DURATION**

- *Funding requests may be in the range of $6000 to $10,000* depending upon the type and scope of research being proposed. Final funding amounts will depend on the total number of awarded projects and available funds. Limit of one proposal per faculty member. Projects are to be limited to one (1) year.

- *Project outcome* must include submission of an external grant proposal to sustain the project within one (1) year of award date. Prior to submission, the grant designation form (page 5) must be completed and emailed to dskalnik@iupui.edu (please cc gmohler@iupui.edu)

- *Budgets* should be mainly focused on supporting graduate or undergraduate student researchers to assist in obtaining preliminary research results that can be used so strengthen an external grant submission.

APPLICATION DEADLINE

- Full Proposal must be submitted in pdf format via email at gmohler@iupui.edu by

5:00 p.m. EST **Monday, February 1, 2021**.

EFFECTIVE DATE AWARDS

• Applicants will be notified by **March 1, 2021**.

CRITERIA FOR AWARDS

1. The proposed activities meet the review criteria of showing promise for funding by an external agency. In particular, the **proposers must explicitly address** how the *proposed activities are innovative (NIH) and/or transformative (NSF).*

2. The proposed activities are *of an interdisciplinary nature and integrate mathematical, computational and/or data science approaches* to address problems arising in science, engineering or medicine.

3. Since proposals may be reviewed by colleagues who are not specialist in your field, it is important that the significance and broader impacts of the research is conveyed to a *non-specialist academic audience*.

APPLICATION INSTRUCTIONS

• Use standard paper size 8 1⁄2 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, grafts, figures and so on may be in color.

PROPOSALS MUST INCLUDE THE FOLLOWING ITEMS

1. **Cover Page** (See below page 4)

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** -- details of how the project will be carried out.

d. **Project Suitability to iM2CS-SEED** -- Specify how the proposal will meet the purpose and criteria of the program by explicitly addressing:

i. How the proposed activities are innovative and/or transformative and will increase chances of external funding.

ii. Why and how the money from this award are needed.

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 support for undergraduate students, graduate students, post-doctoral fellow and experimental supplies. Teaching release CANNOT be funded by iM2CS-SEED.

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.

• Grant recipients are reminded to acknowledge receipt of iM2CS-SEED support in any presentation or publication of work funded by a iM2CS-SEED grant.

• Submission of at least one external grant proposal to sustain the project within one (1) year of award date is required. Prior to submission, the grant designation form (page 5) must be completed and emailed to dskalnik@iupui.edu.

Cover Page

School of Science Institute for Mathematical Modeling and Computational Sciences **iM2CS-SEED**	Leave blank-for internal use only

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**

Request for School of Science Center Grant Designation

PI:
Dept:
Name of School Center: Institute for Mathematical Modeling and Computational
Science
Project Title:
Funding agency:
Agency Due Date:

Research Centers/Institutes within the School of Science serve to facilitate productive, synergistic, and often inter-disciplinary faculty interactions to promote the teaching and research missions of the school. It is expected that such activities will lead to collaborative grant applications. 10% of the ICR generated from "Center Grants" will be returned directly to the relevant Center to provide additional support for the Center's activities. A "Center Grant" is defined as either a grant/contract awarded to a group of investigators who are acting collectively to further the goals of a Campus- or Dean-sanctioned Research Center or Institute, or a grant/contract that supports Center infrastructure or programs.

Please provide a brief justification for why this grant proposal qualifies as a "Center Grant":

Completed forms should be emailed to Associate Dean David Skalnik (dskalnik@iupui.edu). Note that a proposal must be designated as a Center Grant by the School's Deans office at the time of ORA routing and agency submission to be eligible for subsequent "Center ICR" distribution.