



THE UNIVERSITY OF TEXAS AT AUSTIN

Texas Institute for Discovery Education in Science

College of Natural Sciences

February 2, 2015

Dear Colleagues,

It is our great pleasure to invite applications for the inaugural *National Academies Special Topics Summer Institute on Course-based Undergraduate Research Experiences*.

Numerous calls for reform in undergraduate STEM education have emphasized involving undergraduates in doing research because of education studies showing how students benefit from research experiences. To offer research experiences at scale, faculty are developing Course-based Undergraduate Research Experiences, or CUREs. CUREs involve whole classes of students in addressing a research question or problem that is of interest to the scientific community. Not only do CUREs present students with opportunities to make scientific discoveries, CUREs involve students in numerous activities that have been shown to improve learning, especially when compared to traditional lab courses. CUREs also offer the capacity to involve many students in research and can serve all students who enroll in a course – not only self-selecting students who seek out research internships or who participate in specialized programs.

The Texas Institute for Discovery Education in Science (TIDES; <https://cns.utexas.edu/tides>) at The University of Texas at Austin (UT-Austin) is home to two major CURE initiatives – the Freshman Research Initiative (<https://cns.utexas.edu/fri>), which involves 800+ freshmen each year in CUREs across the natural sciences, and CUREnet, an NSF-funded network supporting widespread adoption of CURE instruction (<http://curenet.cns.utexas.edu/>). TIDES is joining forces with the National Academies Summer Institute (<http://www.academiessummerinstitute.org/>) to offer an intensive professional development session for faculty to develop their own CUREs.

We invite applications to participate in the CURE Summer Institute (CURE SI). Modeled on the National Academies Summer Institutes, the CURE SI will be a working meeting during which participants will learn about and use evidence-based teaching strategies to develop a CURE they will teach at their home institution during the 2015-2016 academic year. Working sessions will focus on the features of science research projects that lend themselves to CUREs, and on teaching CUREs using evidence-based teaching strategies, such as active learning, assessment, and mentoring. Each participant or participating team will have an experienced CURE instructor as an onsite facilitator and distant mentor as they teach their CUREs during the academic year. The CURE SI is distinct from the Freshman Research Initiative conference, which will be held again at UT-Austin in 2016.

The CURE SI will be held at UT-Austin from **June 28 to July 2, 2015**. The following costs will be covered by NSF funding for CUREnet:

- On-site meeting expenses and teaching resources
- Dinner on arrival night, June 28, 2015
- Breakfast and lunch each day
- Lodging for attending teams (not including graduate teaching assistants)

Participants will be expected to cover the following costs:

- Three dinners
- Travel to and from the CURE SI (travel grants are available as needed – see application for details)
- Travel and lodging for graduate student participants

We are accepting proposals from teams representing any science disciplines. Priority will be placed on:

- Applications from teams – two or three faculty members or instructional staff who will collaborate on developing a CURE or who will work side-by-side to develop CUREs at their institution. Graduate teaching assistants may also be a part of a team, but their travel and lodging must be covered by their home institution.
- Applications from diverse institutions, including research and comprehensive universities, liberal arts colleges, and community colleges.
- Proposals to develop CUREs that will enroll freshmen or sophomores.
- Proposals to develop CUREs for science majors.

As indicated on the application, selected participants are expected to teach their CURE, either as a stand-alone course, as part of an existing course, or in place of an existing course during the 2015-2016 academic year. Applications should be accompanied by a letter of support from the relevant department head(s).

The CURE Summer Institute application and letter of support templates are attached to this email and available at: <https://cns.utexas.edu/tides/faculty/summer-institutes>

Review of applications will begin March 2 and applicants will be notified regarding their status of their application by March 16. Please contact us at tides@austin.utexas.edu with any questions. This information, the application document, and the template for the letter of support are attached.

Sincerely,

Erin Dolan, Tony Gonzalez, Al MacKrell, Gregory Palmer, Stuart Reichler, Stacia Rodenbusch, Moriah Sandy

Steering Committee

National Academies Special Topics Summer Institute on CUREs

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