NSF Announces New INSPIRE Awards

(Source: National Science Foundation)

Bold, interdisciplinary research grants span science, engineering and education

NSF today announced the first set of new awards that will be given out under INSPIRE, which, when all are distributed under this fiscal year, will total about $30.4 million. Eleven awards were released today, and the total number of awards is expected to reach 40 over the next few weeks. The maximum size for an INSPIRE award this year is $1 million.

INSPIRE, which stands for Integrated NSF Support Promoting Interdisciplinary Research and Education, was established to address some of the most complicated and pressing scientific problems that lie at the intersections of traditional disciplines.

"INSPIRE is a great example of the vital role NSF plays in supporting highly innovative research and education projects at the intersections of traditional disciplines in science and engineering," said NSF Director Subra Suresh. "Through INSPIRE and other NSF programs, I encourage our nation's scientists and engineers to submit to NSF their most innovative ideas for interdisciplinary research."

In FY12, NSF established INSPIRE to fund interdisciplinary, potentially transformative research. Once fully implemented, INSPIRE will complement other NSF efforts with a suite of new, highly innovative NSF-wide activities and funding opportunities. INSPIRE awards are co-funded between the Office of Integrative Activities and other NSF offices and directorates. INSPIRE aims to widen the pool of prospective discoveries by supporting proposals that may be viewed as falling outside of other NSF programs and funding mechanisms.

The awards made under INSPIRE include research on resorbable electronics, modeling and optimization of DNA manufacturing processes, statistical mechanics of natural climate variability, wireless sensor networks in experimental biology research, and scalable toolkit for transformative astrophysics research.

A complete list of awards made today is listed below.

In FY13, INSPIRE will expand to include larger "mid-scale" research awards up to $3.0 million. This new mid-scale opportunity will provide researchers with a novel funding mechanism to consider research questions that might be beyond the scope of standard NSF programs due to funding limitations.

PI PI Institution Title Amount Co-funders
Dankowicz, Harry; University of Illinois at Urbana-Champaign

Asynchronous communication, self-organization, and differentiation in human and insect networks

$999,850 SBE/BCS, BIO/IOS, ENG/CMMI

Iskarous, Khali; University of Southern California Dynamical Principles of Animal Movement

$973,963 SBE/BCS, BIO/IOS

Kaiser, Hartmut; Louisiana State University

STAR: Scalable toolkit for Transformative Astrophysics Research

$799,682 MPS/AST, CISE/CCF

Minai, Ali; University of Cincinnati

The Hunting of the Spark: A Systematic Study of Natural Creativity in Human Networks

$999,762 SBE/BCS, CISE/IIS

Misra, Satyajayan; New Mexico State University

Towards Ubiquitous Adoption of Wireless Sensor Networks in Experimental Biology Research

$800,000 CISE/CNS, BIO/IOS

Omenetto, Fiorenzo; Tufts University

Resorbable Electronics--Materials, Manufacturing, and Modeling

$1,000,000 MPS/DMR, ENG/CMMI

Onuchic, Jose; Rice University

Molecular Underpinnings of Bacterial Decision-Making

$1,000,000 BIO/MCB, MPS/PHY, MPS/CHE, MPS/DMR

Paerl, Hans; University of North Carolina at Chapel Hill

An Ecologically-Driven Strategy for Ensuring Sustainability of Anthropogenically and Climatically Impacted Lakes

$450,709 ENG/CBET, BIO/DEB, OISE

Peccoud, Jean; Virginia Tech

Modeling and optimization of DNA manufacturing processes

$999,531 BIO/DBI, BIO/MCB, ENG/CMMI

Weiss, Jeffrey; University of Colorado, Boulder

Nonequilibrium Statistical Mechanics of Natural Climate Variability: Sea-Surface Temperature and Ocean Heat Content

$709,682 GEO/OCE, MPS/DMR, MPS/PHY, MPS/DMS

Woodbury, Neal; Arizona State University

Mimicking the Functional Complexity of Biology with Man-Made Systems

$999,904 BIO/MCB, MPS/PHY, MPS/CHE, ENG/CBET

-NSF-

Media Contacts
Dana Topousis, NSF (703) 292-7750 dtopousi@nsf.gov
Program Contacts
Thomas F. Russell, NSF (703) 292-4863 trussell@nsf.gov

The National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering. In fiscal year (FY) 2012, its budget is $7.0 billion. NSF funds reach all 50 states through grants to nearly 2,000 colleges, universities and other institutions. Each year, NSF receives over 50,000 competitive requests for funding, and makes about 11,000 new funding awards. NSF also awards nearly $420 million in professional and service contracts yearly.

Useful NSF Web Sites:
NSF Home Page: http://www.nsf.gov
NSF News: http://www.nsf.gov/news/
For the News Media: http://www.nsf.gov/news/newsroom.jsp
Science and Engineering Statistics: http://www.nsf.gov/statistics/
Awards Searches: http://www.nsf.gov/awardsearch/

Publish Date:
07-23-2012

Center for Computation & Technology
2003 Digital Media Center • Telephone: +1 225/578-5890 • Fax: +1 225/578-8957
© 2001–2025 Center for Computation & Technology • Official Web Page of Louisiana State University.