EHR Core Research (ECR)
Overview of Solicitation and Proposal Submission

FY 19 - Solicitation NSF 19-508 (Replacing NSF 15-509)
ECR Solicitation: NSF 19-508

EHR Core Research (ECR)
STEM Learning and Learning Environments, Broadening Participation, and Workforce Development

PROGRAM SOLICITATION
NSF 19-508

REPLACES DOCUMENT(S):
NSF 15-509

National Science Foundation
Directorate for Education & Human Resources
Division of Graduate Education
Division of Undergraduate Education
Division of Human Resource Development
Research on Learning in Formal and Informal Settings

Full Proposal Deadline(s) (due by 5 p.m. submitter’s local time):
January 24, 2019
October 03, 2019
First Thursday in October, Annually Thereafter
Fundamental Research: What do we mean?

- Curiosity driven research that expands knowledge in a specific research area.
- In the case of ECR, fundamental research addresses important research questions related to education, learning, broadening participation, or workforce development in and across STEM fields.
- While the research may have implications for policy or practice, ECR research doesn’t necessarily generate findings with immediate applications at the practical level.
Fundamental Research:

- Is grounded in theoretical or empirical frameworks that inform research questions;
- Identifies and explores important new constructs in education, learning, broadening participation, or workforce development in STEM fields;
- Extends understanding of current constructs;
- Increases understanding of relationships among the constructs under investigation;
- Extends research or evaluation methodologies for advancing the evidence base to support improved policy or practice.
Research Supported:

Topics in: STEM learning and learning environments, broadening participation in STEM, and STEM professional workforce development

Proposals may include/involves:

- all learners, across the life course
- all levels of education
- all settings (e.g., formal, informal, technological)
- assessments of learning
- career pathways & transitions
- emerging practices, changing contexts & workforce needs
- learning, persistence of groups, and underrepresentation in STEM fields
- theory, techniques, perspectives from wide range of disciplines & contexts
ECR Research Tracks

- Track I - Research on STEM Learning and Learning Environments
- Track II - Research on Broadening Participation in STEM
- Track III - Research on STEM Workforce Development
Track I - Research on STEM Learning and Learning Environments

- ECR supports rigorous research projects that seek to advance the fundamental knowledge necessary to improve STEM learning in the many environments and contexts in which such learning takes place.

- Examples of topics of ECR Track I awards include:
  - Teacher training and learning
  - Causal reasoning and science literacy
  - The impact of social ties on college student retention
  - Among many other topics...

- For more examples see: [What Has Been Funded (Recent Awards Made Through This Program, with Abstracts)](on our web site).
ECR supports fundamental research investigating issues related to the learning and participation of groups underrepresented in STEM fields, at both the individual and institutional levels.

Examples of topics of ECR Track II awards include:

- Innovative and culturally responsive pedagogy
- Motivation, academic achievement and sense of belonging
- Intersectionality and the experiences of women of color faculty in engineering
- Among many other topics...

For more examples see: What Has Been Funded (Recent Awards Made Through This Program, with Abstracts) on our web site.
ECR supports fundamental research on STEM workforce development at all levels of education, from K-12 through higher education and the workplace.

Examples of topics of ECR Track III awards include:

- Understanding PhD career pathways
- The Role of peers, networks and demand on STEM career pathways
- STEM training, employment in industry, and entrepreneurship
- Among many other topics...

For more examples see: What Has Been Funded (Recent Awards Made Through This Program, with Abstracts) on our web site.
Funding Levels and Duration

- **Amounts and duration**
  - **Level I**: maximum of $500,000 over 3 years
  - **Level II**: maximum of $1,500,000 over 3 years
  - **Level III**: maximum of $2,500,000 over 5 years

- **Other types of funding**:
  - CAREER
  - Synthesis
  - Conference & workshop
  - EAGER
  - RAPID
Current ECR Dear Colleague Letters

- NSF 19-044 Dear Colleague Letter: Fundamental Discipline-Based Education Research (DBER) Focused on Undergraduate and Graduate STEM Education within the EHR Core Research (ECR) Program
- NSF 19-036 Dear Colleague Letter: Developing and Testing New Methodologies for STEM Learning Research, Research Syntheses, and Evaluation
- NSF 19-035 Dear Colleague Letter: Fundamental Research on Equity, Inclusion, and Ethics in Postsecondary Academic Workplaces and the Academic Profession within the EHR Core Research Program
- NSF 19-033 Dear Colleague Letter: Research to Improve STEM Teaching and Learning, and Workforce Development for Persons with Disabilities
- NSF 19-025 Dear Colleague Letter: STEM Workforce Development Using Flexible Personal Learning Environments
- NSF 17-127 Dear Colleague Letter: Life STEM
Questions?
ECR@nsf.gov

Or visit the NSF EHR Core Research website:
https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504924&org=EHR&from=home