

Education and Human Resources (EHR)

Division of Undergraduate Education

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NSF-wide Education Themes

**Broadening participation
in the S&E workforce**

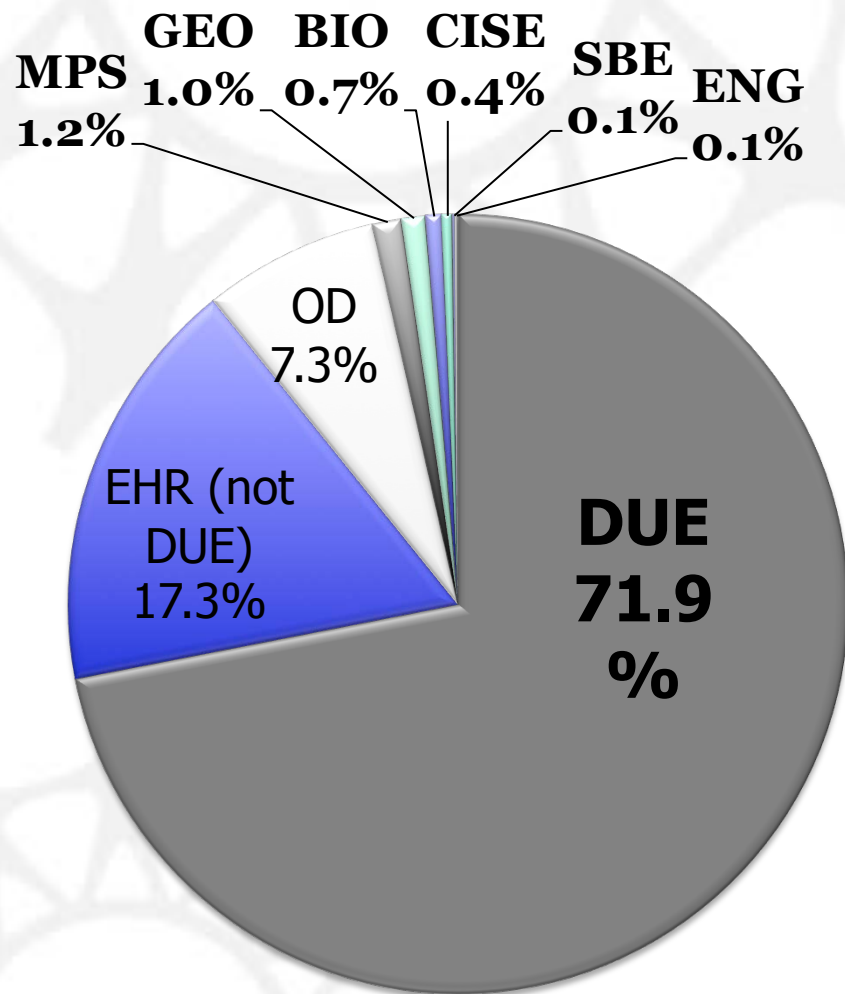
**Strengthening
teacher preparation**

**Integrating
research and education**

**Stimulating students through
Inquiry-based learning**

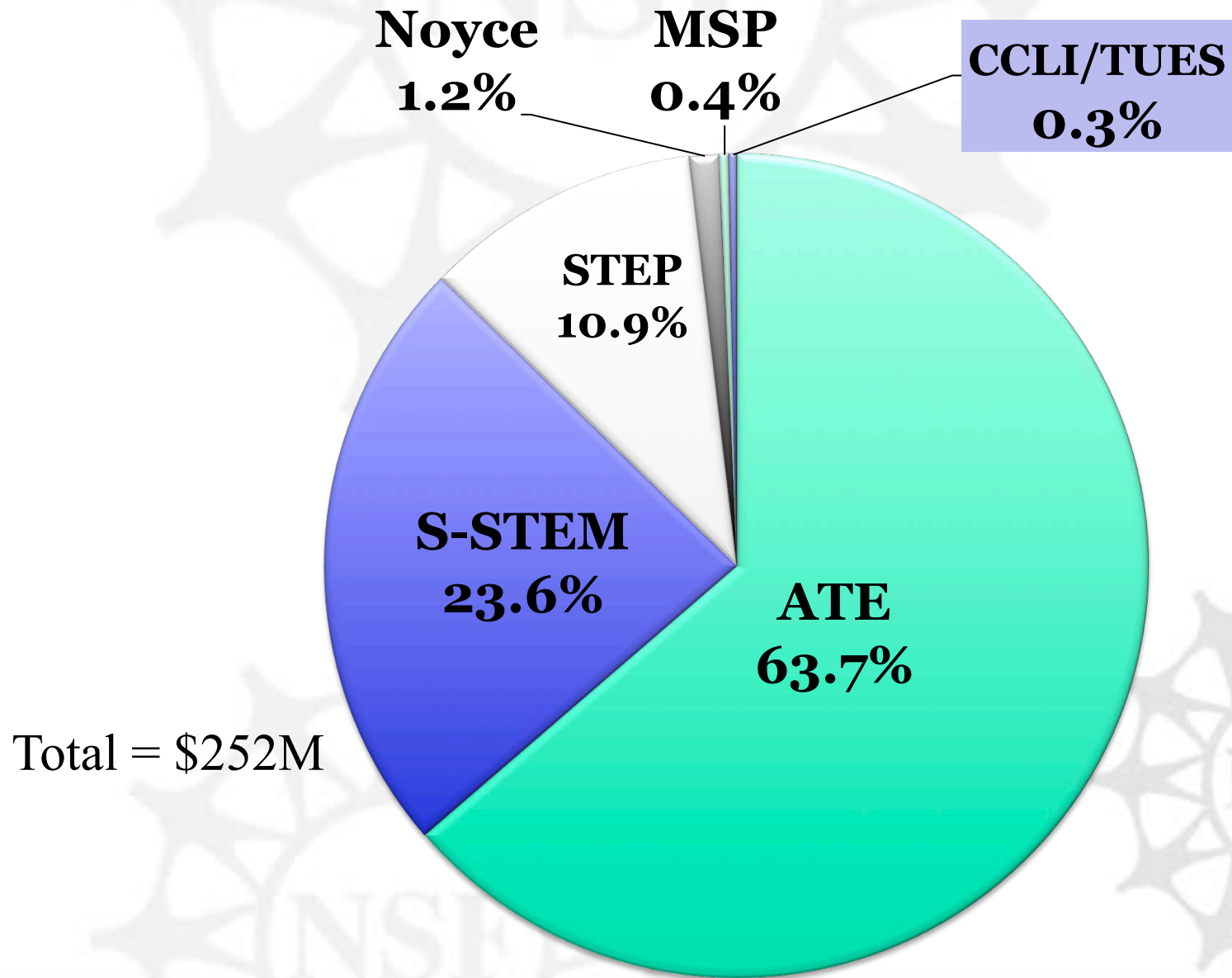
**Reaching a broader public
through informal education**

Active NSF 2-Yr College Projects



Total = \$350 M

Active NSF 2-Yr College Projects (DUE)



DUE Programs of Interest

- TUES
- ATE
- S-STEM
- STEP
- Noyce Teacher Scholarship Program

Many of these programs offer an additional \$50K when a 2-yr institution is a significant partner in the project.

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* up to \$200K
 - Involve exploratory, initial investigation or adaptation in one of the component areas. **Deadline May 2012**
- Type 2 – *Expansion Projects* up to \$600K
 - Build on smaller scale but proven innovations, refine and test innovations on diverse users
- Type 3 – *Comprehensive Projects* up to \$5M
 - 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) up to \$3M
- **Type 2 and 3 deadline in January 2012**

ATE

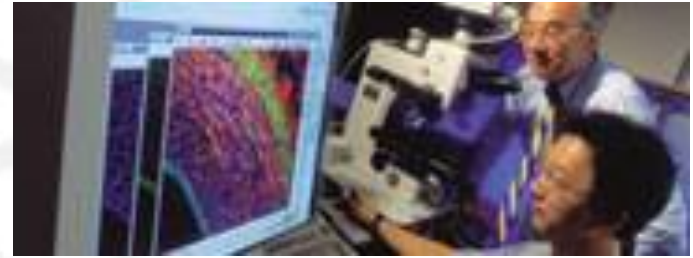
workforce development-technician
education



- ATE solicitation (11-692):
 - www.nsf.gov , Education, DUE
 - Formal Proposals: October 20, 2011
- \$64 million FY2011, same request for FY2012
- Projects: up to \$900,000 for 3-yrs
 - Small, new to ATE: \$200,000 for 3-yrs
- Centers: \$1.6 – 5 million for 4-yrs
- Targeted Research: up to \$1.2 million for 4-yrs

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



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 11, 2011

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: Increase the number of students (U.S. citizens or permanent residents) receiving associate or baccalaureate degrees in established or emerging fields within STEM

- Budget request based on FTE students, up to \$2,000,000 for 5 years
- Proposal deadline: Sept. 27, 2011
- 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

Noyce Program

- Initiated by Act of Congress in 2002
- 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

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**



Information Resources

- ATE Centers: <http://www.atecenters.org>
- Evaluate 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>

In Conclusion: Apply or You Will Never Receive an Award

Read the solicitation!

Read the *GPG*!

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THANK YOU!

