



Established Program to  
Stimulate Competitive Research

## NDSU EPSCoR Request for Proposals STEM Research and Education

*Issued: August 14, 2019  
Deadline: Noon, September 13, 2019*

### **NDSU Only Announcement**

The ND EPSCoR State Office's mission is to support efforts of participating institutions of higher education across the state that result in increased STEM faculty capacity and competitiveness and a stronger STEM pipeline that produces our next generation workforce, educators, and researchers.

Thus, the NDSU campus of ND EPSCoR is accepting proposals to fund STEM activities in the following areas:

#### **A. Proposal Categories**

1. Equipment. Proposals will be accepted for small pieces of equipment (up to \$35,000) that help advance scientific inquiry and R&D. Preference will be given to proposals that: 1) show collaborative use across multiple colleges and departments; 2) request equipment not currently available on campus; and, 3) engage a large number of undergraduate and graduate students in research and learning. Proposals must contain: 1) introduction, justification, and description of the equipment to be purchased; 2) users [i.e., colleges, departments, etc. of the equipment including an approximate number of students who would be trained per year]; 3) statement of whether this equipment is redundant with other pieces of equipment on campus; and, 4) discussion of how this equipment would lead to more proposals to federal agencies.
2. Equipment Repair. Proposals will be accepted to help defray the costs of fixing equipment necessary for research. Preference will be given to proposals that provide a minimum of 25% match to the total repair cost. Proposals must contain: 1) a description of the equipment in need of repair; 2) users of the equipment (departments/colleges); 3) type of research for which the equipment is needed; 4) the estimate of the repair cost; and, 5) the amount and source of match. Awards up to \$4,000 will be provided.
3. Student travel (undergraduate and graduate) to present at a national conference. Professional development of students is crucial to their long-term success. Proposals will be accepted from undergraduate and graduate students who have an accepted presentation (oral and/or poster) at a national conference. The proposal must contain a short discussion of the student's research and professional goals. Correspondence from the conference organizing committee that states the student's abstract was selected for presentation must be submitted with the proposal. Awards up to \$2,000 will be provided, and all travel must be domestic. The student's faculty advisor/mentor must be the PI on the proposal [and submit the proposal] as an indication that the student has performed the research.
4. Undergraduate research. Data show that engaging undergraduate students in research leads to better retention and success of the student. The proposal must contain a short introduction (and significance of) to the research topic, the goals and objectives of the specific proposed research, the innovation of the research, approach/methods, and

references. The student's faculty advisor/mentor must submit a letter supporting the research and certifying that he/she will be providing space/resources and mentoring to the student during the course of the research. Awards up to \$5,000 will be provided. The faculty member must be the PI on the proposal [and submit the proposal].

5. Seed awards for faculty to collect preliminary data for the preparation of **federal** STEM proposals. Funding will be provided to researchers for the specific purpose of gathering preliminary data needed for proposal preparation and submission to a federal agency. Funds may be used for materials and supplies, student support (undergraduate and graduate), and operating services (e.g., recharge center fees). Proposals must provide an introduction and justification for the research, description of the research and data to be collected, the specific federal agency RFP to which a proposal will be submitted, and a short biosketch (2 page) for all participating researchers. Priority will be given to collaborative, interdisciplinary teams/research. Awards of up to \$10,000 will be provided.
6. External proposal review for large, collaborative and interdisciplinary STEM efforts. The competition for federal research dollars has grown substantially over the past decade. In addition, federal agencies are placing a significant focus on interdisciplinary, cross-cutting efforts. Funds for external peer review will be provided to large, interdisciplinary teams/efforts to help position researchers for even greater success in receiving federal awards. Requests for funds must include: 1) list of researchers/affiliations; 2) title of proposal; 3) executive summary of proposal; 4) funding amount; 5) federal agency/program and proposal due date; and, 6) short biosketch (2 page) of all participating researchers. Requests must be received at least four months in advance of the proposal due date so reviewers/review entity can be arranged. Most reviews take approximately one month once the review entity receives the proposal. Awards up to \$5,000 will be made. NDSU campus of ND EPSCoR will contract directly with the external review entity for this service.
7. Seed awards for faculty and students to engage K12 in STEM outreach activities. Strengthening and broadening the STEM pipeline is a core goal of ND EPSCoR. Proposals will be accepted that focus on activities that build stronger partnerships with K12 STEM education in the state. Of particular interest are activities that engage underrepresented/underserved students and result in an increased awareness and interest in STEM careers. Proposals must include: 1) introduction and justification for the activity (i.e., is it grounded in a best practice); 2) description of the activity; 3) description of the K12 partner entity; 4) is this a new or existing activity with this partner; 5) target audience (i.e., grade level, student demographics, etc.); 6) is this a formal or informal activity program; and 7) short biosketch (2 page) of each participating faculty. If an IRB will be needed, proof of an exemption and/or active IRB number will be needed prior to releasing funds. Awards up to \$6,000 will be made.

## **B. Eligibility**

All faculty (tenure-track, tenured, professors of practice, and research professors) are eligible to apply.

## **C. Proposal Preparation Documents**

This solicitation and required forms can be found at <https://www.ndepscor.ndus.edu/funding-opportunities/resind/ndsu-stem-rfp-2019/>.

#### **D. Proposal Submission Deadline**

Proposals are due to the ND EPSCoR office no later than noon on September 13, 2019. Proposals for external review of large collaborative and interdisciplinary efforts follow the submission guideline given under section A, item #6.

The NDSU campus of ND EPSCoR has a limited amount of funds to disburse; thus, the submission of a proposal does not automatically guarantee funding.

#### **E. Funding Availability**

It is anticipated that funds will be released by September 30, 2019 and may be used through May 31, 2020.

#### **F. Proposal Preparation Guidance**

The proposal narrative should be no longer than four pages. In addition to the category specific information noted for each category in section A, the narrative must also contain a section on ***how the research/activity fits into the strategies outlined in the North Dakota Science and Technology Plan (the July 1, 2018 version)***. This section must include references to specific strategies. The current ND Science and Technology Plan can be found at:

[https://www.ndepscor.ndus.edu/fileadmin/ndus/ndepscor/documents/NDSTPlanFINALJune2018 .pdf](https://www.ndepscor.ndus.edu/fileadmin/ndus/ndepscor/documents/NDSTPlanFINALJune2018.pdf)

Each proposal must contain a cover page and budget (and justification).

- Cover page is at

[https://www.ndepscor.ndus.edu/fileadmin/ndus/ndepscor/eedAwards/2019NDStateSTEMCovSheet\\_2019-08-14.pdf](https://www.ndepscor.ndus.edu/fileadmin/ndus/ndepscor/eedAwards/2019NDStateSTEMCovSheet_2019-08-14.pdf)

- Budget form is at

<https://www.ndepscor.ndus.edu/fileadmin/ndus/ndepscor/SeedAwards/2019NDEPSCoRStandardBudgetForm.xlsx>

#### **G. Proposal Submission**

Your proposal requires the signatures of the Department Chair/Dean. Once you have those signatures, you will submit your proposal straight to the ND EPSCoR office.

Please submit your proposal electronically as a single, searchable PDF to Jean Ostrom-Blonigen ([jean.ostrom@ndus.edu](mailto:jean.ostrom@ndus.edu)) with a copy to Janelle Smith ([janelle.smith@ndsu.edu](mailto:janelle.smith@ndsu.edu)).

If you have any questions, please contact Kelly A. Rusch [kelly.rusch@ndsu.edu](mailto:kelly.rusch@ndsu.edu) or Jean Ostrom-Blonigen.

#### **H. Proposal Evaluation**

Proposals will be evaluated for fit with ND EPSCoR's mission, the ND S&T Plan, and national priorities related to broadening participation in the STEM ecosystem.

#### **I. Award Requirements**

All awards require: 1) an end of award report submitted to ND EPSCoR within 30 days of the award expiration date; 2) acknowledgement of ND EPSCoR as the funder; and, 3) presentation of the activity/results at the annual EPSCoR conference (this is for proposal funded in categories 3, 4, and 7).