Introduction to the National Science Foundation

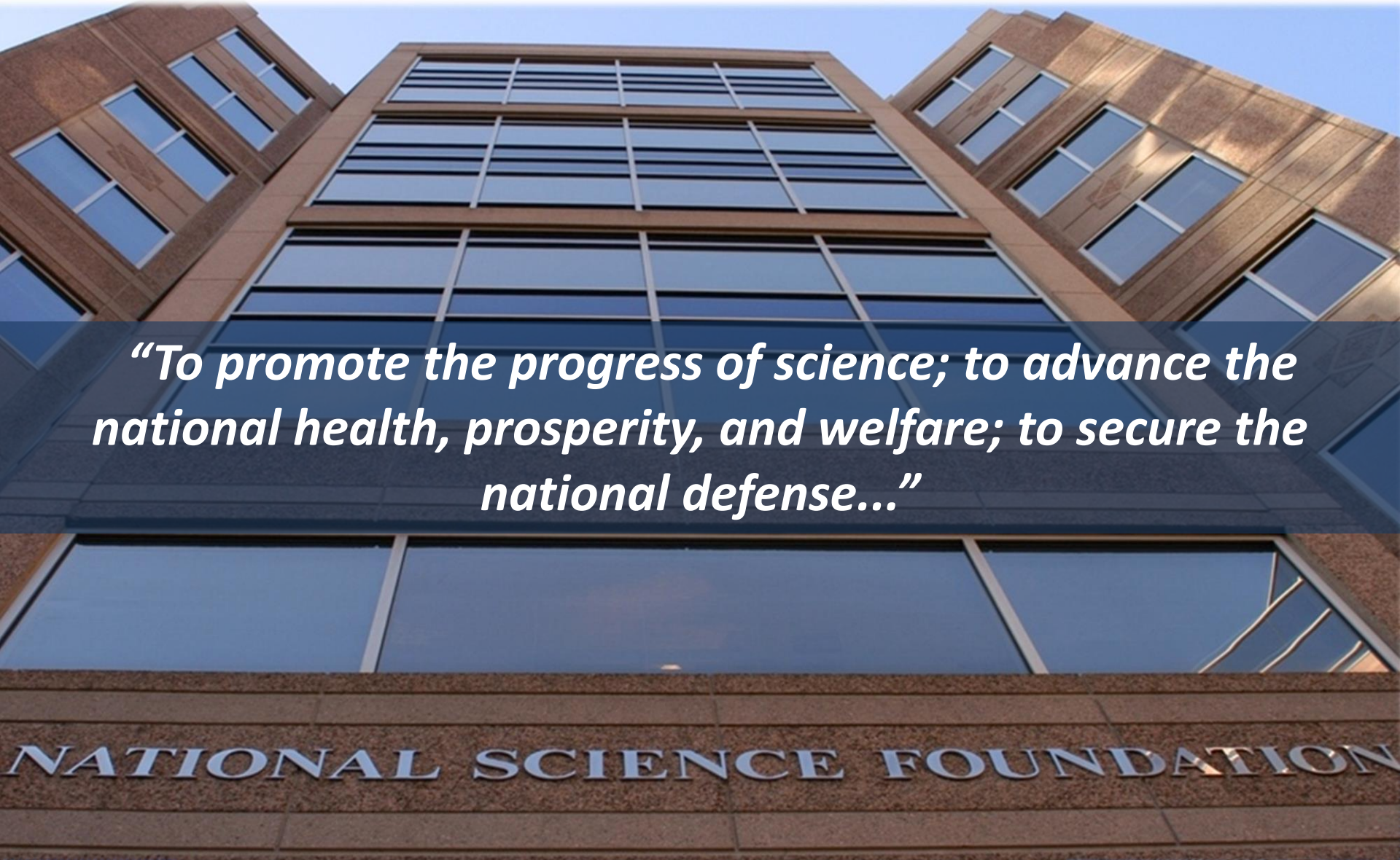
June 2015

Tuskegee University

ITEST/Cyberlearning Workshop

About NSF and what we fund

National Science Foundation's Mission



The US National Science Foundation

- US government agency, funded by tax dollars
- Funds, but doesn’t do, scientific research
- Reports to the National Science Board, 24 scientists appointed by the President and confirmed by the Senate

Organization of NSF

- NSF funds research and development in all fields of science, technology, engineering and math (STEM)
- NSF is organized into Directorates (like colleges in a university) and Divisions (like departments)
- NSF funds a variety of R&D project in STEM education

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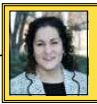

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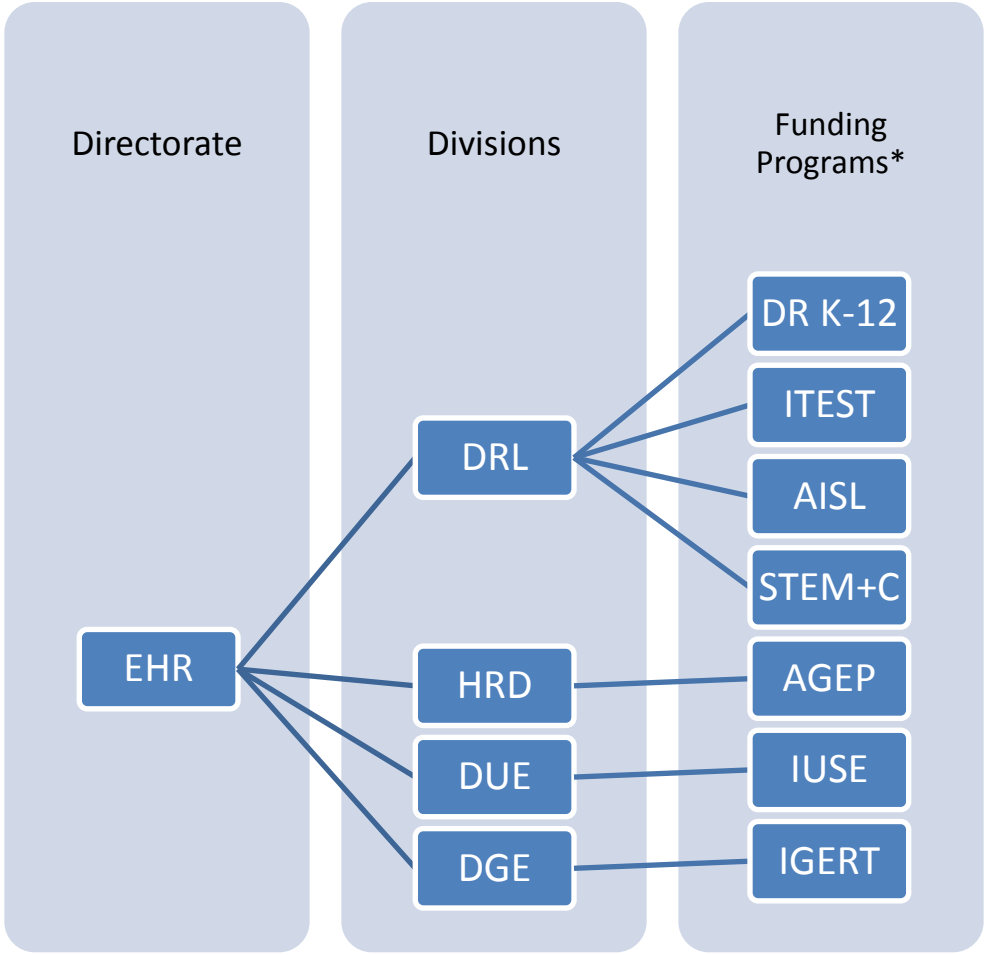
January 2015

Education and technology at NSF

- **Education and Human Resources**
  - Research, development, and implementation supporting STEM education in the US at all ages (including research on broadening participation in STEM, learning and learning environments, and STEM workforce)
- **Social, Behavioral & Economic Sciences**
  - Research in social science (psych, neuro, anthro, etc.) which may include learning research
- **Computer & Information Sciences & Engineering**
  - Research on developing and studying new technologies, including learning technologies, *plus* some programs related to educating computer scientists
- **Other directorates**
  - May have projects on using technologies in education in their respective disciplines

Education and Human Resources

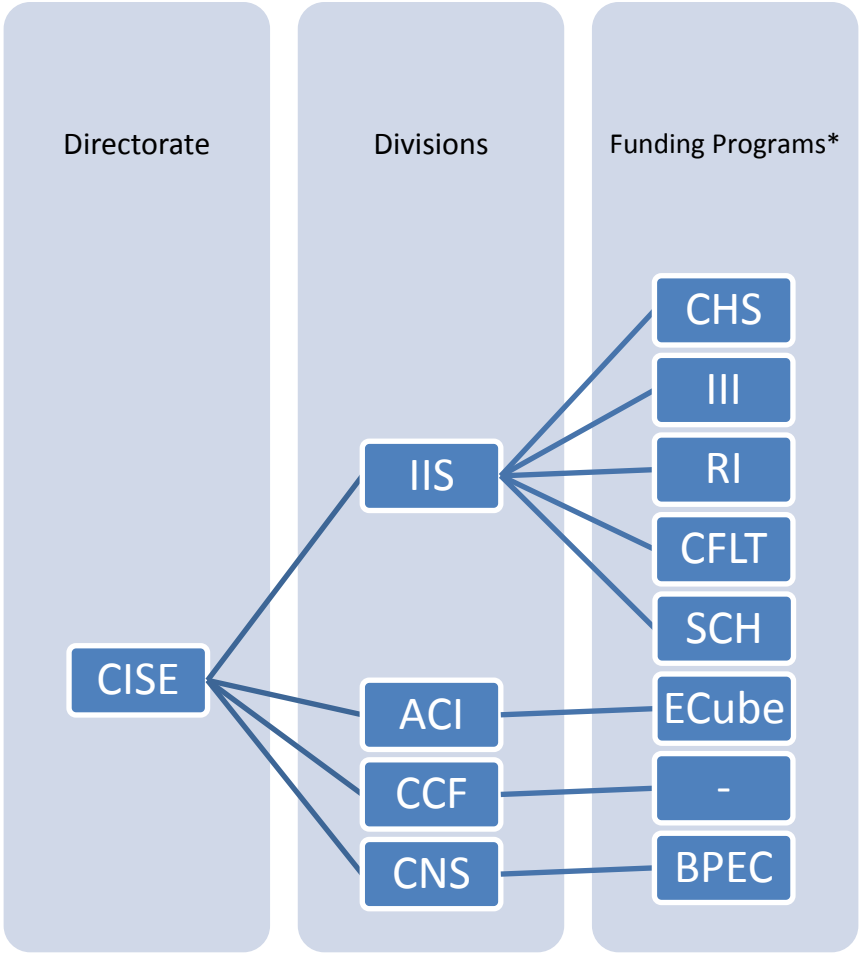
Mission:
To enable ***excellence in U.S. STEM education*** at all levels and in all settings in order to support the development of ***a diverse and well-prepared workforce*** of scientists, technicians, engineers, mathematicians, and educators.



★ This is for demonstration. Not all programs are listed.

Computer & Information Sciences & Engineering

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.



★ This is for demonstration. Not all programs are listed.

Contrasting education & cyberlearning at NSF with other agencies

- NSF's mission does not include clinical health research or education, although it can include basic research relevant to health (try NIH)
- NSF's mission does not give us primary responsibility for educational implementation in the US (this is primarily a state responsibility, or US Department of Education).
- We support commercialization of research in some of our programs, but we are not a venture capital fund, and we definitely don't support commercial ventures with no relation to research

How NSF evaluates proposals

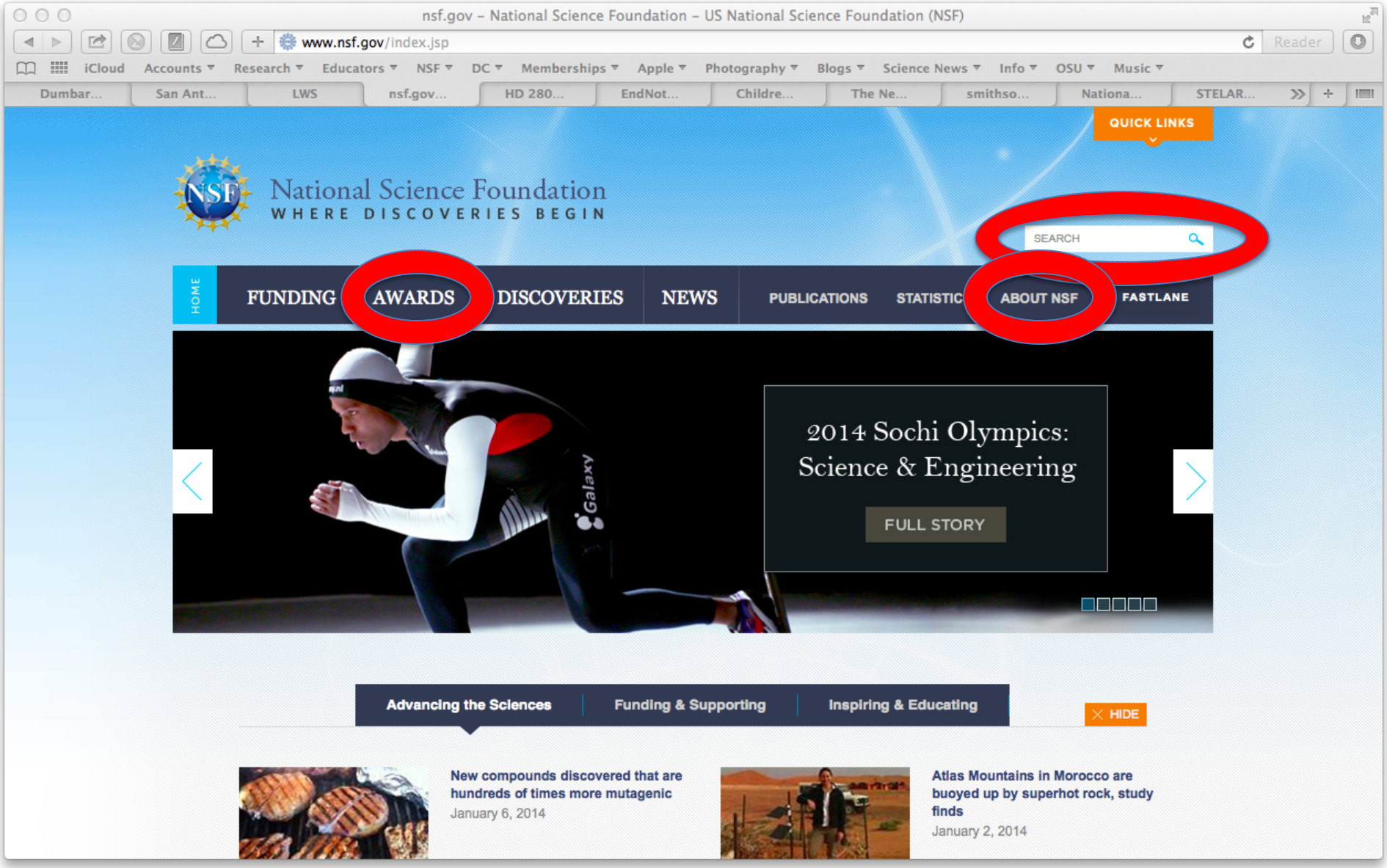
- Submissions are made to specific calls (program announcements, program solicitations) or via our general Grants Proposal Guide
- Proposals that follow the submission guidelines are peer reviewed according to National Science Board Criteria*
- We fund a small proportion of proposals (typically 5-15% of those submitted)

Important rules for newcomers

- Read the *Grants Proposal Guide* and follow it
- Your proposal has to come through an eligible institution (typically a university or non-profit)
- Don’t send in the same proposal multiple times
- Ask questions if you have them
- Consider resubmission with changes from feedback from earlier proposals, but note that all submissions are reviewed from scratch

The submitter's three jobs

- Identify the right funding opportunity
- Conceptualize a fantastic project
- Write a persuasive proposal in 15 pages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Research on Learning in Formal and Informal Settings

Innovative Technology Experiences for Students and Teachers (ITEST)

STEM Learning and Research Center

The STEM Learning and Research (STELAR) Center builds capacity and magnifies the results of ITEST projects to deepen the impact of the ITEST program. To learn more about STELAR, the ITEST program, and current and past ITEST projects, please visit http://stelar.edc.org/.

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DUE DATES

Full Proposal Deadline Date: February 11, 2014

Full Proposal Deadline Date: November 6, 2014

Some important notes

- Solicitations come and go. Some are multi-year, some are not but recur anyhow, many change names
- Solicitations will always have a minimum of 90 days to submit but may not have more
- Most solicitations follow the fiscal year, due in late fall or spring
- Just because NSF has funded a certain kind of work in the past doesn’t mean we have money for it in the future