Education and Human Resources Directorate (EHR)

Regional Grants Conference Tempe, Arizona March 30-31, 2009 Linnea Fletcher

EHR's Organizational Structure

Office of the Assistant Director (OAD)

Wanda Ward (Acting AD)

Joan Ferrini-Munday (Acting DAD)

Division of Graduate Education (DGE)

Division of Human Resources Development (HRD)

Division of Research on Learning in Formal and Informal Settings (DRL) Division of Under-Graduate Education (DUE)

EHR's Mission

To enable excellence in U.S. STEM education at all levels and in all settings in order to support the development of a diverse and well-prepared workforce of scientists, technicians, engineers, mathematicians and educators

EHR's Goals

- To prepare the next generation of STEM professionals;
- To promote rigorous research and evaluation on STEM education and the workforce;
- To heighten the scientific literacy of the population; and
- To broaden participation in STEM

EHR's Priorities for FY2009

- Broadening Participation
- Enriching Teacher Education
- Ensuring a Vibrant Scientific Workforce
- Promoting Cyber-enabled Learning
- Furthering Public Understanding and Advancing STEM Literacy
- Promoting Learning through Research and Evaluation

American Recovery and Reinvestment Act

- Supplements NSF fiscal year 2009 by \$3.0 billion
 - \$2.0 billion for proposals that are already in house and will be reviewed and/or awarded prior to Sept 30, 2009
 - Math and Science Partnership \$25 million
 - Robert Noyce Teacher Scholarship \$60 million
 - Science Masters program \$15 million (solicitation posted in the spring)
 - NSF will also consider proposals declined on or after October 1, 2008 due to a lack of funds

Division of Graduate Education

- Integrative Graduate Education and Research Traineeships (IGERT)
- NSF Graduate Teaching Fellows in K-12 Education (GK-12)
- Graduate Research Fellowship Program (GRFP)

Integrative Graduate Education and Research Traineeship Program (IGERT)

09-519 Solicitation

DUE DATES

Preliminary Proposal Deadline: March 13, 2009 IGERT Traineeship preliminary proposals

Full Proposal Deadline: September 14, 2009
IGERT Traineeship full proposals (By Invitation Only)

Graduate Research Fellowship Program (GRFP)

900 to 1600 awards, 3 years of support Can be international (some opportunities are posted at site)

08-593 Solicitation

DUE DATES: None posted yet, probably in Nov.

Division of Human Resources Development (HRD)

- ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers
- Alliances for Broadening Participation in STEM
- Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (RISE)
- Historically Black Colleges and Universities
 Undergraduate Program (HBCU-UP)
- Research in Disabilities Education (RDE)
- Research on Gender in Science and Engineering (GSE)
- Tribal Colleges and Universities Program (TCUP)

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

- 09-504: Solicitation
- Letter of Intent Deadline Date: August 4, 2009
- Institutional Transformation (IT) and Institutional Transformation Catalyst (IT-Catalyst)
- Full Proposal Deadline Date: November 12, 2009
- Institutional Transformation (IT) and Institutional Transformation Catalyst (IT-Catalyst)

Alliances for Broadening Participation in STEM (ABP)

- <u>09-515</u>: solictation
- DUE DATES
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration
- Full Proposal Deadline Date: October 9, 2009
- LSAMP Educational Research Projects
- Second Friday in October, Annually Thereafter
- Full Proposal Deadline Date: October 9, 2009
- Louis Stokes Alliances for Minority Participation
- Second Friday in October, Annually Thereafter

Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (RISE)

- 09-510: Solicitation
- DUE DATES
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration: The Centers of Research Excellence in Science and Technology (CREST) program makes resources available to enhance the research capabilities of minority-serving institutions through the establishment of centers that effectively integrate education and research.

Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)

09-512 Solicitation

- DUE DATES
- Full Proposal Deadline Date: April 17, 2009
- ACE Implementation Projects
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration (13)

This program provides awards to enhance the quality of undergraduate science, technology, engineering, and mathematics (STEM) education and research at Historically Black Colleges and Universities (HBCUs) as a means to broaden participation in the Nation's STEM workforce. Support is available for Implementation Projects (including Achieving Competitive Excellence), Planning Grants, Education Research Projects, and Targeted Infusion Projects.

Research in Disabilities Education (RDE)

- 09-508 Solicitation
- DUE DATES
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration
- Full Proposal Deadline Date: February 3, 2010
- Alliances for Students with Disabilities in STEM
- First Wednesday in February, Annually Thereafter
- Full Proposal Deadline Date: February 10, 2010
- Demonstration, Enrichment or Dissemination
- Second Wednesday in February, Annually Thereafter
- Full Proposal Deadline Date: February 17, 2010
- Research
- Third Wednesday in February, Annually Thereafter

Research on Gender in Science and Engineering (GSE)

- 09-511 Solicitation
- DUE DATES
- Full Proposal Deadline Date: March 30, 2009
- Research Proposals
- Full Proposal Deadline Date: April 6, 2009
- Extension Services Proposals
- Full Proposal Deadline Date: April 6, 2009
- Diffusion of Research-Based Innovation Proposals
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration (I3)

Tribal Colleges and Universities Program (TCUP)

- O9-509 Solicitation
- DUE DATES
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration
- Full Proposal Deadline Date: October 20, 2009
- TCUP Implementation Projects
- October 20, Annually Thereafter

Division of Research on Learning in Formal and Informal Settings (DRL)

- Advanced Learning Technologies
- Advanced Technological Education
- Communicating Research to Public Audiences
- Discovery Research K-12
- Informal Science Education
- Innovative Technology Experiences for Students and Teachers
- Research and Evaluation on Education in Science and Engineering

Advanced Technological Education DRL and DUE

07-530 Solicitation

DUE DATES

Preliminary Proposal Deadline Date:

April 23, 2009

Preliminary proposals are optional, but strongly recommended, especially for institutions or departments that have not previously submitted to the ATE program. Please see the full text of this solicitation for further information.

Full Proposal Deadline: October 15, 2009

Communicating Research to Public Audiences

03-509 Solicitation

DUE DATES

Full Proposal accepted anytime, but at least six months prior to anticipated start date.

The Principal Investigator (PI) must have an active NSF-supported research grant.

Discovery Research K-12

08-609 Solicitation

DUE DATES

Full Proposal Deadline: January 8, 2009 January 07, 2010

Informal Science Education

<u>08-547</u> Solicitation

DUE DATES

Letter of Intent Deadline: September 18, 2008 (required) Full Proposal Deadline Date: December 18, 2008

- Planning Grants: Must submit Letters of Intent and Full Proposals on the same deadline dates as those indicated above following discussion with a Program Officer.
- Conference, Symposia, and Workshop Grants: Proposals may be submitted at any time, generally at least one year in advance, following discussion with a Program Officer. These types of projects do not require Letters of Intent.

Research and Evaluation on Education in Science and Engineering (REESE)

08-585 Solicitation

DUE DATES

Letter of Intent Due Date(s) (optional) (due by 5 p.m. proposer's local time):

- October 17, 2008
- October 09, 2009

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

- November 21, 2008
- November 12, 2009

Division of Undergraduate Education (DUE)

- Advanced Technological Education
- Computational Science Training for Undergraduates in the Mathematical Sciences
- Course, Curriculum, and Laboratory Improvement
- Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences
- Federal Cyber Service: Scholarship for Service
- Math and Science Partnership
- Nanotechnology Undergraduate Education (NUE) in Engineering
- National Science, Technology, Engineering, and Mathematics Education Digital Library
- NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)
- Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring
- Robert Noyce Teacher Scholarship Program
- Science, Technology, Engineering, and Mathematics Talent Expansion Program

Course, Curriculum and Laboratory Improvement (CCLI)

09-529 Solicitation

DUE DATE

Full Proposal Deadline: May 21, 2009
For Type 1 proposals from submitting organizations located in states or territories beginning with A through M.

Full Proposal Deadline: May 22, 2009
For Type 1 proposals from submitting organizations located in states or territories beginning with N through W

Full Proposal Deadline: January 13, 2010 For Type 2 and 3 proposals & Central Resource Project proposals

Interdisciplinary Training for Undergraduates in the Biological and Mathematical Sciences

08-510 Solicitation

DUE DATES

Full Proposal Deadline:
February 12, 2009
Second Thursday in February,
annually thereafter

Federal Cyber Service: Scholarship for Service (SFS)

08-600 Solicitation

DUE DATE: Probably in December

Scholarship Track and Capacity Building Track

Math and Science Partnership (MSP)

- 09-507: Solicitation
- Full Proposal Deadline Date: August 20, 2009
- Targeted Partnerships
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration

Nanotechnology Undergraduate Education (NUE) in Engineering

- 09-533 Solicitation
- DUE DATES
- Full Proposal Deadline Date: April 29, 2009

This solicitation aims at introducing nanoscale science, engineering, and technology through a variety of interdisciplinary approaches into undergraduate engineering education. The focus of this year's competition is on nanoscale engineering education with relevance to devices and systems and/or on the societal, ethical, economic and/or environmental issues relevant to nanotechnology.

National STEM Education Distributed Learning (NSDL)

- **09-531**
- DUE DATES
- Full Proposal Deadline Date: April 15, 2009
- _ This program aims to establish a national network of learning environments and resources for science, technology, engineering, and mathematics (STEM) education at all levels.

NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)

The S-STEM program expects to have proposal deadlines in August in 2009 and beyond. A new Program Solicitation will be available at least 3 months before the deadline.

Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring

- 04-525 : Solicitation
- DUE DATES: Full Proposal Deadline Date: April 21, 2009
- For 2009 ONLY
- The due date has been extended to April 21, 2009, for the 2009 round of nominations.
- SYNOPSIS

The PAESMEM Program seeks to identify outstanding mentoring efforts that enhance the participation of groups (i.e., women, minorities, and persons with disabilities) that are underrepresented in science, technology, engineering, and mathematics. The awardees serve as leaders in the national effort to develop fully the Nation's human resources in science, technology, engineering, and mathematics.

Robert Noyce Teacher Scholarship Program

- 09-513 Solicitation
- Full Proposal Deadline Date: August 25, 2009
- Innovation through Institutional Integration

Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP)

08-569 Solicitation

DUE DATE:

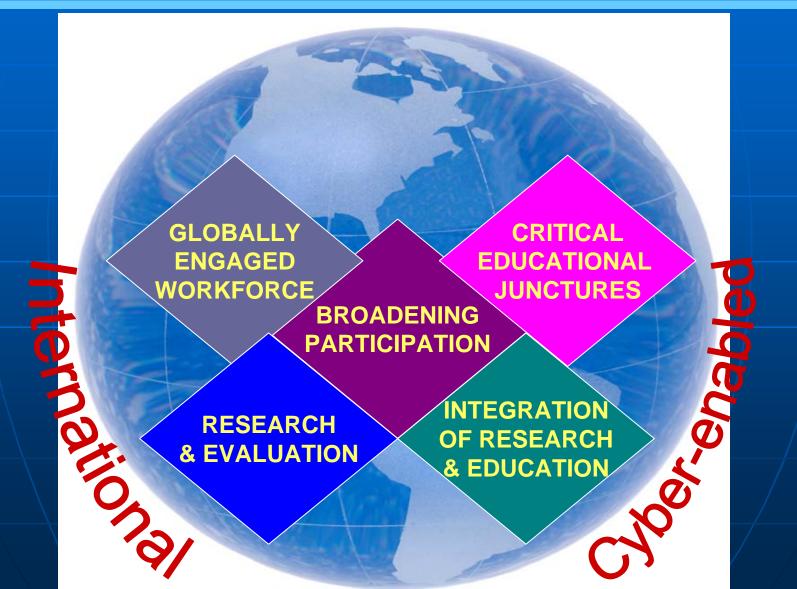
Letter of Intent Due Date(s) (optional) (due by 5 p.m. proposer's local time):

- August 18, 2009
- August 17, 2010

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

- September 29, 2009
- September 28, 2010

Innovation Through Institutional Integration (I³)



Goals of 13

- Increase synergy & collaboration among NSF/EHR-funded projects and within/between institutions
- Enhance sustainability
- Promote integration of STEM research and education
- Broaden participation, attend to critical junctures, and/or provide for more globally engaged workforce
- Encourage research on intra- or interinstitutional integration and broader impacts.

Innovation through Institutional Integration (I³)

For 2009, proposals will be solicited in 9 programs:

 CREST, GSE, HBCU-UP, ITEST, LSAMP, MSP, Noyce, RDE, TCUP

Innovation through Institutional Integration (I³)

- Eligibility
 - Institutions of Higher Education
- Limits on Proposals
 - One per Institution
 - PI must be Provost or equivalent
 - Continuing Grants up to \$200K per year for 5 years
- FAQs: on NSF web site

Contacts

- Directorate for Education and Human Resources (EHR) Phone: (703)-292-8600
- Division of Graduate Education (EHR/DGE) Phone: (703) 292-8630
- Division of Human Resource Development (EHR/HRD) Phone: (703) 292-8640
- Division of Research on Learning in Formal and Informal Settings (EHR/DRL) Phone: (703) 292-8620
- Division of Undergraduate Education (EHR/DUE) Phone: (703) 292-8670