

HAWAII

• FY 2023 Fast Facts



• Top NSF-funded Academic Institutions for FY 2023

University of Hawaii \$58,380,000 Chaminade University of Honolulu \$2,030,000

Hawaii Pacific University \$455,000

• NSF By The Numbers

The U. S. National Science Foundation (NSF) is an <u>\$9.06 billion</u> independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.

DID YOU KNOW? NSF has funded the work of **261** Nobel Prize winners over 75 years.





Expanding the Frontiers of Science

Station ALOHA (A Long-term Oligotrophic Habitat Assessment), the long-term ocean monitoring site 100 km (62 miles) north of Oahu, Hawaii, has been the location of repeated observations since the late 1980s. The **University of Hawaii's** ALOHA Cabled Observatory (ACO), the deepest operating cabled observatory on the planet, provides the ocean science community with essential infrastructure and access for sustained science at Station ALOHA, an oligotrophic (very low-nutrient) site representative of a large fraction of the global ocean. The ACO enables the development, testing and operation of new ocean observing sensors and technology, from the abyss to the surface, to study the movement of carbon, nutrients and animal populations throughout the water column. The observatory complements the periodic Hawaii Ocean Time-series (HOT) ship-based measurements and Woods Hole Oceanographic Institute/HOT surface mooring co-located at Station ALOHA. NSF funding supports continued ACO operations and maintenance for the scientific community, including the repair, deployment and maintenance of instrumentation and sensors.

STEM Education and Broadening Participation

The Kiai Loko Center for Limu Research, conceived and managed by personnel from the **University of Hawaii** - **Windward Community College** through an NSF Tribal Colleges and Universities Program award, focuses on applying traditional Native Hawaiian knowledge alongside Western scientific methods to study questions important to Native Hawaiians related to limu (algae) and the traditional Hawaiian fishpond. Aquacultural practices employed in the maintenance of healthy fishponds and the production of limu are important aspects of traditional Native Hawaiian lifestyles that contribute to critical contemporary issues such as food security, biodiversity and cultural perpetuation. The center's five-year objectives partner community members, Native Hawaiian cultural experts and science, technology, engineering and mathematics professionals in engaging 120 Native Hawaiian high school students in culturally relevant STEM courses, student internships and the completion of STEM certificates that prepare students for positions as aquaculture technicians. Student-led research address limu-related issues important to Native Hawaiian people, advancing the knowledge base surrounding limu ecology and production. The development of academic pathways supports students in transitioning to and completing STEM college degrees and entry into additional STEM professions.



Regional Innovation Engines

NSF Regional Innovation Engines (NSF Engines) Development Awards help organizations create connections and develop their local innovation ecosystem within two years to prepare a strong proposal for becoming a future NSF Engine. The **University of Hawaii** is leading an award focused on translational research that increases sustainable food production and economic expansion in Hawaii's aquaculture, fisheries and agriculture sectors. The award integrates Indigenous knowledge systems and scientific technologies to generate food products and services to respond to the challenges of food insecurity among underserved communities, an over-reliance on food imports and the burgeoning effects of climate change.

EPSCoR

COMPETITIVE RESEARCH | Hawaii is one of 28 U.S. states or territories under the <u>NSF Established Program to Stimulate</u> <u>Competitive Research (EPSCoR)</u>. **\$8,119,685** in awards have been made to Hawaii academic institutions through EPSCoR in FY 2023. For more information, visit Hawaii's EPSCoR state web page.

NCSES

According to the <u>NSF National Center for Science and</u> <u>Engineering Statistics (NCSES)</u>, which is housed in NSF, 31% of science, engineering and health doctorates conferred in Hawaii are made in life sciences. <u>Visit Hawaii's science and</u> <u>engineering state profile to learn more!</u>

37.12 %	of Hawaii's higher education degrees are
	concentrated in S&E fields.

- **3.83**^w of Hawaii's workforce is employed in S&E occupations.
- of Hawaii's total employment is attributable
 to knowledge and technology intensive
 industries.

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. For more information, please visit the NSF CHIPS and Science website.

RESEARCH SECURITY – NSF is committed to safeguarding the integrity and security of science and engineering while also keeping fundamental research open and collaborative. NSF seeks to address an age of new threats and challenges through close work with our partners in academia, law enforcement, intelligence and other federal agencies. By fostering transparency, disclosure and other practices that reflect the values of research integrity, NSF is helping to lead the way in ensuring taxpayer-funded research remains secure. To learn more, please visit the NSF Research Security website.

CONNECT WITH NSF – For more information on NSF's impact in your state, please contact the NSF Office of Legislative and Public Affairs at <u>congressionalteam@nsf.gov</u>.