

NSF Funding Opportunities



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Active NSF 2-Yr College Projects

NSF Directorate	Active Awards	Total Funding
Education and Human Resources (EHR)	371	\$301,511,331
Office of the Director (OD)	5	\$24,615,888
Math and Physical Sciences (MPS)	5	\$4,020,727
Geosciences (GEO)	9	\$3,313,904
Biological Sciences (BIO)	4	\$2,321,128
Computer & Information Science & Engineering (CISE)	3	\$1,406,021
Social, Behavioral & Economic Sciences (SBE)	3	\$434,884
Engineering (ENG)	2	\$299,662

NSF web site (www.nsf.gov)

The screenshot shows the NSF website homepage. At the top left is the NSF logo with the tagline "National Science Foundation WHERE DISCOVERIES BEGIN". To the right is a search box with "NSF Web Site" selected. Below the header is a navigation bar with links: HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane. The main content area features four featured articles: "Nobel Prizes the NSF Connection A Special Report", "Pioneering Study of Sign Language", "Earthquakes: Details Can Save Lives", and "Ancient Raptors in Patagonia". Below this are three columns: "For the Research & Education Community" with a "Find Funding Opportunities" dropdown menu (highlighted with a red arrow), "Special Notice" with a link "After the Hurricanes", and "Site Features" with a link "NSF at a Glance". The "Latest News" section contains three news items: "NSF Next-Generation Cybertools Awards Go to Cornell and U. of Chicago", "NSF Makes Cyberinfrastructure-TEAM Awards", and "NSF-Funded Nobel Prize Winners in Science Through 2005". At the bottom, there is a "Now Showing: Film, TV, Museums and More" section.

NSF National Science Foundation
WHERE DISCOVERIES BEGIN

SEARCH
NSF Web Site

HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane

Nobel Prizes
the NSF Connection
A Special Report

Pioneering Study of Sign Language

Earthquakes: Details Can Save Lives

Ancient Raptors in Patagonia

For the Research & Education Community

Find Funding Opportunities

Program Areas

- Select One
- Select One
-
- Biology
- Computer, Info. Sci., Eng.
- Crosscutting, NSF-wide
- Cyberinfrastructure
- Education**
- Engineering
- Environmental Research
- Geosciences
- International

Search Staff Directory

Career Opportunities

Contracting Opportunities

Special Notice

[After the Hurricanes:](#) Information for researchers and educators.

Latest News [See All](#)

[NSF Next-Generation Cybertools Awards Go to Cornell and U. of Chicago](#)
Released October 18, 2005

[NSF Makes Cyberinfrastructure-TEAM Awards](#)
Released October 18, 2005

[NSF-Funded Nobel Prize Winners in Science Through 2005](#)
Released October 17, 2005

Site Features

- [NSF at a Glance](#)
- News
- For the News Media
- Special Reports
- Discoveries from NSF Research
- Research Overviews
- Speeches & Lectures
- Multimedia Gallery
- NSF & Congress
- Classroom Resources
- Priority Areas
- Science and Engineering Statistics

Now Showing: Film, TV, Museums and More [See All](#)



Undergraduate Education (DUE)



- [DUE Home](#)
- [About DUE](#)
- [Funding Opportunities](#)
- [Awards](#)
- [News](#)
- [Events](#)
- [Discoveries](#)
- [Publications](#)
- [Career Opportunities](#)
- [Project Information Resource System](#)
- [View DUE Staff](#)

Search DUE Staff

EHR Organizations

- [Graduate Education \(DGE\)](#)
- [Research on Learning in Formal and Informal Settings \(DRL\)](#)
- [Undergraduate Education \(DUE\)](#)
- [Human Resource Development \(HRD\)](#)

Proposals and Awards

- [Proposal and Award Policies and Procedures Guide](#)
- [Introduction](#)
- [Proposal Preparation and Submission](#)
- [Grant Proposal Guide](#)
- [Grants.gov Application Guide](#)

Email Print Share

Undergraduate Education (DUE)

CCLI Program Is Now TUES

The Course Curriculum and Laboratory Improvement Program (CCLI) has changed to Transforming Undergraduate Education in Science (TUES). Please see the new solicitation http://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=5741&ods_key=nsf10544.

Programs and Funding Opportunities

Key: [Crosscutting](#) | [NSF-wide](#)

[Advanced Technological Education \(ATE\)](#)

[Computing in the Cloud \(CIC\)](#)

[Cooperative Activity with Department of Energy Programs for Education and Human Resource Development \(Request for Supplement\)](#)

[Federal Cyber Service: Scholarship for Service \(SFS\)](#)

[Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences \(UBM\)](#)

[Math and Science Partnership \(MSP\)](#)

[Nanotechnology Undergraduate Education \(NUE\) in Engineering](#)

[National STEM Education Distributed Learning \(NSDL\)](#)

[NSF Director's Award for Distinguished Teaching Scholars \(DTS\)](#)

[NSF Scholarships in Science, Technology, Engineering, and Mathematics \(S-STEM\)](#)

[Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring](#)

[Research Coordination Networks in Biological Sciences \(RCN\)](#)

[Robert Noyce Teacher Scholarship Program](#)

[Science, Technology, Engineering, and Mathematics Talent Expansion Program \(STEP\)](#)

[Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics \(TUES\) \(TUES\)](#)

Division of Undergraduate Education (DUE)

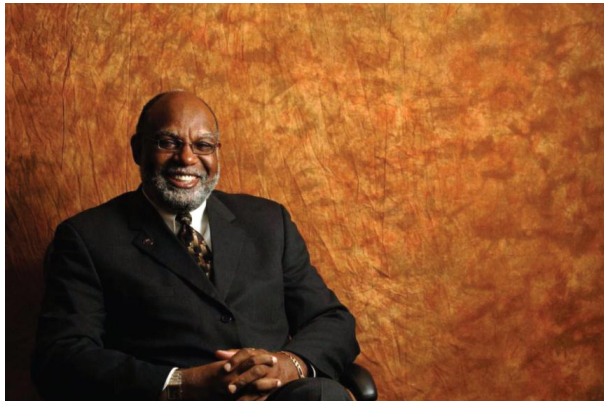


Advanced Technological Education (ATE)

- Authorized under the Science and Advanced Technology Act of 1992 (SATA) and reauthorized under the *America Competes Act*.
- Program focuses on the education of a quality STEM technical workforce for high-technology fields that drive the nation's economy.
 - Grades 7-12, 2yr- and 4-yr institutions can be supported.
- **Community colleges** have leadership roles on all projects.

“THE ATE PROGRAM SERVES AS A TRUE CATALYST FOR STUDENT SUCCESS AND ECONOMIC DEVELOPMENT.”

RUFUS GLASPER, Ph.D., Chancellor Maricopa CCS



For more than a decade ATE centers and projects have been busy figuring out:

- How to recruit teens and adults—particularly underrepresented populations—for STEM careers
- What helps students succeed in STEM courses essential to a wide range of technical fields
- Where curricula should change to develop a world-class technical workforce.

ATE Program Tracks

- Projects which focus on:
 - Program Development, Implementation and Improvement;
 - Professional Development for Educators;
 - Curriculum and Educational Materials Development;
 - Teacher Preparation;
 - Small Grants for Institutions New to the ATE Program;
 - Business and Entrepreneurial skills for students in technician education programs;
 - Leadership Capacity Building for faculty.
 - Mentoring students: recruitment, retention, completion
 - Veterans in STEM Technician Education
- Centers of Excellence: National, Regional, Resource
- Targeted Research on Technician Education

Small Grants for Institutions New to ATE

■ Purpose

- Simulates implementation, adaptation, and innovation in all areas supported by ATE.
- Available only to community college campuses that have not had an ATE award within the last 10 years or never had one.
 - Broaden the base of participation of community colleges in ATE.
 - Strengthen the role of community colleges in meeting needs of business and industry
- Limited to \$200,000 over 3 years
- Funding rate for FY10 was between 70-80% for this area

ATE

■ Resources

- ATE Centers: <http://www.atecenters.org>
- Evaluate|t|e Center: <http://www.evaluate-ate.org>
- ATE Central: <http://atecentral.net/>
- SCATE Center: www.teachingtechnicians.org
- ATE PI Guide: <http://govpiguide.org/>
- “Educating Biotechnicians”:
http://www.aacc.nche.edu/Resources/aaccprograms/ate/Documents/biotech_report.pdf
- “Preparing Energy Technicians for the 21st Century Workforce”:
<http://www.ateec.org/store/catalog/Energy-General---Preparing-Energy-Technicians-for-the-21st-Century-Workforce-400.html>
- Broadening Impact: NSF-funded Projects at Two-Year Colleges:
<http://www.communitycollegetimes.com/Pages/Funding/NSF-seeks-community-colleges-input-.aspx>

Education and Industry

- Partnerships
- Internships
- Industry input driving curriculum
 - Hire adjunct faculty from industry
 - Skill standards
- Industry Advisory Board
- Career pathways
- Economic Development/WIB involvement (both state and local)

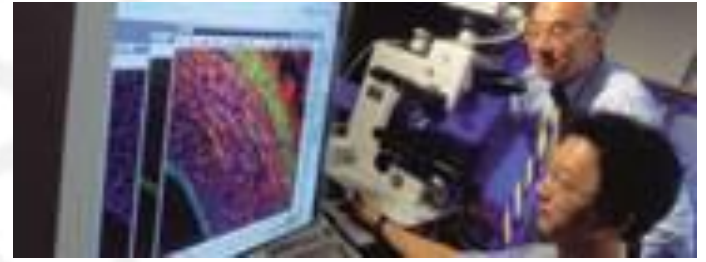


ATE



- ATE solicitation (11-692):
 - www.nsf.gov , Education, DUE
 - Formal Proposals: October 20, 2011
- \$64 million request for FY2012

- Projects: up to \$900,000 for 3-yr
 - Small, new to ATE: \$200,000 for 3-yr
- Centers: \$1.6 – 5 million for 4-yr
- Targeted Research: up to \$1.2 million for 4-yr



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

- Goal: institutions receive funds to provide scholarships to academically talented, but financially needy, students. Students can be pursuing associate, baccalaureate, or graduate degrees.
- <http://www.nsf.gov/pubs/2006/nsf06527/nsf06527.htm>
- H1B Visa Funds
- Full proposal due August 14, 2012

S-STEM

MAJOR FEATURES

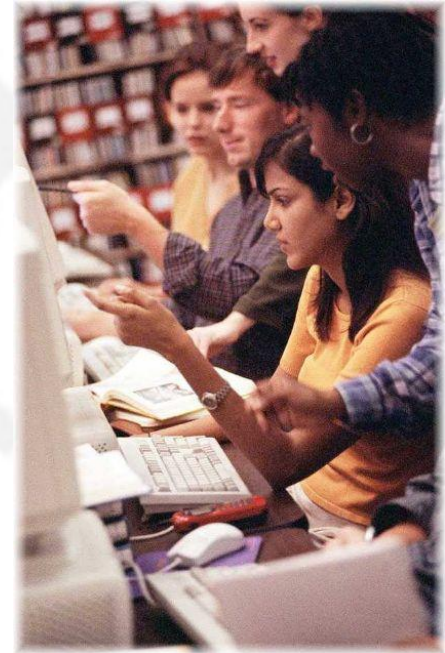
- Eligible disciplines include almost all NSF supported areas (see solicitation for guidance)
- Maximum scholarships increased to \$10,000 (but still based on financial need and cost of attendance)
- Grant size increased to \$600,000 with 5% allowed for administration and 10% for student support
- Maximum of \$225,000 in any one year, but can ramp up
- One proposal per constituent school or college that awards degrees (also schools within institutions)

STEM Talent Expansion Program (STEP)

Goal:

to increase the number of students (U.S. citizens or permanent residents) receiving associate or baccalaureate degrees in established or emerging fields within science, technology, engineering, and mathematics (STEM)

- Budget request based on FTE students, up to \$2,000,000 for 5 years
- Proposal deadline: Sept. 25, 2012



STEP

- Type 1: Implement strategies that will increase the number of students obtaining STEM degrees.
- Type 2: Conduct research on factors affecting associate or baccalaureate degree attainment in STEM

Community College Awards (examples)

- 096903 Ready! Set! Transfer! Project, Seattle CC District
- 0856770 Enhancing Recruitment and Retention in Utah's Biotechnology Pipeline, Salt Lake CC

Noyce Program

- Initiated by Act of Congress in 2002
 - Robert Noyce was the first Chief Executive of Sematech
- To encourage talented mathematics, science, and engineering undergraduates to pursue teaching careers
- To encourage STEM professionals to become teachers
- To prepare Master Teachers
- **FOR COMMUNITY COLLEGES**
 - Internships for freshmen and sophomores
 - Career Changers: Stipends for STEM professionals seeking to become K12 teachers

Math and Science Teachers Project: Teachers of Excellence Program

0630435 Florida Gateway College

PI: Pamela Carswell

- Alternative certification program for STEM professionals in rural North Central Florida
- Practical experience with lesson planning, classroom management, and research-based cooperative learning strategies
- Integration of real world math and science into classroom
- Cohort development, mentoring, and follow-up supervision

Transforming Undergraduate Education in STEM (TUES) formerly CCLI

Vision

Excellent STEM education for all undergraduate students.

Goal

Stimulate, disseminate, and institutionalize transformative or innovative developments in STEM education through the production of knowledge and the improvement of practice.

*Most comprehensive program in DUE

TUES

- Type 1 – *Exploratory Projects*
 - Involve exploratory, initial investigation or adaptation in one of the component areas. **Deadline May 2012**
- Type 2 – *Expansion Projects*
 - Build on smaller scale but proven innovations, refine and test innovations on diverse users
- Type 3 – *Comprehensive Projects*
 - Several diverse institutions, evaluation or assessment activities—deep & broad, combine proven results and mature innovations from several component areas, sustainability, national dissemination, etc.
- Central Resource Centers – Talk with a Lead PI (Myles Boylin, Terry Woodin, or Don Millard)
- **Type 2 and 3 deadline in January 2013**

0816515 "Community College Undergraduate Research: A Model of Integration" (Type 2 TUES)

James Hewlett

Finger Lakes Community College

- Design, implementation and evaluation of model for integrating undergraduate research into a community college science curriculum.
- Developing inquiry-based educational materials (such as problem-based learning modules and case studies) .
- Materials then being expanded into an undergraduate research experience within a credit-bearing, transferable, advanced sophomore-level course.
- Curriculum includes training students as peer-leaders, and supports the creation of an educational environment where research and education are integrated.

Other Programs in EHR

- **DRL**
 - **ITEST** Innovative Technology Experiences for Students and Teachers Program
 - **DRK-12** Discovery Research K-12
 - **ATE**
- **HRD**
 - **HBCU-UP**
 - **TC-UP**



Writing a Proposal: Getting Started

- Start **EARLY**
- Get acquainted with FASTLANE
- Read the [Program Solicitation](#) and follow the guidelines. Read the [Grant Proposal Guide \(GPG\)](#).
- Learn about the recent DUE awards using the NSF Award Search tool
- Become an NSF reviewer
- Contact (e-mail is best) a program officer to discuss your idea. This may cause you to refine your idea and may prevent you from applying to the wrong program
- Program Officers in DUE: Check the solicitations for names and contact information

Pre-Compliance Check: Read the solicitation

Compliance Check

- Hurdle #1:
 - Do you specifically address intellectual merit and broader impacts in the project summary
 - Number of pages, formatting, font size
 - Completeness

Merit Review

- Hurdle #2 (Mail and Panel Reviews)
 - Convince a panel of your peers that:
 - There is an identified need (describe what else has been done around this need)
 - You describe a good idea to solve the need
 - You and your team are the appropriate people to do it (you have the necessary expertise)
 - Your institution has the necessary infrastructure
 - Your goals and objectives are tied to evaluative activities (you will know if you are successful)
 - You have a plan to spread the results of your project

In Conclusion: Apply or You Will Never Receive an Award

Read the solicitation!

Read the *GPG*!

Read the solicitation!

Read the *GPG*!

THANK YOU!

