NSF PARTNERSHIP OPPORTUNITIES

NSF embraces partnership opportunities to enhance research and innovation, increase access to research infrastructure and strengthen workforce development. Partnering can accelerate scientific discovery as well as the translation of research into products and services that benefit society.

POTENTIAL NSF PARTNERS

- Private industry
- Foundations
- Non-profits
- Federal agencies
- International organizations
- State and local governments
- Individuals

The NSF/Air Force partnership is advancing areas of mutual interest in the geosciences and other areas.

PARTNERSHIP HIGHLIGHTS

A partnership with NSF can take many forms. The following are a few examples of NSF partnership agreements.

LETTER OF INTENT

NSF deepened ties with the **U.S. Air Force**, a longtime provider of critical logistical support for polar research, through a letter of intent. Together, we are working to advance national security research in areas of common interest, such as space operations and geosciences, advanced materials sciences, information and data sciences, and workforce development.

MEMORANDUM OF UNDERSTANDING

NSF and the **National Institute of Food and Agriculture** are advancing initiatives aimed at critical resources such as digital agriculture, food security, energy and water quality through a memorandum of understanding. The partnership encourages information sharing about project activities and joint support in areas of mutual interest.

LETTER OF COLLABORATION

Through the **Graduate Research Internship Program**, NSF partners with nine federal agencies providing additional research options for NSF Graduate Research Fellows at federal facilities and national laboratories in areas of national priority. Opportunities have included positions in astrophysics at the Smithsonian Institution, natural resource management at the U.S. Department of Agriculture and mineral studies at the U.S. Geological Survey.

INTERAGENCY AGREEMENT

NSF and multiple federal agencies support the **National Center for Atmospheric Research,** a research and development center that advances worldclass research in the atmospheric and related earth system sciences. The center has expanded understanding of many atmospheric occurrences, including geohazards such as hurricanes, geomagnetic storms and wildfires. Federal partners include the U.S. Army, Air Force, Army Corps of Engineers, the Defense Advanced Research Projects Agency and the National Oceanic and Atmospheric Administration.

The NSF/Intel partnership is enhancing the security and privacy of cyber-physical systems.

JOINT SOLICITATION

Intel Corporation and NSF partnered to develop and jointly fund five solicitations to advance research, innovation and workforce development in cybersecurity and privacy, visual and experiential computing, computer-assisted programming, wireless edge networks and microarchitecture. NSF and Intel provide equal support for the program.

INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTERS

The **Center for Biophotonic Sensors and Systems** is a national resource for development of biophotonic sensors and systems using light-based technologies to create devices and systems for early disease detection and more effective personalized care options. The center was established by Boston University and the University of California Davis and supported by NSF's Industry/University Cooperative Research Centers program. The center includes nearly 20 members from government, industry and academia who leverage research funds to address pressing industry needs.

A GIFT TO NSF

Through a collaboration to strengthen the needs of the future workforce, **The Boeing Company** made a gift to NSF that is supporting the design and deployment of online curricula to accelerate training in critical skill areas such as robotics, data science and artificial intelligence. NSF will fund research focused on re-skilling and improving the technical abilities of the nation's STEM workforce.

For more information on partnering with NSF, contact partnership@nsf.gov

$2.5B

Amount federal government invests annually in small business and technology transfer firms, resulting in about 10 patents per day.

34%

NSF Industry-University Cooperative Research Centers that reported an invention in FY18

DID YOU KNOW?

NSF and NASA have partnered on several research projects in Antarctica, including a study to prepare astronauts to cope with months of isolation, confinement and life in an extreme environment.

Image credits: Page 1 (top to bottom) Liu zishan/Shutterstock.com; Scott Springer, Earth & Space Research; Page 2 (c)iStock.com/Andrey Prokhorov