

THE NATIONAL SCIENCE FOUNDATION (NSF)

is the only federal agency whose mission includes support for all fields of fundamental science, technology, engineering, and mathematics (STEM).

"Research breakthroughs create industry in fields that were once unheard of, fueling new waves of jobs and prosperity."

> - Michael J. Hogan, President University of Illinois

BY THE NUMBERS **ILLINOIS IN FY 2012**

5th: National ranking in NSF funds \$376 Million: NSF funds awarded 74: NSF-funded institutions 957: NSF grants awarded

EXAMPLES OF NSF-FUNDED RESEARCH IN ILLINOIS

Illinois is one of three earthquake research centers selected by NSF to extend understanding on the problems associated with low-frequency seismic events and reducing the potential earthquake losses to the central and eastern U.S.



NSF supports the Blue Waters petascale computing project to produce a computer four times more powerful than any computer that exists today.



The Cyberlearning Capacity-Building Project, based out of Northwestern University, is laying the groundwork for new interdisciplinary research efforts that address early STEM learning. The project brings together diverse stakeholders—including parents and educators—to strengthen collaborations that connect children's scho ol and out-of-school experiences.



Courtesy: www.nsf.gov/awardsearch www.research.gov/seeinnovation

INVESTMENT IN NSF = INVESTMENT IN ILLINOIS INNOVATION

- Illinois boasts over 200 academic, government and non-profit research institutions, as well as seven research and technology parks. 1
- Illinois ranks 8th in the nation for research and development investment and 13th in federal research and development funding. 1
- When ranked among universities alone, the University of Illinois at Urbana-Champaign ranks first in receiving NSF funding.2
- The University of Illinois pumps more than \$13 billion into the state's economy annually.2

¹ Global Health R&D: a Smart Investment for Illinois. ResearchAmerica! Retrieved from: http://www.researchamerica.org/uploads/ILGHeconomicsheet.pdf. ² Resek, R., Hewings, G.J.D., Lubotsky, D., & Edwards, F. (2009). The Impact of the University of Illinois on the Economy of Our State. Retrieved from: http://igpa.uillinois.edu/press/impact-illinois.



The National Science Foundation Illinois

THE NATIONAL SCIENCE FOUNDATION (NSF) not only funds cutting-edge research at institutions across the country; NSF's education initiatives ensure the U.S. will remain a global leader in innovation for generations to come.

NSF supports educational opportunities for undergraduate and graduate students, postdoctoral researchers, and K-12 educators.

Some of the many NSF programs that provide direct or indirect funding for these groups include the Graduate Research Fellowship Program, the National STEM Distributed Learning Program, and the Robert Noyce Teacher Scholarship Program.

EXAMPLES OF NSF AWARDS TO IMPROVE EDUCATION AND TRAINING

The Entrepreneurial Leadership in STEM Teaching and Learning Partnership, run out of the University of Illinois at Urbana-Champaign in collaboration with local school districts, is developing and building the infrastructure needed to sustain a state-wide Illinois community of highly qualified science Teacher Leaders.



The STEM Scholars Program provides scholarships to students with academic merit and unmet financial need pursuing Associates of Science (AS) and Associates of Engineering Science (AES) degrees and transfer opportunities with a concentration in STEM disciplines at the City Colleges of Chicago.



A team of researchers at the University of Chicago aims to help middle school students draw connections between mathematical representations (fractions and ratios) through experimentation specific teaching strategies.



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"In terms of cultivating the next generation of scientists, few programs can match the impact of the NSF So, needless to say, we are elated that NSF has invested so much in [our] students' futures and in their research here at Illinois."

> - Ken Vickery, Director of External Fellowship in the Graduate College University of Illinois at Urbana-Champaign

"Not only does [our] research have a tremendous economic impact on the Chicago area, but it also is addressing some of the most significant health, energy and other issues facing the world today."

> - Morton Schapiro, President Northwestern University