

# SEIRI SEED Grants Information Session

April 12, 2017



IUPUI

**STEM EDUCATION  
INNOVATION AND  
RESEARCH INSTITUTE**

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INDIANA UNIVERSITY-PURDUE UNIVERSITY

Indianapolis

# Presentation Outline

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- Purpose of the SSG
- Scope
- Eligibility
- Funding Levels
- Submission Deadline
- Application Process
- Support for Awardees
- Awardee's Obligations
- Review Criteria
- Proposal Features

# I. Purpose of the SSGS

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- To provide faculty in STEM departments with seed funding to develop, implement, and evaluate the impact of pedagogical innovations across multiple STEM courses at IUPUI.
- To facilitate and support STEM education innovation and research by growing the body of Discipline-Based Education researchers at IUPUI.
- To enhance your competitiveness for external funding.

# DBER Seeks to...

- Understand how people learn the concepts, practices, and ways of thinking of STEM;
- Understand the nature and development of expertise in a discipline;
- Help identify and measure appropriate learning objectives and instructional approaches that advance students toward those objectives;
- Contribute to the knowledge base in a way that can guide the translation of DBER findings to classroom practice;
- Identify approaches to make science and engineering education broad and inclusive

# II. Scope

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- The SSG supports:
  - A wide range of curricular innovations
  - Potentially transformative projects
  - Projects implemented in the **undergraduate curriculum** at IUPUI
  - Projects that provide opportunities for novel Discipline-Based Educational Research
- Proposals should include:
  - An innovative aspect
  - A plan to assess/evaluate student impact (*we will help you refine the conceptualization of this component post-award*)

# II. Scope

## Project Ideas

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- Developing and exploring any novel and potentially transformative approach to teaching science, technology, engineering, mathematics, or informatics to undergraduate STEM students at IUPUI
- Situating a rigorously tested pedagogical approach that has been proven to work in one context within another
- Utilizing technology within or beyond the STEM classroom in novel ways
- Fostering interdisciplinary collaborations among student teams from within and outside of STEM or across STEM disciplines

# III. Eligibility

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- The PI must be an IUPUI full-time faculty within the School of Science, the School of Engineering and Technology, or the School of Informatics and Computing (tenured, tenure track, and non-tenure track).
- Co-PI(s) may also include faculty members from the School of Education or any other school.
- Other part-time or adjunct faculty within the School of Science or the School of Engineering and Technology may be included on proposals but may not serve as a PI.

# IV. Funding Levels

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- Up to \$150,000 for projects from 18 to 24 months.
- Teams can apply for up to \$30,000.
- SEIRI reserves the right to negotiate budgets.



# V. Submission Deadline

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**By May 15, 2017, 11:59pm EST, upload to**

**[https://iu.co1.qualtrics.com/SE/?SID=SV\\_1Y3BdVnMqyEYHwV&Q\\_JFE=0](https://iu.co1.qualtrics.com/SE/?SID=SV_1Y3BdVnMqyEYHwV&Q_JFE=0)**

**Late submissions will be returned without review.**

# VI. Application Process

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- Direct your SSG-related questions to [seiri@iupui.edu](mailto:seiri@iupui.edu)
- For an appointment, call 317-278-0168

# VII. Support for Awardees

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- Programmatic Consultations Post-Award
  - Developing an assessment/evaluation plan
  - Preparing IRB Materials

# VIII. Awardees' Obligations

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- **July 2017:** Notification of funding
- **ASAP:** Apply for and receive IRB
- **For the duration of the project:** Agree to work with a facilitator from SEIRI who will serve as a consultant and will monitor the progress of the project.
- **August 2017:** Attend session for awardees
- **Spring 2018:** Present at a SSG symposium
- **July 2019:** Complete final project reports
- **Within 24 months:** Apply for external funding
- *When you disseminate findings, acknowledge SSG support*

# IX. Review Criteria

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1. The potential **student impact** of the project
2. The **sustainability** and long-term impact of the project
3. The potential for the project to **advance knowledge**
4. The **appropriateness** of the budget
5. The **qualifications** of the team to conduct the work
6. The probability of the project leading to **external funding**

# XI. Proposal Features

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1. Project Summary (1-page maximum)
2. Project Description (8-page maximum)
3. Project Timeline (1-page maximum)
4. Budget Overview
5. Budget Justification (1-page maximum)
6. Bio-sketches
7. Letters of Support from Department Chairs

# XI. Proposal Features

## Project Summary (1-page)

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- Project Title
- List all investigators, including full name, department, rank/title, and e-mail address
- Optional: Other personnel (collaborators, technicians, graduate students, postdocs)
- List potential sources of future funding (NSF, NIH, etc.)
- Abstract: Describe the project in lay terms; articulate the project objective; specify what makes this project innovative; describe your research or evaluation plan to ascertain student impact (this will be listed on SEIRI's website if the project is funded)

# XI. Proposal Features

## Project Description (8 pages)

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- Project Scope
  - Objectives
  - Participants
  - Recruitment
- Rationale and Literature Review
- Novelty
- Assessment/Evaluation Plan
- Roles of Key Personnel
- Dissemination Plan
- Broader Impacts
- References (these do not count towards the max)



# XI. Proposal Features

## Project Timeline (an example)

YEAR	2017						2018											
MONTH	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Part 1 Data Collection	█	█	█	█														
Part 1 Data Analysis				█	█	█	█											
Part 2 Data Collection							█	█	█	█								
Part 2 Data Analysis									█	█	█	█						
Part 3 Data Collection												█	█	█	█			
Part 3 Data Analysis														█	█	█	█	█
Team Meetings	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Conference Travel					█								█					
Other Dissemination															█	█	█	█

# XI. Proposal Features

## Budget Overview

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**Use either your own template or one offered by ORA:**

[http://www.researchadmin.iu.edu/GrantContract/gc-propprep/gcs\\_samples.html](http://www.researchadmin.iu.edu/GrantContract/gc-propprep/gcs_samples.html)

Note that there are no indirect costs.

# **XI. Proposal Features**

## **Budget Justification (1 page)**

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Make sure this aligns with your budget.

# XI. Proposal Features

## Biographical Sketches (1-page each)

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- List Professional Preparation
- Current and Prior Academic Appointments
- Current and Pending Funding
- Relevant products (e.g., Patents, Publications)

# **XI. Proposal Features**

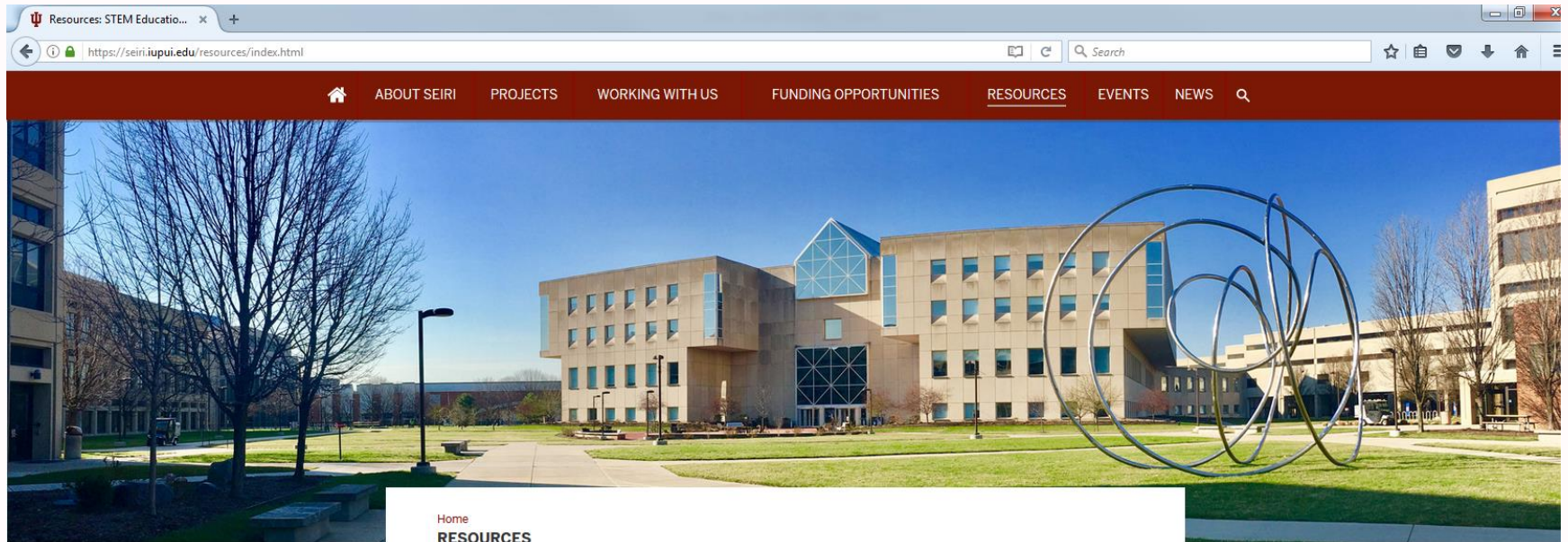
## **Letter(s) of Support**

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A letter of support from each investigator's Department Chair must be uploaded with your application

# Leverage resources on our new website:

<http://seiri.iupui.edu>



- [Discipline-Based Educational Research](#)
- [National STEM Reports](#)
- [Diffusion of Innovations](#)
- [Topical Research](#)
- [Educational Research -- General](#)
- [Quantitative Research Methodologies](#)
- [Qualitative Research Methodologies](#)
- [Mixed Methods Research](#)
- [Science of Learning](#)
- [Science of Instruction](#)

*\*Screenshot taken  
March 20, 2017*

# Join us next week...

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## Teaching@IUPUI: An Introduction to Course Evaluation and Assessment

**Presenters:** Grant Fore, Justin Hess,

**Date/Time:** April 19, 2017, 11:30 am – 12:30pm

**Where:** Online – Adobe Connect

**Registration Link:**

<http://ctl.iupui.edu/Workshops-Events/Events/EventRegistration?eventid=e167ffa1-aa0c-4236-83ec-14dd007078ca&scheduleid=4d65470b-02e0-4768-8a44-1b0c3aa98a06>

**Identify funding opportunities on our website:**

**<http://seiri.iupui.edu>**

**Thank you.**

**Questions?**