



## 2017-2018 Action Research Fellowship Request for Applications

### About ESTEME@OSU

Oregon State University is transforming; the culture of scholarship is being applied toward comprehensively examining and evolving undergraduate instructional practices. This shift has many implications; one of the most exciting is an improvement in student learning outcomes and competencies. The [ESTEME@OSU](#) (Enhancing STEM Education at Oregon State University) project is focusing on increasing the use of [evidence-based instructional practices \(EBIPs\)](#) to enhance the effectiveness of STEM courses. *This program is supported by the National Science Foundation's WIDER program, DUE 1347817.*

### Purpose of the Fellowship

This fellowship supports instructors already using EBIPs in STEM courses to take the next step in educational innovation through action research; that is, asking and answering questions about practice and collecting evidence in their own classroom to inform practice. Fellows will be supported in three ways: 1) participation in an interdisciplinary community of instructors with similar goals to apply what research tells us about learning in the classroom; 2) partnership with an ESTEME@OSU mentor with practical expertise in education research to support research design, data collection and analysis; and 3) up to \$3,000 in financial support that can cover travel, publication fees, supplies, or other research-related expenses.

### Eligibility

Faculty and instructors teaching undergraduate courses in the sciences (broadly speaking), engineering or mathematics, with a preference for instructors of large enrollment courses. Individuals are eligible, but teams that work across disciplines or sections are encouraged to apply. Partnership with graduate students or postdocs pursuing “Scholar” certification through the OSU Center for the Integration of Research, Teaching and Learning ([CIRTL](#)) is highly encouraged. CIRTL participants pursuing the Scholar Level have knowledge and skills in conducting teaching as research with a strong grasp of the literature, critical reflection, and sharing findings with a local, regional, or national group of peers. Please contact [Julie.Risien@oregonstate.edu](mailto:Julie.Risien@oregonstate.edu) and [Jessica.Beck@oregonstate.edu](mailto:Jessica.Beck@oregonstate.edu) to find a match with an aspiring CIRTL Scholar.

### Program Requirements

- Meet with the community of fellows four times from June 2017 through June 2018 to discuss and refine research plans, discuss approaches to analysis, results and dissemination.
- Stay in regular communication and attend meetings with mentors and research partners.
- Comply with all policies of the OSU Office of Research Integrity and the Institutional Review Board for research on human subjects.
- Present the study at the Spring 2018 ESTEME@OSU “Faculty, Food, and Fun” event.

- Present the study at least one additional OSU venue by the end of the 2018 calendar year (may include campus seminar, departmental or college meetings).
- Disseminate results by presenting a paper or poster at a conference or by submitting to a peer-reviewed journal by the end of the 2018-19 academic year.
- Provide copies of all papers, posters and presentations to the ESTEME@OSU team.

## Application

Applications are due April 30, 2017 via email to [Victoria.Bonebrake@oregonstate.edu](mailto:Victoria.Bonebrake@oregonstate.edu). Please submit a single .pdf document including the below elements.

1. Cover page with name(s), title(s), department(s) and the title of proposed project.
2. Statement(s) of teaching practice describing each team member's instructional approach and the professional and personal development goals each wishes to achieve through the fellowship (1 paragraph each).
3. Curriculum vitae (2-page version is preferred, but not required. Please submit in a format you already have).
4. Preliminary proposal for research including the following (1-3 pages)
  - a. A brief description of the course(s) or series you wish to study during the 2017-2018 academic year. Please include an estimate of the number of students that will be included in your study.
  - b. A brief description of the practices (EBIPs) each team member currently uses and/or plans to use.
  - c. One or more preliminary action research question(s).
  - d. A preliminary description or bullet points about anticipated methods of data collection and analyses you might use to answer the proposed research question(s) and the possible role(s) an undergraduate researcher could have in the project.
5. A preliminary dissemination plan describing how you intend to meet the requirements for sharing your results at OSU *and* with the broader education research community outside of OSU (1 paragraph or bullets).
6. Applicants are encouraged to address how department resources might be leveraged to encourage the implementation of teaching practices supported by project results (up to 1 paragraph).
7. Signature from your department chair on a letter of commitment (template letter attached).

## Selection

Applications will be reviewed by a small team including principal investigators and advisors of the ESTEME@OSU WIDER grant team and the Center for Research on Lifelong STEM Learning. Selection criteria are 1) merit of preliminary research and dissemination plans; 2) potential for research to contribute to change initiatives at OSU and the goals of the ESTEME@OSU in particular; and 3) distribution of fellows across STEM departments. Funding is available for 8-10 proposals. All applicants will be notified about funding decisions by May 17, 2017.

## Additional Information

Potential applicants are encouraged to contact us with questions.

[Victoria.Bonebrak@oregonstate.edu](mailto:Victoria.Bonebrak@oregonstate.edu) (Program Assistant)

[Julie.Risien@oregonstate.edu](mailto:Julie.Risien@oregonstate.edu) (Program Manager)

[Milo.Koretsky@oregonstate.edu](mailto:Milo.Koretsky@oregonstate.edu) (Principal Investigator)

More information about the ESTEME@OSU project is here: <http://stem.oregonstate.edu/esteme/home> and [http://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1347817](http://www.nsf.gov/awardsearch/showAward?AWD_ID=1347817).

Examples of ESTEME@OSU EBIPs of focus are here:

<http://stem.oregonstate.edu/esteme/ebips>.

A video describing Action Research is here: [http://www.nefstem.org/teacher\\_guide/videos/intro\\_2.wmv](http://www.nefstem.org/teacher_guide/videos/intro_2.wmv)

More Information about the CIRTL Scholars Program is here:

<http://gradschool.oregonstate.edu/cirtl>



[APPLICANT NAME] has shared with me the research and dissemination plan associated with their application for an ESTEME@OSU Action Research Fellowship. I support [APPLICANT NAME] in their endeavor to conduct action research, participate in the fellowship community of practice, and disseminate results at OSU and external venues.

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Signature of Chair or Head

Department or School

Date