Jim Lewis
Acting Assistant Director
Education and Human Resources
EHR Program Organization Chart

Office of the Assistant Director – Directorate for Education and Human Resources

1. Cross-Directorate Funded
2. H-1B Visa Fee Funded
3. Funded NSF-Wide

Funded NSF-Wide
- Faculty Early Career Development Program (CAREER)³
- Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)³

National Science Foundation
National Science Foundation Update

Jim Lewis
Acting Assistant Director
Education and Human Resources
“to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense; and for other purposes”
NSF INCLUDES
10 Big Ideas for Future NSF Investments

**EHR**

**DIRECTORATE FOR**

**EDUCATION & HUMAN RESOURCES**

**NSF**

**EHR**

**DIRECTORATE FOR**

**EDUCATION & HUMAN RESOURCES**

**NSF**

**RESEARCH IDEAS**

**Navigating the New Arctic**
Improve Arctic observational tools to document rapid changes on multiple scales.

**Harnessing Data for 21st Century Science and Engineering**
Generate a world-wide data-enabled future for the U.S. through fundamental research and education in data science.

**Work at the Human-Technology Frontier: Shaping the Future**
Develop “smart” technologies and environments to enhance the human experience; assess their impact on human behavior and social systems.

**Understanding the Rules of Life: Predicting Phenotype**
Bridge the biggest gap in biological science by determining how the environment influences an organism’s unique characteristics.

**The Quantum Leap: Leading the Next Quantum Revolution**
Develop ways to access and manipulate the behavior of matter and energy at very small scales to make the next generation technology more accurate and efficient.

**Windows on the Universe: The Era of Multi-messenger Astrophysics**
Extend our understanding of the cosmos by building on NSF’s unique observational assets.

**PROCESS IDEAS**

**Growing Convergent Research at NSF**
Use ideas and technologies from widely diverse fields to bring about solutions to societal problems and profound questions.

**NSF-INCLUDES:**
**Enhancing Science and Engineering through Diversity**
Tap the innovation inherent in America’s diversity to strengthen the U.S. science and engineering enterprise.

**Mid-scale Research Infrastructure**
Develop a nimble process to fund crucial scientific infrastructure projects that fall between traditional funding boundaries.

**NSF 2050**
Bold, forward-thinking research that transcends traditional approaches and pushes the frontiers of exploration.
Convergence Accelerators

Harnessing Data for 21st Century Science and Engineering

The Future of Work at the Human-Technology Frontier
American Innovation and Competitiveness Act (AICA)

“The Director shall award grants on a competitive, merit-reviewed basis to Hispanic-serving institutions (as defined in section 502 of the Higher Education Act of 1965 (20 U.S.C. 1001a) to enhance the quality of undergraduate STEM education at such institutions and to increase the retention and graduation rates of students pursuing associate’s or baccalaureate degrees in science, technology, engineering, and mathematics.”

Enacted January 6, 2017

National Science Foundation
Consolidated Appropriations Act, 2017, Public Law 115-31

“The agreement also directs NSF to establish an Hispanic Serving Institution (HSI) program at no less than $15,000,000 as authorized in 42 U.S.C. 186o-12. The agreement encourages NSF to use this program to build capacity at institutions of higher education that typically do not receive high levels of NSF grant funding.”

Enacted May 5, 2017
Establishing an HSI Program

• NSF announces plans for Hispanic Serving Institution Program – June 6, 2017
• Goals to establish the program:
  ➢ Build capacity at Hispanic Serving Institutions
  ➢ Focus on undergraduate HSIs
• A Subcommittee of our Advisory Committee comprised of HSI campus leaders provided advice regarding the solicitation.
• Dear Colleague Letter to fund conferences
• Solicitation Released (NSF 18-524)
Dear Colleagues:

With this Dear Colleague Letter (DCL), the National Science Foundation (NSF) is calling for submission of conference proposals to inform the design of NSF's new Hispanic-Serving Institution (HSI) program, to be established in fiscal year 2018. Proposed conferences are expected to result in the identification of the most critical challenges and opportunities regarding undergraduate STEM education at two-year and four-year Hispanic-Serving institutions of higher education, and potential actionable solutions that fall within NSF’s mission, policies, and practices.
HSI Conference Awards

- University of California-Irvine – January 22-24, 2018
- University of Houston – February 14-16, 2018
- University of Arizona – November 18-20, 2017
- Nova Southeastern University, FL – December 11-12, 2017

Submissions received July 6, 2017
HSI Conference Awards

- El Centro College, TX – February 27-28, 2018
- Laredo Community College, TX – March 21-23, 2018
- University of Texas-El Paso, TX – March 29-30, 2018;
  University of Miami, FL – April 26-27, 2018;
  American Society for Engineering Education, UT – date TBD
- California State University, CA – April 25-27, 2018
- Northwestern Illinois University, IL – May 3-4, 2018
- **CUNY City College, NY – May 23 - 25, 2018**
- University of Puerto Rico, PR – November 8-9, 2018

*Submissions received September 30, 2017*
Listening to the Field

Three NSF Listening Sessions in mid-August 2017
➢ 300 Participants
➢ 100 Institutions

SACNAS Conference Listening Session
➢ 25 Participants/Students
Lessons Learned from HSI Conferences
HSI Solicitation

Improving Undergraduate STEM Education: Hispanic-Serving Institutions (HSI Program)

PROGRAM SOLICITATION
NSF 18-524

National Science Foundation

Full Proposal Deadline(s) (due by 5 p.m. submitter’s local time):
March 06, 2018

Posted December 7, 2017
HSI Program Tracks

Track 1: Building Capacity

Track 2: HSIs New to NSF

Resource Hub

National Science Foundation
NSF makes first awards through Hispanic-Serving Institutions Program

Funding will bolster STEM capacity at HSIs

Alexandra Coso Strong will lead an HSI Program conference on engineering education.
HSIs and NSF INCLUDES

Design and Development Launch Pilot Lead Institutions & Partner Institutions

California State Polytechnic Univ-Pomona
California State University-Dominguez Hills
California State University-East Bay
California State University-San Bernardino
Central New Mexico Community College
Citrus College
City Colleges of Chicago-Malcolm X College
City College of NY - Dean of College of Eng.
CUNY City College
Florida International University
Merritt College

New Mexico State University-Dona Ana
New Mexico State University-Main Campus
Northern New Mexico College
Saddleback College
Texas State University
Truckee Meadows Community College
University of California-Merced
University of New Mexico-Los Alamos
University of the South Pacific, Marshall Is.
University of Puerto Rico-Carolina
University of Texas at San Antonio
University of Texas at El Paso

National Science Foundation
Design and Development Launch Pilots
- 70 Launch Pilots
- 760 Partners

On-Ramps
- Summit held January 8-10
- Receiving proposals for conference
- Encouraging supplements to existing centers.
- DCL deadline April 16

Coordination
- Provide increased communication, interoperability, support, and accountability for the network of alliances.
- Blue-Ribbon Panel reviewing top proposals.

Alliances
- Proposals received last week currently under review.
EHR
DIRECTORATE FOR
EDUCATION & HUMAN RESOURCES

NSF INCLUDES

Launch Pilots Funded
Launch Pilot Strategies to address a particular broadening participation challenge

- **5 projects** expand access to quality STEM education
- **6 projects** address career needs of STEM professionals
- **10 projects** prepare STEM educators
- **10 projects** address students' STEM identity, attitudes, motivation
- **11 projects** strengthen institutional capacity
- **20 projects** enhance support systems for undergraduate and graduate STEM students
- **42 projects** provide STEM engagement for students and communities to promote STEM studies and careers

*Note: Some projects have goals and objectives that fall into more than one category.*
Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EHR)

PROGRAM SOLICITATION

NSF 17-590
Robert Noyce Teacher Scholarship Program (Noyce)

Noyce (NSF 17-541)

National Science Foundation