

NSF 19-066

Frequently Asked Questions (FAQs) for NSF 19-565, EHR Core Research: Building Capacity in STEM Education Research (ECR: BCSER)

- 1. What is the relationship between the ECR (EHR Core Research) program and the BCSER (Building Capacity for STEM Education Research) competition?
- 2. How do you define "Mid-Career"? Can a full professor submit an Individual Investigator Development (IID) proposal?
- 3. Can an Individual Investigator Development (IID) proposal have Co-PIs and/or senior researchers?
- 4. Can an Individual Investigator Development (IID) proposal have subawards?
- 5. Are multiple investigators allowed for the Individual Investigator Development (IID) track?
- 6. Are multiple principal investigators allowed for the Institutes in Research Methods (IRM) proposals?
- 7. Can scholarship of teaching and learning researchers submit Individual Investigator Development (IID) proposals?
- 8. The Individual Investigator Development in STEM Education Research (IID) description in the ECR: BCSER solicitation requires investigators to identify a research project, assess the experience and expertise that will be gained, and create a detailed professional development plan. How much of the 15-page proposal limit should be devoted to each requirement?
- 9. Can an Institute in Research Methods (IRM) proposal request support for a period of less than five years?
- 10. Will BCSER accept CAREER proposals?
- 11. Can a principal investigator apply simultaneously to ECR: BCSER and other EHR programs?

This document has been archived and replaced by NSF 22-042.

- 12. Can ECR: BSCER proposals include more than one of the core research areas: Learning and Learning Environments, Broadening Participation, and Workforce Development?
- 13. What education levels may be foci of ECR: BCSER proposals?
- 14. What learning environments may be foci of ECR: BCSER proposals?
- 15. Do proposals to ECR: BCSER need to include project evaluation?
 - 1. What is the relationship between the ECR (EHR Core Research) program and the BCSER (Building Capacity for STEM Education Research) competition?

The ECR program supports fundamental research projects that advance knowledge regarding STEM learning and learning environments, broadening participation and institutional capacity in STEM fields, and STEM workforce development. BCSER is a competition under ECR to build **capacity** for individuals to contribute to this knowledge base.

2. How do you define "Mid-Career"? Can a full professor submit an Individual Investigator Development (IID) proposal?

"Mid-Career" is defined as investigators from academic and non-academic organizations, including STEM disciplinary researchers, who desire to complement their existing expertise with specific STEM education research training. ECR: BCSER awards are designed to build individuals' capacity to carry out high-quality fundamental STEM education research regardless of career stage.

3. Can an Individual Investigator Development (IID) proposal have Co-Pls and/or senior researchers?

Yes. Proposals may include Co-PIs and/or senior investigators other than the principal investigator. These roles must be described explicitly in the proposal and justified in the research professional development plan.

4. Can an Individual Investigator Development (IID) proposal have subawards?

Yes. Subawards are allowed. The role of the subawardee must be fully described and justifiable to accomplish the research professional development goals.

5. Are multiple investigators allowed for the Individual Investigator Development (IID) track?

The IID track of ECR: BCSER is intended to encourage the professional development of an *individual*, and principal investigators are expected to propose a plan to meet their individual professional development goals. If Co-PIs or other investigators are proposed, their role in completing the individual development activities must be described clearly and justified.

6. Are multiple principal investigators allowed for the Institutes in Research Methods (IRM) proposals?

Yes. There is no limitation on the number of investigators for IRM proposals. The proposing organization(s) is(are) expected to demonstrate the expertise in STEM education research methods and resources to conduct the proposed research training.

7. Can scholarship of teaching and learning researchers submit Individual Investigator Development (IID) proposals?

Yes. In general, scholarship of teaching and learning researchers are conducting research in their classrooms to improve students' experience, broaden participation, and/or develop new plans for teaching and assessment. ECR: BCSER seeks to develop investigators who can design and conduct fundamental research that is generalizable to others and potentially builds new theory and broad understandings in STEM education research.

8. The Individual Investigator Development in STEM Education Research (IID) description in the ECR: BCSER solicitation requires investigators to identify a research project, assess the experience and expertise that will be gained, and create a detailed professional development plan. How much of the 15-page proposal limit should be devoted to each requirement?

Principal investigators should determine how much space should be devoted to each requirement in the project description. Each of the elements presented in the solicitation must be addressed in the proposal to allow an assessment of the intellectual merit and broader impact of the proposed project. The proposal will be reviewed holistically.

9. Can an Institute in Research Methods (IRM) proposal request support for a period of less than five years?

Yes. The solicitation allows project durations of "up to five years".

10. Will BCSER accept CAREER proposals?

No. CAREER proposals must be submitted to the Faculty Early Career Development Program (CAREER) program solicitation (NSF 17-537).

11. Can a principal investigator apply simultaneously to ECR: BCSER and other EHR programs?

Yes. Principal investigators may apply to ECR: BCSER and other EHR programs simultaneously, provided that the same or a substantially similar proposal is not under consideration by multiple programs at the same time (see the *NSF Proposal &Award Policies & Procedures Guide* (PAPPG), Chapter 1.G.2). Proposals to ECR: BCSER must specifically address the focus and requirements of the solicitation (NSF 19-565).

12. Can ECR: BSCER proposals include more than one of the core research areas: Learning and Learning Environments, Broadening Participation, and Workforce Development?

Yes. ECR: BCSER is focused on building capacity to conduct fundamental STEM education research in the broad themes of STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development. These may not be mutually exclusive since the research skills and competencies may be applied to address a single or combination of the themes.

13. What education levels may be foci of ECR: BCSER proposals?

ECR: BCSER incorporates formal and informal STEM education on all levels, including preK-12 to adults.

14. What learning environments may be foci of ECR: BCSER proposals?

ECR: BCSER proposals are focused on STEM education research in any of the topics that are applicable to the ECR program.

15. Do proposals to ECR: BCSER need to include project evaluation?

The third review element considered with respect to both NSF's intellectual merit and broader impacts merit review criteria asks whether the plan proposed is well-reasoned and incorporates a mechanism to assess success (see PAPPG Chapter III.A.2). Proposers may choose to develop and describe the mechanisms they will use to assess success in the form of a project evaluation plan.