



LEWIS-BURKE



A S S O C I A T E S LLC

**FEDERAL PROGRAMS AND
FELLOWSHIPS THAT PROVIDE
SUPPORT FOR GRADUATE
STUDENTS**

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Overview

This report contains a list of federal government research scholarship, fellowship, and traineeship programs that provide support for graduate students.

The federal government programs listed below are organized by the agency that runs the program. Within each agency, the programs are organized by the applying entity, such as whether the award is given to the institution or to individuals. The analysis of each opportunity includes a program summary, eligibility requirements, size of the program, approximate size and type of award, citizenship requirements, annual due dates, and other special factors. The program websites are provided as a source for more detailed information.

Department of Commerce

National Oceanic and Atmospheric Administration

The mission of National Oceanic and Atmospheric Administration (NOAA), a bureau of the Department of Commerce (DOC), is to understand and predict changes in Earth's environment and to conserve and manage coastal and marine resources. NOAA is organized according to line offices, including the National Weather Service, the National Ocean Service, and Office of Oceanic and Atmospheric Research, among others. The Office of Oceanic and Atmospheric Research, which is where the majority of NOAA's extramural research funding is maintained, is organized into three general research topic areas: Climate Research; Weather and Air Quality Research; and Ocean, Coastal and Great Lakes Research. The majority of NOAA research fellowship opportunities are in the ocean research area. In addition to the opportunities below, NOAA has several programs that provide opportunities to work at NOAA sites. A complete list of graduate opportunities can be found at <http://www.noaa.gov/audience/graduate>.

Individual Awards

Dr. Nancy Foster Scholarship Program

- Overview: This program provides support for independent graduate-level research in oceanography, marine biology, or maritime archaeology, as well as "science, engineering, social science, and resource management for ocean and coastal areas." Women and members of minority groups are particularly encouraged to apply.
- Eligibility: Those eligible to apply are currently pursuing or intending to pursue a full-time masters or doctoral level degree in oceanography, maritime archaeology, or marine biology. A 3.3 grade point average and full-time student status is required.
- Citizenship: Applicants must be U.S. citizens or permanent residents.
- Award/Program Size: Each student's scholarship includes a 12-month stipend of \$30,000, an annual cost-of-education allowance of up to \$12,000, as well as \$10,000 to cover the costs of a four- to six-week research collaboration at a NOAA facility. Master's students may be supported for up to two years (at a maximum of \$96,000) and doctoral students for up to four years (at a maximum of \$196,000). NOAA awards two to four scholarships each year.
- Due Date: Applications for the 2019 scholarship closed on December 17, 2018.

Source: <https://fosterscholars.noaa.gov/howtoapply.html>

Sea Grant John A. Knauss Marine Policy Fellowship

- Overview: Supported by the National Sea Grant Office, this fellowship targets graduate students who have “an interest in ocean, coastal and Great Lake resources, and the national policy affecting decisions affecting those resources.”
- Eligibility: Applicants must be enrolled in a relevant graduate program to apply.
- Citizenship: The program is open to all students meeting the eligibility requirements regardless of citizenship.
- Award/Program Size: Student awards totaling \$71,500 per year per student are provided through a cooperative agreement with state Sea Grant Programs. The length of assignment is thirteen months (non-renewable).
- Due Date: Applications for the 2019 competition are due February 22, 2019.

Source: <https://seagrant.noaa.gov/Knauss>

National Institute of Standards and Technology

The National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce (DOC), promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology. NIST is organized into five laboratories: Material Measurement, Physical Measurement, Engineering, Communications Technology, and Information Technology. It also has a Center for Neutron Research and a Center for Nanoscale Science and Technology.

Individual Awards

Graduate Student Measurement Science and Engineering Fellowship Program

- Overview: This fellowship program provides financial assistance for doctoral students in disciplines related to NIST measurement science and engineering research. Specific fields vary by year, but in general include chemistry, computer science, materials science, mathematics, geology, astronomy, and physics. Fellows complete two summer internships at NIST laboratories. The program is run in conjunction with the National Physical Science Consortium (NPSC, <http://www.npsc.org/>).
- Eligibility: Graduate students must be pursuing a degree from an NPSC-member university and in a field important to NIST, such as chemistry, computer science, electrical engineering, materials science, mathematics, mechanical engineering, or physics. Applicants historically under-represented in STEM, either minority, female, or both are encouraged to apply.
- Citizenship: Fellows must be U.S. citizens.
- Award/Program Size: Fellows receive a \$26,000 stipend per year and tuition waiver and may be funded for up to six years.
- Due Date: The application process opens in August and closes in early December.

Source: <https://www.nist.gov/iaao/academic-affairs-office/nist-graduate-student-measurement-science-and-engineering-gmse>

Department of Defense

The Department of Defense (DOD) funds research that is relevant to its mission, predominately drawing from engineering, computer/information science, and physical sciences. However, DOD also provides some limited research and education opportunities in foreign languages, social sciences, and medical and life sciences.

Individual Awards

National Defense Science and Engineering Graduate Fellowship (NDSEG)

- Overview: This program is a competitive, portable fellowship that is awarded to students who intend to pursue graduate study in one of the 15 supported disciplines: aeronautical and astronautical engineering; biosciences; chemical engineering; chemistry; civil engineering; cognitive, neural, and behavioral sciences; computer and computational sciences; electrical engineering; geosciences; materials science and engineering; mathematics; mechanical engineering; naval architecture and ocean engineering; oceanography; and physics.
- Eligibility: Applicants should be either enrolled in their last year of college or first two years of graduate study at the time of application. You must intend to pursue a doctoral degree in order to be eligible for NDSEG Fellowship support.
- Citizenship: Applicants must be U.S. citizens or nationals.
- Award/Program Size: The DOD has awarded approximately 180 new fellowships each year. NDSEG fellowships last for three years and pay for full tuition and all mandatory fees, a monthly stipend, and up to \$1,200 a year in medical insurance.
- Due Date: Applications for the 2018 competition were due December 7, 2018. This program is competed annually, and applications are typically due in the fall.

Source: <https://www.ndsegfellowships.org/application>

Science Mathematics and Research for Transformation (SMART) Scholarship for Service Program

- Overview: This program allows students pursuing an undergraduate or graduate degree in science, technology, engineering, and mathematics (STEM) disciplines to receive a full scholarship in exchange for serving at internships at DOD facilities and working for DOD after graduation. Students pursuing degrees related to the following are encouraged to apply: aeronautical and astronautical engineering; biosciences; biomedical engineering; chemical engineering; chemistry; civil engineering; cognitive, neural, and behavioral sciences; computer and computational sciences; electrical engineering; geosciences; industrial and systems engineering; information sciences; materials science and engineering; mathematics; mechanical engineering; naval architecture and ocean engineering; nuclear engineering; oceanography; operations research; and physics.
- Eligibility: Applicants must 18 years or older by August 1, 2019. Applicants must also be enrolled in an undergraduate or graduate program at an approved U.S. academic institution or have acceptance for entrance for the fall 2019 semester.
- Citizenship: Applicants must be citizens of the U.S., Australia, Canada, New Zealand, or the United Kingdom.
- Award/Program Size: Participants receive full tuition and education related fees; cash award paid at a rate of \$25,000 to \$38,000 depending on degree being pursued. SMART awards may range from one academic term to five academic years.
- Due Date: Applications open in August and close by early December.

- Special Attention: Participants must be able to participate in summer internships at DOD laboratories and be willing to accept post-graduate employment with the DOD. Participants must also have a minimum cumulative GPA of 3.0 on a 4.0 scale.

Source: https://smartscholarshipprod.service-now.com/smart?id=kb_article&sys_id=3db0a713dbbd0300b67330ca7c96197c

David L. Boren Graduate Fellowship

- Overview: This program supports the study of under-represented languages and areas critical to U.S. national security. The fellowship provides support for overseas study and a domestic language study supplement. Fellows are required to work for the federal government in a national security related position for at least a year following graduation. A list of preferred languages can be found at <https://borenawards.org/fellowships/thinking-applying/boren-fellowship-preferences>.
- Eligibility: Students must be enrolled in a graduate program at a U.S. academic institution. All applicants must demonstrate how their study programs are connected to achieving a better understanding of national security and must be planning to attend an overseas program in a country outside of Western Europe, Canada, Australia, or New Zealand.
- Citizenship: Applicants must be U.S. citizens.
- Award/Program Size: The Boren Fellowship provides a minimum of 12 weeks and maximum of one-year (maximum one year overseas) of support. The program provides up to \$24,000 for overseas study as well as limited funding for supplemental domestic language study, for a total of \$30,000 for combined overseas/domestic study.
- Due Date: Applications for the 2019 competition were due January 30, 2019.

Source: http://borenawards.org/boren_fellowship/basics.html

National Physical Science Consortium (NPSC) – National Security Agency Sponsorship

- Overview: This program is a vehicle by which the National Security Agency (NSA) supports students pursuing doctoral degrees in mathematics, engineering, computer science, and physics. In addition to stipend support, NSA provides technical mentoring and at least two summers of employment at NSA.
- Eligibility: Students must be enrolled in a graduate program at an NPSC member institution. A complete list of participating institutions is available at <http://www.npsc.org/Universities/universities.html>.
- Citizenship: Applicants must be U.S. citizens.
- Award/Program Size: The fellowship may last up to six years and includes full tuition and required fees. Students may additionally hold a research or teaching assistantship.
- Due Date: Applications are accepted from September 1 until November 30 each year.

Source: <https://www.intelligencecareers.gov/icstudents.html?Agency=NSA> and <http://www.npsc.org/>

Department of Education

The Department of Education offers a number of discretionary grants in the areas of education policy enhancement, educational environments, and educator capabilities. Most of the graduate fellowship support programs are run by the Office of Post-Secondary Education, which is responsible for developing and implementing post-secondary education policy that increases quality and access.

Institution Awards

Graduate Assistance in Areas of National Need (GAANN)

- Overview: “This program provides fellowships, through university academic departments and programs, to assist graduate students with excellent records who demonstrate financial need and plan to pursue the highest degree available in their course of study at the institution.” Grants are awarded to programs and institutions to sustain and enhance the capacity for teaching and research in subject areas of national need. For the 2018 competition, the specified areas of national need included computer and information sciences, such as artificial intelligence and cybersecurity, and engineering in fields like aeronautics, chemicals, systems, materials science, and electronics, among others.
- Eligibility: Students are not eligible to apply for this grant. Academic departments and programs within institutions of higher education that provide courses of study leading to a graduate degree may apply. Fellows must be enrolled as graduate students, have financial need, and be planning a career in teaching or research. The academic program must have been in existence for at least four years.
- Citizenship: Fellows must be citizens, nationals, or permanent residents of the U.S.
- Award/Program Size: Awards range in size from \$149,250 to \$398,000 for up to three years. The estimated number of awards is 74.
- Due Date: Applications were due August 29, 2018. This program is usually competed each year.
- Special Attention: An institution must provide an institutional matching contribution equal to at least 25 percent.

Source: <http://www2.ed.gov/programs/gaann/index.html>

Fulbright-Hays Doctoral Dissertation Research Abroad

- Overview: This program provides grants to colleges and universities to fund individual doctoral students who conduct research in other countries in modern foreign languages and area studies for periods of six to 12 months.
- Eligibility: U.S. institutions of higher education are eligible to apply. Graduate students in doctoral programs must apply through the institutions in which they are enrolled. Eligible students must be planning a teaching career in the U.S. upon completion of the doctoral program.
- Citizenship: Students are eligible to receive a fellowship if they are citizens, nationals, or permanent residents of the U.S.
- Award/Program Size: Expenses covered by the award include: travel expenses, including excess baggage to and from the residence of the fellow to the host country of research; maintenance and dependents allowances based on the cost of living in country of research for the fellow and his or her dependent(s); project allowance for research related expenses such as books, copying, tuition and affiliation fees, local travel and other incidental expenses; and health and accident insurance premiums.
- Due Date: For the 2019 competition, applications are due March 25, 2019

Source: <http://www2.ed.gov/programs/iegpsddrap/index.html>

Foreign Language and Area Studies (FLAS) Fellowships Program

Note: This program was proposed for elimination in the President's FY 2018 budget request.

- Overview: This program provides academic year and summer fellowships to institutions of higher education to assist undergraduate students and graduate students undergoing training in modern foreign languages and related area or international studies.
- Eligibility: Institutions of higher education or consortia of institutions are eligible to apply. Institutions conduct competitions to select eligible undergraduate students and graduate students to receive fellowships.
- Citizenship: Students are eligible for fellowships if they are citizens, nationals, or permanent residents of the U.S. Students should show potential for high academic achievement and be enrolled in a program of modern language training
- Award/Program Size: FLAS grants are awarded to institutions for a four-year project period. In FY 2018, the Department of Education made 105 awards at an average of approximately \$290,000 per year. Fellowships include an institutional payment and a stipend for the fellow. For graduate students, the average year-round graduate fellowship was \$15,000 and average summer fellowship was \$2,500.
- Due Date: Applications were due June 25, 2018. This program is competed every three years and the next round of awards will likely be awarded in FY 2022.

Source: <http://www2.ed.gov/programs/iegpsflasf/index.html>

Ronald E. McNair Postbaccalaureate Achievement Program

- Overview: The Ronald E. McNair Postbaccalaureate Achievement Grants, which is one of the TRIO programs, help institutions of higher education in aiding low income and first-generation college students to successfully complete undergraduate programs, and in encouraging them to pursue graduate degrees, with the goal of increasing the number of these students enrolled in doctoral programs by working “closely with participants as they complete their undergraduate requirements. Institutions encourage participants to enroll in graduate programs and then track their progress through to the successful completion of advanced degrees.”
- Eligibility: Institutions of higher education or consortia of institutions are eligible to apply. Applicants for McNair grants must assure the Department of Education that participants complete at least their sophomore year of study if they receive an internship through the program, and that the two-thirds of the participant population served must be low-income, first-generation college students.
- Citizenship: Students are eligible for the program if they are citizens, nationals, or permanent residents of the U.S.
- Award/Program Size: The average award size is approximately \$245,000 and supports about 25 participants. The grant duration is five years.
- Due Date: Competitions are typically held every five years. Applications were last due April 7, 2017.

Sources: <https://www2.ed.gov/programs/triomcnair/index.html>

Department of Energy

The Department of Energy (DOE) funds research that is relevant to its mission of advancing the national, economic, and energy security of the U.S. DOE supports research in a broad range of basic and applied sciences. It is the principal federal funding agency of research programs in high-energy physics, nuclear physics, and fusion energy sciences. It also manages fundamental research programs in basic energy sciences, biological and environmental sciences, and computational science and is the federal government's largest single provider of funds for materials and chemical sciences. Other research areas include climate change, geophysics, genomics, life sciences, nanotechnology, fossil energy, and nuclear medicine.

Individual Awards

Graduate Student Research (SCGSR) Program

- **Overview:** This program provides supplemental awards to outstanding U.S. graduate students to pursue part of their graduate thesis research at a DOE laboratory in areas that address scientific challenges central to the DOE Office of Science mission. The research opportunity is expected to advance the graduate students' overall doctoral thesis while providing access to the expertise, resources, and capabilities available at the DOE laboratories. The program is geared towards students pursuing a Ph.D. in physics, chemistry, material sciences, biology (non-medical), mathematics, engineering, computer or computational sciences, or select areas of environmental sciences. Around 100 awards are provided each year.
- **Eligibility:** Applicants must be studying at an accredited college or university in the U.S. or its territories. At the time of application, applicants must have obtained Ph.D. candidacy at their home institution and must have established a defined graduate thesis project and graduate thesis advisor. Applicants must demonstrate that their graduate thesis is in an area of fundamental research aligned with the DOE Office of Science Priority Research Areas identified in the SCGSR solicitation.
- **Citizenship:** Applicants must be U.S. citizens or permanent residents and be at least 18 years of age at the time of applying.
- **Award/Program Size:** The award period for the proposed research project at DOE laboratories may range from three months to one year. Supplemental awards are intended to cover incremental costs associated with living and travel expenses during the award period. Awardees are eligible to receive a monthly stipend in the amount of up to \$3,000 for general living expenses while at the host DOE laboratory during the award period and up to \$2,000 in travel support if the host DOE national laboratory is greater than 50 miles from their university/resident location.
- **Due Date:** Competitions are held twice a year and DOE typically releases a call for proposals in February and August. A call for proposals for the first 2019 competition will be in February 2019 with applications due in May 2019.

Source: <https://science.energy.gov/wdts/scgsr/>

Computational Science Graduate Fellowship (CSGF) Program

- **Overview:** This program provides opportunities to students pursuing a Ph.D. in scientific or engineering disciplines with an emphasis in high-performance computing. CSGF trains scientists to meet the nation's workforce needs and helps to create a nationwide interdisciplinary community. Fellows complete a 12-week practicum at a DOE national laboratory and follow a program of study that combines courses in a scientific or engineering discipline with courses in computer science and applied mathematics. An average of 20 fellowships are awarded per year. In 2018, a new math and computer science track was added which

focuses on applied mathematics, statistics or computer science that help emerging high performance systems.

- Eligibility: College seniors or first year graduate students in the physical, engineering, computer, mathematical, or life sciences without an M.S. degree are eligible to apply.
- Citizenship: Applicants must be either U.S. citizens or permanent residents.
- Award/Program Size: Support of this fellowship is limited to four years and must be renewed each year. The fellowship provides full tuition and required fees, a yearly stipend of \$37,000, and \$5,000 academic allowance in the first year of the fellowship and \$1,000 each renewed year thereafter.
- Due Date: Applications for the 2019 competition were due January 9, 2019. Applications generally open in the fall of each year and close in January.

Source: <http://www.krellinst.org/csgf/>

Mickey Leland Energy Fellowship Program (MLEF)

- Overview: The mission of the MLEF program is to provide opportunities for under-represented students in the STEM fields with opportunities to gain hands-on research experience with the DOE Office of Fossil Energy (FE). Selected candidates will train under the mentorship of program officials and scientists on focused research projects consistent with the mission of FE. At the conclusion of the program, Fellows attend a "Technical Forum" where they will present their research findings and tour a nearby technical site. The program lasts 10 weeks.
- Eligibility: Applicants must be at least 18 and be currently enrolled in a full-time STEM program at the bachelors (at least sophomore), masters, or doctoral level. Applicants must also have a cumulative GPA of at least 3.0. While the program aims to increase opportunities for under-represented students, all eligible students are encouraged to apply.
- Citizenship: Applicants must be U.S. citizens.
- Award Size: Current masters students receive a weekly stipend of \$750. Current Ph.D. students receive a weekly stipend of \$850.
- Due Date: Applications for the 2019 competition were due January 7, 2019. This program is competed annually.

Source: <http://www.fossil.energy.gov/education/lelandfellowships/index.html>

Internships

DOE offers a variety of internship opportunities for students in DOE-related fields:

Student Stipend-Based Internship Programs

- Overview: DOE offers several stipend-based internship programs such as National Laboratories Internships, the Science Graduate Fellowship, the NNSA Minority Serving Institutions Program, and the Minority Educational Institution Student Partnership Program.

Source: <https://energy.gov/jobs/services/students-recent-graduates/stipend-based-internships>

More information on internship opportunities at DOE is available at <http://energy.gov/student-programs-and-internships>.

DOE Scholars Program

- Overview: The DOE scholars program introduces DOE’s mission and operations to both undergraduates and post-graduates who are interested in exploring a career with the Department. The program is offered to students in a variety of disciplines, with site placements across the country.
- Eligibility: Applicants must be at least 18 years of age and be an undergraduate, graduate, or post-graduate of an accredited institute of higher education.
- Citizenship: Applicants must be U.S. citizens.

Source: <https://orise.orau.gov/doescholars/default.html>

Institute for Advanced Composites Manufacturing Innovation Internship Program

- Overview: The Institute for Advanced Composites Manufacturing Innovation (IACMI) “supports research and development projects that accelerate the adoption of advanced composites” in the advanced manufacturing industry. The internship program aims to develop the technical skills of graduate students to support the advanced manufacturing industry after graduation, specifically related to vehicles, wind energy, compressed gas storage, infrastructure, and aerospace. The 10-week summer program allows students to connect with experts in the composites field and work alongside one or more of IACMI’s member organizations.
- Eligibility: This program is open to undergraduate and graduate students who are enrolled in a regionally accredited U.S. university or college. Applicants must be 18 years old and have a minimum GPA of 3.2.
- Citizenship: Applicants must be U.S. citizens.
- Due Date: This competition occurs annually. Applications for the 2019 program were due February 8, 2019. The next application period will likely occur in late fall or early winter.

Source: <https://iacmi.org/2019-internship-program/>

Department of Health and Human Services

National Institutes of Health

The primary function of the National Institutes of Health (NIH) is to support biomedical and health-related research. Included in this mission is research on the behavioral and social impacts of individuals and society as related to public health. Please refer to each program's corresponding link to see which of NIH's agencies and 27 Institutes and Centers (ICs) within the Department of Health and Human Services (HHS) are collaborating on each program. Further details on the relevant areas of graduate study can be found at the link as well. A complete list of all NIH training and fellowship programs with links to current opportunities is available at <https://researchtraining.nih.gov/>.

Institutional Awards

Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (Parent T32)

- **Overview:** The purpose of this program is to provide predoctoral and postdoctoral research training opportunities for individuals interested in pursuing research careers in biomedical, behavioral, and clinical research. Training activities can be in "basic biomedical or clinical sciences, in behavioral or social sciences, in health services research, or in any other discipline relevant to the NIH mission."
- **Eligibility:** Only domestic, non-profit, private or public institutions may apply for grants to support NRSA institutional research training programs. The applicant institution must have a strong and high-quality research program in the area(s) proposed for research training and must have the requisite staff and facilities on site to conduct the proposed research training program. The training principal investigator (PI) should be an established basic, behavioral, and/or clinical researcher.
- **Citizenship:** The individuals to be trained must be citizens, nationals, or permanent residents of the U.S.
- **Award/Program Size:** Awards may be made for periods up to five years and are renewable. The number of awards is contingent upon NIH appropriations, and the submission of a sufficient number of meritorious applications. NIH will contribute to the combined cost of tuition and fees at the rate in place at the time of award. Stipends are also provided as a subsistence allowance for trainees to help defray living expenses during the research training experience and are based on a 12-month appointment period.
- **Due Date:** Applications are due in three annual cycles: January 25, May 25, and September 25. Please note, applicants should check with the relevant IC since some do not accept T series applications for all three cycles. In addition, not all ICs participate in the parent T32 funding opportunity announcement.

Source: <https://grants.nih.gov/grants/guide/pa-files/PA-18-403.html>

Ruth L. Kirschstein NRSA Short-Term Institutional Research Training Grant (Parent T35)

- **Overview:** The objective of this program is to develop or enhance research training opportunities for individuals interested in careers in biomedical, behavioral, and clinical research. The program provides short-term support for a period of at least eight, but no more than 12, weeks in a grant year for full-time training experiences under the supervision of experienced researchers. Many of the NIH ICs use this grant mechanism exclusively to support intensive, short-term research training experiences for students in health professional schools during the summer. The program may also be used to support other types of predoctoral and postdoctoral training in focused, often emerging, scientific areas relevant to the mission of the NIH ICs.

- Eligibility: Only domestic, non-profit, private or public institutions may apply for grants to support NRSA institutional research training programs. The applicant institution must have a strong, high quality research program in the area(s) proposed for research training and must have the requisite staff and facilities on site to conduct the proposed research training program. The PI conducting training should be an established basic, behavioral, and/or clinical researcher.
- Citizenship: The individuals to be trained must be citizens, nationals, or permanent residents of the U.S.
- Award/Program Size: The number of awards is dependent on NIH appropriations and the number of meritorious applications received.
- Due Date: Applications are due in three annual cycles: January 25, May 25, and September 25. Please note, applicants should check with the relevant IC since some do not accept T series applications for all three cycles.

Source: <https://grants.nih.gov/grants/guide/pa-files/PA-18-404.html>

Individual Awards

Ruth L. Kirschstein NRSA Individual Predoctoral Fellowship (Parent F31)

- Overview: The purpose of this individual predoctoral research training fellowship is to provide support for promising doctoral candidates who will be performing dissertation research in scientific health-related fields relevant to the missions of the participating NIH ICs.
- Eligibility: The applicant must be at the dissertation research stage of their training and must show evidence of both high academic performance in the sciences and a “commitment to a career as an independent research scientist.” Before submitting a fellowship application, the applicant must also identify a sponsoring institution. The sponsoring institution must have appropriate staff and facilities available on site to provide a suitable environment for performing high-quality research training and be demonstrably committed to research training in the particular program proposed by the applicant.
- Citizenship: Applicants must be citizens, nationals, or permanent residents of the U.S.
- Award/Program Size: Individuals may receive “up to 5 years of aggregate Kirschstein-NRSA support at the predoctoral level including any combination of support from institutional training grants... and an individual fellowship award.”
- Due Date: Applications are due in three annual cycles: April 8, August 8, and December 8. Please note, applicants should check with the relevant IC, since not all participate in the parent F31 funding opportunity announcement.

Source: <https://grants.nih.gov/grants/guide/pa-files/PA-18-671.html>

Ruth L. Kirschstein NRSA Individual Postdoctoral Fellowship (Parent F32)

- Overview: The purpose of the F32 research training fellowships to provide support for research training for highly promising postdoctoral researchers with the potential to become productive, independent investigators scientific health-related fields relevant to the missions of the participating NIH ICs.
- Eligibility: Any postdoctoral fellow with the skills and knowledge required to carry out the proposed research can develop an application with his/her sponsor and institution. Before an F32 award can be activated, the individual must have received a PhD, MD, DO, DC, DDS, DVM, OD, DPM, ScD, EngD, DrPH, DNSc, ND (Doctor of Naturopathy), PharmD, DSW, PsyD, or equivalent doctoral degree from an accredited domestic or foreign institution.
- Citizenship: Applicants must be citizens, nationals, or permanent residents of the U.S.

- Award/Program Size: Individuals may receive “up to 5 years of aggregate Kirschstein-NRSA support at the predoctoral level (up to 6 years for dual degree training, e.g., MD/PhD), and up to 3 years of aggregate Kirschstein-NRSA support at the postdoctoral level, including any combination of support from institutional training grants (e.g., T32) and an individual fellowship award.”
- Due Date: Applications are due in three annual cycles: April 8, August 8, and December 8. Please note, applicants should check with the relevant IC, since not all participate in the parent F32 funding opportunity announcement.

Source: <https://grants.nih.gov/grants/guide/pa-files/PA-18-670.html>

Fulbright-Fogarty Fellows in Public Health

- Overview: NIH’s Fogarty International Center partners with the Fulbright Program in supporting medical or graduate student fellows to promote the expansion of public health research in resource-limited settings.
- Eligibility: Medical or graduate students may apply. Eligibility requirements vary by country, and each applicant can apply to only one country.
- Citizenship: Applicants must be U.S. citizens.
- Award/Program Size: The size and number of awards granted vary.
- Due Date: Applications for the 2019-2020 academic year were due October 9, 2018.

Source: <http://www.fic.nih.gov/Programs/Pages/fulbright-fellowships.aspx>

Pathway to Independence Award (K99/R00)

- Overview: the purpose of the Pathway to Independence Award is to increase and sustain a strong pool of NIH-supported independent investigators. The program supports the transition from a postdoctoral research fellowship to a position as an independent, tenure-track faculty position. The K99/R00 award provides support in two phases: the initial K99 phase provides support for up to two years of mentored postdoctoral research training; the second R00 phase provides up to three years of independent research support.
- Eligibility: “Applicants must have no more than 4 years of postdoctoral research experience at the time of the initial (new) or the subsequent resubmission application. The K99/R00 award is intended for individuals who require at least 12 months of mentored research training and career development (K99 phase) before transitioning to the R00 award phase of the program.”
- Citizenship: There is no citizenship requirement for K99/R00 applicants. Applicants must have received a PhD, MD, DO, DC, DDS, DVM, OD, DPM, ScD, EngD, DrPH, DNSc, ND (Doctor of Naturopathy), PharmD, DSW, PsyD, or equivalent doctoral degree from an accredited domestic or foreign institution
- Award/Program Size: Award budgets consist of salary and other program-related expenses. The total project period may not exceed five years.
- Due Date: Applications are due in three annual cycles: February 12, June 12, October 12. Please note that the K99/R00 uses three distinct funding opportunity announcements, depending on the type or research proposed—basic experimental studies with humans; clinical trial required; clinical trial not allowed.

Sources: <https://grants.nih.gov/grants/guide/pa-files/PA-19-090.html> (basic experimental studies with humans); <https://grants.nih.gov/grants/guide/pa-files/PA-18-397.html> (clinical trial required); <https://grants.nih.gov/grants/guide/pa-files/PA-18-398.html> (clinical trial not allowed)

Centers for Disease Control and Prevention

The mission of the Centers for Disease Control and Prevention (CDC) is to protect and improve public health through information that enhances health decision-making and partnerships with state health departments and other organizations. The CDC focuses on developing and applying disease prevention and control policies, especially in infectious diseases, environmental health, occupational safety and health, health promotion, and prevention and education activities.

Internships

CDC offers a variety of internship and fellowship opportunities and training and research grants, often administered through institutions, including colleges and universities, for students in CDC-related fields. Internships are available in fields such as environmental health, health education, infectious disease, epidemiology, emergency response, and others. The training grants are designated for specific professions by category, and a list of current opportunities is available at https://www.cdc.gov/fellowships/full-time/masters.html#modalIdString_CDCTable_0.

A sampling of internship opportunities for current students includes:

- ASANCHS Research Fellowship Program
<https://www.amstat.org/asa/files/pdfs/YCR-ASANCHSResearchFellowshipProgram.pdf>
- ASPPH/CDC Public Health Fellowship Program
https://s3.amazonaws.com/aspph-wp-production/wp-content/uploads/2015/12/ASPPH-CDC-programAnnoucement-2019_FINAL.pdf
- Dr. James A. Ferguson Emerging Infectious Diseases Fellowship Program
<http://www.kennedykrieger.org/professional-training/professional-training-programs/rise-programs/ferguson-fellowship>

Agency for Healthcare Research and Quality

The Agency for Healthcare Research and Quality (AHRQ) within the Department of Health and Human Services (HHS) creates and disseminates effective tools and measures for health care systems to improve care and outcomes. AHRQ's stated mission is "to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable." AHRQ's recent focus areas include addressing the opioid crisis, improving digital health and data-driven strategies, and funding investigator-initiated research. AHRQ has also listed funding priorities in patient safety, hospital-acquired infections, patient-reported outcomes and quality, and other evidence-based practices.

Individual Awards

Health Services Research Dissertation Program

- Overview: This program provides support to individuals who are conducting research undertaken as part of an academic program to qualify for a doctorate degree relating to healthcare quality. Research applications must address one of the following areas: "(1) research to improve healthcare patient safety; (2) harnessing data and technology to improve healthcare quality and patient outcomes; (3) research to increase accessibility and affordability of healthcare by examining innovative market approaches to care delivery and financing."
- Eligibility: Institutions of higher education, non-profit organizations, and local governments are eligible to apply for this opportunity. Individuals must be at the dissertation stage of training to apply for the PI position.

- Citizenship: Applicants must be U.S. citizens, non-citizen nationals, or permanent residents.
- Award/Program Size: Total award size and number of awards depends on the number of applications that AHRQ receives. The total direct cost awarded must not exceed \$40,000 for the entire project period. Project periods must be a minimum of nine months but may not exceed 17 months.
- Due Date: Applications are due annually February 1, May 1, August 1, and November 1.

Source: <https://grants.nih.gov/grants/guide/pa-files/PA-18-765.html>

Health Resources and Services Administration

The Health Resources and Services Administration (HRSA), an agency of the Department of Health and Human Services (HHS), is the primary federal agency for improving access to healthcare services for people who are uninsured, isolated, or medically vulnerable. The Bureau of Health Professions within HRSA increases access to healthcare by developing, distributing, and retaining a diverse, culturally competent health workforce.

HRSA offers a variety of health professions training grants, often administered through institutions, including colleges and universities. The training grants are designated for specific professions by category, including nursing, medicine, oral health, public health, and others. A comprehensive list of HRSA grants is accessible here: <http://bhpr.hrsa.gov/grants/index.html>. Below are several examples of HRSA's multidisciplinary and broad eligibility grants to highlight the types of opportunities HRSA has funded in the past; it is important to note that most of the funding examples listed have expired but may be recompeted in the future.

Institution Awards

Behavioral Health Workforce Education and Training (BHWET) Program

- Overview: This program, first competed in 2012, aims to strengthen the clinical field competencies of social workers and psychologists who pursue clinical service with high need and high demand populations. The BHWET program is not competed annually and will likely not be recompeted for several years. The most recent competition focused mostly on the workforce serving rural populations and medically underserved areas. Each competition lists specific eligibility requirements and focus areas.
- Eligibility: Eligible organizations for the professional track include accredited behavioral health professional training programs in behavioral pediatrics, social work, school social work, substance use disorder prevention and treatment, marriage and family therapy, occupational therapy, school counseling, or professional counseling; accredited schools of masters or doctoral-level training in psychiatry, psychiatric-nursing programs; and APA-accredited doctoral level schools and programs in health service psychology or school psychology programs with a practicum of ten or more hours per week for two semesters, and APA-accredited doctoral internship programs in professional psychology.
- Citizenship: Applicants must be U.S. citizens, non-citizen nationals, or permanent residents.
- Award/Program Size: Award and program size is subject to annual appropriations in competition years.
- Due Date: No competition is currently posted. The BHWET program was most recently recompeted in FY 2017 and will likely not be recompeted again for several years.

Source: <https://bhw.hrsa.gov/fundingopportunities/?id=67ee4161-1b08-433d-8224-d1e009af2663>

Geriatrics Workforce Enhancement Program (GWEP)

- Overview: GWEP aims to “establish and operate geriatrics education centers... to develop a healthcare workforce that maximizes patient and family engagement and improves health outcomes for older adults

by integrating geriatrics and primary care.” The program was recompeted in FY 2019 and will likely not be recompeted for several years without a major increase in funding. Funding will be awarded via cooperative agreements to “support the education and training of health professions students, residents, fellows, and faculty; healthcare providers; and direct care workers who will provide healthcare to older adults,” as well as “provide educational programs for individuals, patients, families, and caregivers to provide them with the knowledge and skills for self-management and/or care delivery for older adults.” The program aims to fund projects that benefit rural or underserved populations or meet public health needs in state or local health departments. In the most recent competition, HRSA placed special emphasis on the ability of grantees to establish ties with local partners and community organizations.

- **Eligibility:** Applicant organizations must include or partner with an academic geriatrics training program, one or more community-based primary care sites, and a community-based organization. Furthermore, partnerships with other organizations and programs that impact health outcomes for older adults are encouraged.
- **Citizenship:** Applicants must be U.S. citizens, non-citizen nationals, or permanent residents.
- **Award/Program Size:** For the FY 2019 competition, HRSA plans to make about 47 awards each worth up to \$750,000 over five years.
- **Due Date:** No competition is currently posted. The GWEP program was most recently recompeted in FY 2019 and may not be recompeted again until FY 2024 or later.

Source: <https://bhw.hrsa.gov/fundingopportunities/Default.aspx?id=4c8ee9ff-617a-495e-ae78-917847db86a9>

Substance Abuse and Mental Health Services Administration

The Substance Abuse and Mental Health Services Administration (SAMHSA), within the Department of Health and Human Services (HHS), is the implementation arm for social and behavioral intervention and prevention strategies in public health. While much of SAMHSA’s discretionary funds go to state and local governments or to support the health workforce, opportunities to implement SAMHSA initiatives for which nonprofit entities (such as universities) are eligible are occasionally offered.

Individual Awards

Minority Fellowship Program

- **Overview:** The program is managed by seven associations: American Nurses Association (ANA), American Psychiatric Association (APA), Council on Social Work Education (CSWE), American Psychological Association (ApA), The Association for Addiction Professionals (AAP), American Association for Marriage and Family Therapy (AAMFT), and the National Board for Certified Counselors and Affiliates (NBCC). In order to receive an award, students must apply through one of the aforementioned associations. The goal of this program is to increase the pool of professionals qualified to provide leadership, consultation, training, and administration to government, public, and private organizations that develop and implement programs for under-served ethnic minority persons with mental and/or substance abuse disorders. This program provides grants to encourage and facilitate the doctoral and post-doctoral development of minority nurses, psychiatrists, psychologists, and social workers. In FY 2016, SAMHSA allocated approximately \$8 million to the Minority Fellowship Program.
 - **AAMFT**—The program is open to all full-time doctoral students in marriage and family therapy doctoral programs that demonstrate a strong commitment to a career in ethnic minority mental health and substance abuse services and providing substance abuse and mental health services to minority and underserved populations. African American, Alaskan Native, American Indian, Asian American, Hispanic/Latino, Native Hawaiian, and Pacific Islander

students are especially encouraged to apply. *Source:*

https://www.aamftfoundation.org/Foundation/What_We_Do/Minority_Fellowship_Program.aspx

- **ANA** — Applicants must be a member of an ethnic or racial minority group: Asian or Asian American, Black or African American, Hispanic or Latino, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander. Applicants must be a registered nurse and have a master's degree in psychiatric or mental health nursing or a related field and be pursuing a doctoral degree in their field. Additionally, applicants must be an ANA member and able to demonstrate a commitment to a research career in nursing and substance abuse and/or psychiatric or mental health issues affecting minority populations. The fellowship guidelines recommend that all applicants should have completed one year of graduate studies prior to applying to the MFP. *Source:* <http://www.emfp.org/Main-Menu-Category/Fellowships/MFP-Fellowship>
- **ApA** — Applicants must be psychiatry residents-in-training and remain in training during the entire academic year. Applicants must be ApA members. All applicants are welcome to apply regardless of race or ethnicity but must demonstrate their commitment to serve ethnic minority populations. *Source:* <https://www.apa.org/pi/mfp/about/index.aspx>
- **APA** — Applicants must demonstrate a strong commitment to a career in ethnic minority mental health and enhancing the knowledge of culturally competent psychiatry residents. APA awards about 30 fellowships a year, pending funding. *Source:* <https://www.psychiatry.org/residents-medical-students/residents/fellowships/available-apa-apaf-fellowships/samhsa-minority-fellowship>
- **CSWE** — Applicants must have a master's degree in social work and be starting full-time study leading to a doctoral degree in social work or be currently enrolled as full-time students in a doctoral social work program. All applicants are welcome to apply regardless of race or ethnicity but must demonstrate a commitment to a career providing mental health and substance abuse services to ethnic, racial, social, and cultural minorities. *Source:* <https://www.cswe.org/Centers-Initiatives/Initiatives/Minority-Fellowship-Program/MFP-Doctoral-Students/About>
- **NBCC** — This program is intended to support doctoral students in counseling from diverse backgrounds with the intention of producing a workforce committed to addressing issues in underserved populations such as mental health as well as substance abuse and addiction therapy. African Americans, Alaska Natives, American Indians, Asian Americans, Hispanics/Latinos, Native Hawaiians and Pacific Islanders are especially encouraged to apply. *Source:* <http://nbccf-mfpdr.applicantstack.com/x/detail/a2b3qvi3f7le>
- **Citizenship:** Applicants must be U.S. citizens or permanent residents.
- **Award/Program Size:**
 - **AAMFT** — Fellows receive \$20,000 per year for a maximum of three years and must be renewed annually.
 - **ANA** — Fellowships are renewed on an annual basis. The fellowship is usually awarded for 10 to 12 months. A fellow who wishes to receive continual awards for the maximum five years must complete a progress report each year. Renewals are not automatic. The annual stipend amounts vary from year to year depending on federal allocations to the MFP.
 - **ApA** — Fellows receive monthly stipends and serve for one year with an opportunity to apply for an additional year. The annual stipend amounts vary from year to year depending on federal allocations to the MFP.
 - **APA** — Fellows receive financial support for a maximum of three years and must be renewed annually. There is limited availability for dissertation support.
 - **CSWE** — Fellows receive monthly stipends for a one-year period to defray living expenses; some tuition support may be provided depending on the availability of funds. The duration of

the award is three years contingent upon funding and the fellow maintaining satisfactory progress towards degree objectives.

- NBCC — Fellows receive up to \$20,000 a year.
- Due Dates:
 - AAMFT — Applications were due January 31, 2019.
 - ANA — Application are due May 6, 2019.
 - ApA — Applications were due January 15, 2019.
 - APA — Applications were due in January 31, 2019.
 - CSWE — Applications are due February 2019.
 - NBCC — Applications were due January 25, 2019.

Source: <https://www.samhsa.gov/minority-fellowship-program/become-mfp-fellow>

Department of State

The Department of State supports a limited number of international social science and exchange programs each year. Many of these grants focus on international public policy, governance, and/or human rights. A limited number of these programs are open to or targeted at graduate students. Further, recent budget constraints have driven a consolidation of programs and left the Fulbright Program as the primary option for graduate students seeking fellowship funding through the Department.

Individual Awards

Fulbright Grants for Graduate Study and Research Abroad (part of the Fulbright U.S. Student Program)

- **Overview:** This program is an international educational exchange program designed to increase mutual understanding between Americans and people in other countries. The program provides participants, chosen for their academic merit and leadership potential, with the opportunity to study, teach, conduct research, exchange ideas, and contribute to finding solutions to shared international concerns. Fulbright projects span every major discipline, and recipients carry out a wide variety of unique projects and activities while on their grant.
- **Eligibility:** The Fulbright U.S. Student Program offers fellowships for U.S. graduate students to study, conduct research, and/or teach English abroad. The Fulbright Foreign Student Program offers opportunities for foreign graduate students to study, conduct research, and/or teach their native language in the U.S.
- **Citizenship:** U.S. applicants (U.S. citizens only) apply either through their university or college or at-large to the cooperating agency responsible for the program in which they are interested. Non-U.S. applicants (non-U.S. citizens) apply to either the Fulbright Commission in their country of citizenship or the U.S. Embassy in their country of citizenship (in countries where there is not a Fulbright Commission).
- **Award/Program Size:** The Fulbright Program awards approximately 8,000 new grants annually. In FY 2018, the congressional appropriation was \$240 million. Foreign governments and private organizations also contribute funding.
- **Due Date:** Applications for the 2019 competition were due October 9, 2018. This is an annual competition.

Source: <https://exchanges.state.gov/us/program/fulbright-us-student-program>

National Aeronautics and Space Administration

The National Aeronautics and Space Administration (NASA) conducts space exploration work in five principal categories: Science, Aeronautics, Space Technology, Exploration, and Operations. The Science Mission Directorate (SMD) explores the Earth, Sun, planets, and the Universe. The Aeronautics Research Mission Directorate designs and tests new flight technologies that bolster exploration and lead to improved flight capabilities on Earth. The Human Exploration and Operations Mission Directorate concentrates on the International Space Station and developing new methods for human exploration in space. The Space Technology Mission Directorate invests in potentially game-changing technology with applications across NASA mission directorates. In education, NASA activities include support for scientific training in fields relevant to NASA's mission as well as general outreach using space to inspire interest in technical issues and careers.

Individual Awards

Future Investigators in NASA Earth and Space Science and Technology (FINESST)

- **Overview:** This opportunity was previously known as the NASA Earth and Space Science Fellowship (NESSF) program. The new program will offer graduate students to develop research projects that contribute to SMD's research goals to better understand the solar system.
- **Eligibility:** Only students pursuing masters or doctoral degrees in Earth or space sciences, or related disciplines, will be considered. Students may apply at any point in their degree program. Students pursuing a Baccalaureate may also apply if they are actively enrolled in a masters or doctoral degree program at the time of the award. An individual accepting this award may not simultaneously be receiving an award for any other federal fellowship or traineeship.
- **Citizenship:** FINESST is open to all students enrolled at any U.S. university, though U.S. citizens or permanent U.S. residents will be given preference. Proposals which include a citizen from one of the countries in Column II on the "Designated Country List" will be subject to additional scrutiny. The Designated Country List can be found at https://oiir.hq.nasa.gov/nasaecp/docs/DCList_10-24-2018.pdf.
- **Award/Program Size:** The maximum amount for a FINESST award is \$45,000 per year, up to \$135,000 total for a performance period of three years.
- **Due Dates:** Proposals were due February 1, 2019. This program is competed annually.

Source: <https://nspires.nasaprs.com/external/solicitations/summary.do?sollid=%7B913A7DEE-2747-6539-130C-0AB1E2322F42%7D&path=future&method=init>

National Space Grant College and Fellowship Program

- **Overview:** The National Space Grant College and Fellowship Program (Space Grant) is a national network of colleges and universities, which includes over 850 affiliates from universities, colleges, industry, museums, science centers, and state and local agencies. These affiliates belong to one of 52 consortia in all 50 states, the District of Columbia, and the Commonwealth of Puerto Rico. Each of the 52 consortia funds fellowships and scholarships for students pursuing careers in STEM, as well as curriculum enhancement and faculty development. A goal of the program is to recruit and train U.S. citizens (especially women, underrepresented minorities, and persons with disabilities) for careers in aerospace science and technology. Consortia are required to provide a specific target percentage for participation of female and underrepresented minority students in fellowship and scholarship programs.

- Eligibility: Graduate students from a variety of STEM disciplines are eligible for fellowships which enable them either to initiate or continue research in their own fields and complete their studies. Eligibility details vary from institution to institution.
- Citizenship: Applicants must be U.S. citizens.
- Award/Program Size: The size and duration of the fellowship awards vary at each institution.
- Due Dates: Due dates vary at each institution.

Source: <http://www.nasa.gov/offices/education/programs/national/spacegrant/home/index.html>

Internships and Fellowships

NASA Space Technology Research Fellowships (NSTRF)

- Overview: NSTRF supports graduate students “who show significant potential to contribute to NASA’s goal of creating innovative new space technologies.” Fellows conduct research projects at their home institutions and NASA Centers or U.S. Research and Development laboratories. Students are also paired with a NASA subject matter expert that will aid in the students’ research projects.
- Eligibility: Those seeking graduate degrees related to space technology and are or will be enrolled in full-time masters or doctoral degree program before the beginning of the fellowship can apply.
- Citizenship: U.S. citizens and permanent residents are eligible to apply for this fellowship opportunity.
- Award/Program Size: In the 2018 competition, fellowships were worth \$75,000 per year, including a student stipend, tuition and fees, and a faculty advisor allowance.
- Due Dates: Applications are typically due in the late fall. The awards are competed annually.

Source: <https://www.nasa.gov/strg/nstrf>

NASA Internships and Fellowships

NASA offers a variety of fellowship, scholarship, and internship opportunities for students ranging from high school through postdoctoral levels in NASA-related fields.

Information on currently available opportunities can be found at <https://intern.nasa.gov/>. This site is searchable by discipline, time frame, education level, and NASA Center/Facility of interest.

National Science Foundation

The National Science Foundation (NSF) funds basic research in all areas of science and engineering. This includes research on social, behavioral, and economic sciences as well as science, technology, engineering, and mathematics (STEM) education.

Institution Awards

National Science Foundation Research Traineeship Program (NRT)

- **Overview:** The objective of the NRT is to develop interdisciplinary, transformative models for STEM graduate education in order to prepare the scientists and engineers of the future. The NRT program has specific research themes that will rotate every two to three years. Special topics for the 2018 solicitation include any research in convergent themes of national priority with particular emphasis on NSF's Big Ideas, including the *Future of Work at the Human-Technology Frontier*, *Navigating the New Arctic*, *Harnessing the Data Revolution*, *Quantum Leap*, *Windows on the Universe*, and *Understanding the Rules of Life*. In addition to its topical focus, NSF expects institutions to instill graduate students with skills and experiences relevant to a variety of STEM careers.
- **Eligibility:** Projects may involve more than one institution, but a single institution must accept overall management responsibility. The lead institution must independently grant Ph.D. degrees in at least one of the science, technology, engineering and mathematics (STEM) fields supported by NSF in order to be eligible.
- **Citizenship:** All stipend recipients must be U.S. citizens or permanent residents.
- **Award/Program Size:** Proposed budget can be up to \$3 million total for up to five years. For the current competition, NSF anticipates making about 14 to 15 awards each year.
- **Due Date:** Letters of Intent, which are required, are due December 6 annually and full proposals are due February 6 annually.
- **Special Attention:** For the current competition, there is a limit of two proposals per institution.

Source: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505015

CyberCorps (R): Scholarship for Service (SFS)

- **Overview:** SFS seeks to increase the number of qualified students entering the field of cybersecurity and to increase the capacity of the U.S. higher education enterprise to continue to produce professionals in that field. Recipients of the scholarship must work for the federal government for an amount equal to the length of the award.
- **Eligibility:** Proposals can be submitted by institutions of higher education which have certified programs in cybersecurity on behalf of their faculty. There are no restrictions on the number of proposals that can be submitted per organization. PIs, however, can only participate as PI, Co-PI, or senior personnel in one proposal per annual competition.
- **Citizenship:** Scholarship recipients must be U.S. citizens.
- **Award/Program Size:** The scholarship "supports up to three years of stipends, tuition, and allowances for students in cybersecurity." The stipends amount to \$25,000 per year for undergraduate students and \$34,000 per year for graduate students. "NSF anticipates that approximately \$15 million will be available for new awards in FY 2019, pending the availability of funds." Each award will be worth about \$2 to 4 million and NSF will likely make about eight to 12 awards.
- **Due Date:** Proposals are due July 31, 2019 and July 31, 2020.

Source: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504991

International Research Experience for Students (IRES)

- Overview: This program supports groups of U.S. undergraduate or graduate students conducting research abroad in collaboration with foreign investigators. It has three tracks, including IRES Sites, Advanced Studies Institutes, New Concepts in International Graduate Experience. NSF is evaluating the future of this program and others that provide international experiences for graduate students through a [Dear Colleague Letter](#). The agency is interested in ways in which it can better advance science, enhance the education experience of students, and improve professional development through these international programs.
- Eligibility: Proposals must be submitted by a U.S. institution, organization, or professional society.
- Citizenship: Recipients must be U.S. citizens or permanent residents.
- Award/Program Size: For track 1, awards will be worth up to \$300,000, though “exceptionally creative proposals” could receive \$400,000. Track 2 awards are worth about \$150,000. Track 3 awards are worth up to \$1 million.
- Due Dates: Track 1 proposals are due the second Tuesday in September annually. Track 2 proposals are due the third Tuesday in September annually. Track 3 proposals are due the fourth Tuesday in September.

Source: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12831

Individual Awards

Graduate Research Fellowship Program (GRFP)

- Overview: GRFP is NSF’s signature graduate support program, providing support for students in the early stages of their graduate or doctoral studies in science and engineering.
- Eligibility: Fellowships are awarded for graduate study leading to research-based masters or doctoral degrees in all fields supported by NSF, including in science, social science, engineering, mathematics, as well as STEM education. Applicants are eligible to apply during their senior year of college, prior to entering graduate school, during their first year of graduate school, or during the fall term of their second year of graduate school. New for the 2017-2019 competitions, graduate students may only apply one time after starting graduate school, either in their first or second years of study. Applicants must be enrolled at a U.S.-based institution for their graduate study.
- Citizenship: Applicants must be U.S. citizens, nationals, or permanent residents.
- Award/Program Size: NSF expects to award 1,500 new fellowships per fiscal year. Fellowships provide three years of support. For each year of support, NSF provides a stipend of up to \$34,000 to the fellow and a cost-of-education allowance of \$12,000 to the degree-granting institution.
- Due Dates: Applications are due in the last two weeks of October annually with the exact date dependent on the field in which the student is applying.

Source: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6201

Social, Behavioral, and Economic Sciences Doctoral Dissertation Research Improvement Grants (SBE DDRIG)

This program, which used to award grants to doctoral students to improve the quality of dissertation research across the Social, Behavioral, and Economic Sciences, no longer exists as a single program. However, numerous programs within the Directorate for Social, Behavioral, and Economic Sciences (SBE) have DDRIG

tracks. Eligibility, award size, and due dates vary by program. Students should refer to the individual program site for more information on requirements for individual programs.

Source: http://www.nsf.gov/funding/education.jsp?fund_type=2

NSF Division of Mathematical Sciences (DMS) Internship Program

- Overview: NSF oversees this program in partnership with the Oak Ridge Institute for Science and Education (ORISE) to enrich the training for doctoral students in mathematical sciences. Most of the summer internships are hosted at the National Laboratories to introduce students to applications of mathematical and statistical theories outside of academia. “The longer-term goals are to expand the program and include private industries and nonprofit organizations as hosts.”
- Eligibility: Eligible applicants include students enrolled full-time as graduate students at accredited U.S. colleges or universities during the academic year prior to the start of the internship. Applicants should be working towards a degree in mathematical sciences and provide two relevant letters of recommendation.
- Citizenship: U.S. citizenship is not required for participation in the program. However, depending on the internship assignment, U.S. citizenship, permanent residence, or J1/F1 visa may be required. Non-U.S. citizens with questions about their eligibility are instructed to contact immigration@orau.org.
- Due Dates: Applications are due January 31 annually.

Source: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505519

Internships and Fellowships

Graduate Research Internship Program (GRIP)

- Overview: The GRIP program provides supplemental funding to NSF Graduate Research Fellows to conduct collaborative research with select federal agencies. Fellows participate in internships with a host research mentor at national laboratories and facilities.
- Eligibility: NSF Graduate Research Fellows, within their five-year term, are eligible to apply. Fellows can either be “on tenure” or “on reserve” to be eligible. Fellows must have completed at least one year of their graduate program at the time of application and have one full year of graduate study remaining at the time of application. An April 16, 2018 Dear Colleague Letter provides further details about eligibility and application requirements. The letter can be found at <https://nsf.gov/pubs/2018/nsf18069/nsf18069.jsp>.
- Citizenship: Depending on the agency, applicants may need to be U.S. citizens or permanent residents.
- Award/Program Size: NSF will provide \$5,000 towards the costs of the internship including research, relocation, travel, and other expenses.
- Due Dates: Applications are due December 4 and May 6.

Source: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505127

Graduate Research Opportunities Worldwide (GROW)

- Overview: The GROW program provides travel funding for NSF Graduate Research Fellows to conduct collaborative international research abroad with researchers in specific NSF partner countries. Current opportunities exist in Australia, Austria, Brazil, Chile, Columbia, Denmark, Finland, France, India, Ireland, Japan, Korea, Mexico, the Netherlands, Norway, Qatar, Singapore, and Sweden. As mentioned in the IRES overview, NSF is examining how it can improve the outcomes of programs that include international experiences for graduate students through a [Dear Colleague Letter](#).

- Eligibility: NSF Graduate Research Fellows, within their five-year term, are eligible to apply. Fellows can either be “on tenure” or “on reserve” to be eligible. Fellows must have completed one year of their graduate program at the time of application and must be making progress towards their degree.
- Citizenship: No special requirements beyond the GRFP requirements.
- Award/Program Size: NSF expects to award up to 400 GROW fellowships annually. NSF will provide a travel allowance of \$5,000 to cover travel and research costs.
- Due Dates: Applications are due December 4 and May 6 annually.

Source: <https://nsf.gov/pubs/2018/nsf18069/nsf18069.jsp>

U.S. Department of Agriculture

The U.S. Department of Agriculture's (USDA) primary mission is to regulate and implement public policy for the nation's food, agriculture, and natural resources. However, there are offices within USDA which support extramural research opportunities. The National Institute of Food and Agriculture (NIFA) is the extramural research and grant agency of the USDA. Through these grants, USDA is able to conduct research critical to farmers, consumers, and communities.

Institution Awards

NIFA National Needs Graduate and Postgraduate Fellowship (NNF) Grants Program

- **Overview:** This grant program supports training students for masters and doctoral degrees in food, agricultural and natural resource sciences and special International Study or Thesis/Dissertation Research Travel Allowances (IRTA) for eligible recipients. "Awards made under NNF are specifically intended to support traineeship programs that engage outstanding students to pursue and complete their degrees in areas where there is a national need for the development of scientific and professional expertise in the food and agricultural sciences."
- **Eligibility:** Applications are solicited from institutions that confer a graduate degree in at least one of the following targeted expertise shortage areas: animal and plant production; forest resources; agricultural education and communication; agricultural management and economics; food science and human nutrition; agricultural biosecurity; and data science. Land-grant institutions, universities with significant minority enrollments, and universities that have the capability to teach food and agricultural science are eligible to apply.
- **Award/Program Size:** An estimated \$3.1 million will be available. There is no commitment by USDA to fund any particular application or to make a specific number of awards. Awards are expected up to \$262,500.
- **Due Date:** Applications were due February 12, 2019. This program is competed annually.

Source: <https://nifa.usda.gov/funding-opportunity/food-and-agricultural-sciences-national-needs-graduate-and-postgraduate>

Individual Awards

Agriculture and Food Research Initiative (AFRI): Education and Workforce Development

- **Overview:** This grant program, formerly known as the Food, Agriculture, Natural Resources, and Human Sciences Education and Literacy Initiative, "focuses on developing the next generation of research, education, and extension professionals in the food and agricultural sciences." Focus areas include professional development opportunities for K-14 teachers and education professionals, training of undergraduate students in research and extension, and fellowships for pre- and postdoctoral candidates.
- **Eligibility:** Land-grant institutions are eligible to apply. Others may be eligible depending on the program types listed in the request for applications, which can be found on the website.
- **Citizenship:** Individuals applying must be U.S. citizens, nationals or permanent residents.
- **Award/Program Size:** Over \$24 million is expected to be available for this opportunity.
- **Due Date:** Proposals were due by July 19, 2018.

Source: <https://nifa.usda.gov/funding-opportunity/agriculture-and-food-research-initiative-food-agriculture-natural-resources>

U.S. Agency for International Development

The U.S. Agency for International Development (USAID) is the primary federal agency responsible for engaging the developing world. USAID partners with the higher education community in support of solutions to key global development challenges. While the Trump Administration has criticized President Obama's focus on international aid and has proposed reductions to the Department of State overall, USAID programs enjoy bipartisan support from Congress.

Individual Awards

Donald M. Payne International Development Fellowship Program

- **Overview:** The USAID Donald Payne Fellowship Program honors the late former congressman by providing support for graduate students interested in careers in international development. The program supports students seeking masters degrees in "development, economics, history, political science, public administration, communications, public policy, business administration foreign languages, agriculture, environmental sciences, or urban planning at a graduate or professional school approved by the Payne Program." Applicants must commit to at least five years working for USAID as a member of the Foreign Service as a requirement of the program. The Payne Program specifically seeks applicants from minority groups historically underrepresented among international development professionals.
- **Eligibility:** Applicants must be U.S. citizens, be seeking admission to a two-year graduate program, and have a GPA of at least 3.2 (on a 4.0 scale) at the time of application. Applicants cannot already be enrolled in graduate school at the time of application.
- **Citizenship:** Applicants must be U.S. citizens. Additionally, fellowship money can only be used at U.S. institutions of higher education.
- **Program/Award Size:** The Payne Program provides up to \$96,000 over two years for graduate school, internships, and professional development activities. USAID awards approximately five fellowships per year.
- **Due Date:** Applications were due December 21, 2018. This program is competed annually.

Source: <http://www.paynefellows.org/?areaid=2&contentid=941>

Internships

Volunteer Student Interns

The agency hosts both paid and unpaid internships throughout the academic year. USAID seeks undergraduate and graduate students studying a wide variety of fields. Opportunities with specific offices are posted on the USAID website as they become available. Requirements and deadlines vary by opportunity.

Source: <http://www.usaid.gov/work-usaid/careers/student-internships>

Department of Transportation

The Department of Transportation (DOT) oversees federal highway, air, rail, maritime, and other transportation administration activities and functions. The Office of the Assistant Secretary for Research and Technology (OST-R) oversees and coordinates DOT's research and education programs. DOT distributes research funds to state and local transportation agencies as well as academic institutions.

Individual Awards

Dwight David Eisenhower Transportation Fellowship Program (DDETFP)

- Overview: This program offers fellowships to students earning degrees in disciplines related to transportation. It awards between 150 and 200 grants each year, subject to the availability of funds.
- Eligibility: Applicants should be pursuing a masters or doctorate degree full-time in a transportation-related field and conducting ongoing transportation research.
- Citizenship: Students who are non-U.S. citizens may apply for grants but must provide a certified copy of their I-20 or I-551 ID issued by the U.S. Citizenship & Immigration Service (CIS).
- Award/Program Size: The funding amount for each awardee depends on the selection and ranking from the National Selection Panel. Awardees may receive up to \$10,000 for tuition; masters level students may receive up to \$1,700 per month while doctoral level students may receive \$2,000 per month in stipends.
- Due Date: Applications are due April 12, 2019. This program is competed annually.

Source: <http://www.fhwa.dot.gov/tpp/ddetfp.htm> and <https://www.grants.gov/web/grants/search-grants.html?keywords=eisenhower>

While DOT does not offer as many programs for students as other agencies, a brief overview of ongoing opportunities can be found at <https://www.transportation.gov/careers/student-programs-dot>.

Relevant Agencies Not Currently Offering Graduate Student Funding

Environmental Protection Agency

Science guides the regulatory decision-making of the Environmental Protection Agency (EPA). Utilizing intramural EPA laboratories as well as the extramural research community, the EPA Office of Research and Development (ORD) conducts research on topics such as air and water quality, ecosystem assessment and restoration, climate change, impacts to human health, and pollution prevention. EPA previously funded the Science to Achieve Results (STAR) graduate fellowships, which were discontinued in 2015. STAR supported master's and doctoral candidates in environmental studies, including traditional environmental disciplines and fields such as social anthropology, urban and regional planning, and decision sciences. The program supported about 100 new fellows each year but was terminated as part of the Obama Administration's push for consolidation of STEM education programs. More information about EPA internship opportunities can be found at <http://www.epa.gov/ncer/fellow/>.

National Endowment for the Humanities

Currently the National Endowment for the Humanities (NEH) does not support graduate education. There was an effort from the university community to advocate in support of NEH creating a new competitive grant program that would support faculty-graduate student collaborations similar to those found in the sciences. However, most recent advocacy regarding NEH has focused on preventing the agency from being defunded. Though there are no specific funding programs for students, graduate students can participate in NEH-supported seminars and institutes. More information on these programs is available at <http://www.neh.gov/grants/education/summer-seminars-and-institutes> and <http://www.neh.gov/grants/odh/institutes-advanced-topics-in-the-digital-humanities>.

National Endowment for the Arts

The National Endowment for the Arts (NEA) supports traditional art forms such as music, dance, and theater projects. There are also opportunities for the funding of art promotion and enhancing access to the arts to unserved or underserved populations. NEA does not currently offer any programs specifically for graduate students.

Appendix: Fellowship Citizenship Requirements

Programs that are Offered to Permanent Residents

Department of Commerce

National Oceanic and Atmospheric Administration

- Dr. Nancy Foster Scholarship Program, Page 3

Department of Education

- Graduate Assistance in Areas of National Need (GAANN) Program, Page 7
- Fulbright-Hays Doctoral Dissertation Research Abroad Program, Page 7
- Foreign Language and Area Studies (FLAS) Fellowships Program, Page 8
- Ronald E. McNair Postbaccalaureate Achievement Program, Page 8

Department of Energy

- Graduate Student Research (SCGSR) Program, Page 9
- Computational Science Graduate Fellowship (CSGF) Program, Page 9

Department of Health and Human Services

National Institutes of Health

- Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (Parent T32), Page 12
- Ruth L. Kirschstein NRSA Short-Term Institutional Research Training Grant (Parent T35), Page 12
- Ruth L. Kirschstein NRSA Individual Predoctoral Fellowship (Parent F31), Page 13
- Ruth L. Kirschstein NRSA Individual Postdoctoral Fellowship (Parent F32), Page 13
- Pathway to Independence Award (K99/R00), Page 14

Centers for Disease Control and Prevention

- ASANCHS Research Fellowship Program, Page 15
- ASPPH/CDC Public Health Fellowship Program, Page 15
- Dr. James A. Ferguson Emerging Infectious Diseases Fellowship Program, Page 15

Agency for Healthcare Research and Quality

- Health Services Research Dissertation Program, Page 15

Health Resources and Services Administration

- Bureau of Health Workforce Education and Training (BHWET) Program, Page 16
- Geriatrics Workforce Enhancement Program (GWEP), Page 16

Substance Abuse and Mental Health Services Administration

- Minority Fellowship Program, Page 17

National Aerospace and Space Administration

- NASA Space Technology Research Fellowship (NSTRF), Page 23

National Science Foundation

- National Science Foundation Traineeship Program (NRT), Page 24

- International Research Experience for Students (IRES), Page 25
- Graduate Research Fellowship Program (GRFP), Page 25
- NSF Division of Mathematical Sciences (DMS) Internship Program, Page 26
 - U.S. citizenship is not required for participation in the program. However, depending on the internship assignment, U.S. citizenship, permanent residence, or a J1 or F1 visa may be required. Non-U.S. citizens with questions about their eligibility are instructed to contact immigration@orau.org.
- Graduate Research Internship Program (GRIP), Page 26
 - Citizenship requirements vary based on the federal agency.
- Graduate Research Opportunities Worldwide (GROW), Page 26

U.S. Department of Agriculture

- Agriculture and Food Research Initiative (AFRI): Education and Workforce Development, Page 28

Department of Transportation

- Dwight David Eisenhower Transportation Fellowship Program (DDETFP), Page 30

Programs that are Open to Citizens of Other Countries

Department of Commerce

National Oceanic and Atmospheric Administration

- Sea Grant John A Knauss Marine Policy Fellowship, Page 4

Department of Defense

- SMART Scholarship for Service Program, Page 5
 - Non-U.S. citizens or permanent residents must be citizens of Australia, Canada, New Zealand, or the United Kingdom to apply.

National Institutes of Health

- Pathway to Independence Award (K99/R00), Page 14

Department of State

- Fulbright Grants for Graduate Study and Research Abroad (part of the Fulbright U.S. Student Program), Page 21
 - Non-U.S. citizens may apply to either the Fulbright Commission in their country of citizenship or the U.S. Embassy in their country of citizenship.

National Aeronautics and Space Administration

- Future Investigators in NASA Earth and Space Science and Technology (FINESST), Page 22
 - FINESST is open to all students enrolled at any U.S. university, though U.S. citizens or permanent U.S. residents will be given preference. Proposals which include a citizen from one of the countries in Column II on the “Designated Country List” will be subject to additional scrutiny. The Designated Country List can be found at https://oiiir.hq.nasa.gov/nasaecp/docs/DCList_10-24-2018.pdf.

National Science Foundation

- NSF Division of Mathematical Sciences (DMS) Internship Program, Page 26

- U.S. citizenship is not required for participation in the program. However, depending on the internship assignment, U.S. citizenship, permanent residence, or a J1 or F1 visa may be required. Non-U.S. citizens with questions about their eligibility are instructed to contact immigration@orau.org.
- Graduate Research Internship Program (GRIP), Page 26
 - Some agencies may allow citizens of other countries to apply.

Department of Transportation

- Dwight David Eisenhower Transportation Fellowship Program (DDETFP), Page 30