Fellowships in STEM Fields

Graduate students in STEM fields (Science, Technology, Engineering, Mathematics, and closely related technical fields) have a variety of fellowship opportunities to consider. Fellowships in these fields are more plentiful, and awards often more generous, than in other fields. Some even offer multi-year funding or professional development opportunities. Women and minorities in particular will find a number of awards that seek to encourage these students to enter or continue in STEM fields, where they are presently severely under-represented. However, there are also challenges: First, since many awards in the sciences are backed by U.S. government funding, a large number are restricted to U.S. citizens and permanent residents, and international students may therefore find it harder to locate funding opportunities. Second, many awards in the sciences are narrowly focused on specific areas of research, or require the student to apply very early in their graduate career. Students who are serious about identifying all relevant opportunities must familiarize themselves early on with the use of funding databases and work closely with faculty mentors.

The following is a sampling of awards in STEM disciplines. It is not an exhaustive list, and students are urged to consult with faculty mentors, join professional associations, and use funding search tools to locate opportunities in their specific field or area of research.

**AAUW Selected Professions Fellowships**
[http://www.aauw.org/learn/fellows_directory/selected.cfm](http://www.aauw.org/learn/fellows_directory/selected.cfm)
Open to U.S. citizen or permanent resident women for Master’s level work in STEM (and a few other) fields where women are under-represented.

**AFCEA (Armed Forces Communications and Electronics Association)**
[http://www.afcea.org/education/scholarships/graduate/default.asp](http://www.afcea.org/education/scholarships/graduate/default.asp)
Funds a variety of graduate fellowship programs. U.S. citizens only.

**AFCEA STEM Teachers Scholarship**
[http://www.afcea.org/education/scholarships/undergraduate/TeachersScholarship.asp](http://www.afcea.org/education/scholarships/undergraduate/TeachersScholarship.asp)
For prospective middle and high school teachers of STEM subjects. U.S. citizens only.

**American Australian Association USA to Australia Fellowships**
[http://www.americanaustralian.org/usa_to_aust_apps/](http://www.americanaustralian.org/usa_to_aust_apps/)
For select STEM fields one year of research in Australia. U.S. citizen or permanent resident.

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American Nuclear Society (ANS) Graduate Scholarships
http://ans.org/honors/scholarships/
Awards to prepare for careers in nuclear science and technology. Open to international students.

Association for Women in Science Educational Awards
http://www.awis.org/
Awards of up to $3,000 for female graduate students or early career professionals in STEM fields. Award may be used for professional development activities such as attending a conference, acquiring specialized training, or travel. No citizenship restrictions.

Associated General Contractors Foundation Graduate Fellowship
http://scholarship.agc.org/
Scholarship of $7500 for engineering students (especially civil and construction engineering) intending to pursue a career in the construction industry. Must be U.S. citizen or permanent resident with at least one full year of study remaining in the graduate program.

Autism Speaks / Dennis Weatherstone Predoctoral Fellowship Program
http://www.autismspeaks.org/science/grants-program/grants-and-fellowships
Funds pre-doctoral students (in Ph.D. or Sc.D. program) interested in pursuing careers in autism research. Fellows will work directly with mentors who are leading scientists in autism research. $28,000/year for two years.

CDC Fellowships
http://www.cdc.gov/fellowships/
The U.S. Centers for Disease Control and Prevention offers a variety of fellowship opportunities, including research fellowships, professional development fellowships, and diversity initiatives for students and recent graduates seeing careers in public health and related fields.

Chateaubriand Fellowship
http://www.chateaubriand-fellowship.org/
The Chateaubriand Fellowship is a grant offered by the Embassy of France in the United States that allows doctoral students enrolled in American universities to conduct research in France for up to 10 months. A separate competition is held for STEM fields, with the goal of advancing scientific cooperation and enabling U.S. doctoral students to benefit from an experience in the best laboratories in France. French language not required. French citizens not eligible.

Christine Mirzayan Science and Technology Policy Graduate Fellows Program
http://sites.nationalacademies.org/PGA/policyfellows/index.htm
Funds awardee to attend 12-week science and technology policy workshop in Washington D.C. No citizenship restrictions. Preference usually given to advanced doctoral students or recent Ph.D. recipients.

Department of Energy Computational Science Graduate Fellowship (DOE CSGF)
http://www.krellinst.org/csgf
U.S. citizens in first two years of graduate study for research in computational sciences.

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Department of Energy Jefferson Labs Graduate Fellowship Program
http://www.jsallc.org/IF/IndexGF.html
Ph.D. students in nuclear/particle/accelerator physics and related engineering fields to conduct research at Jefferson Labs, including allowance for travel expenses. Competition announced annually in December.

Department of Energy Office of Science Graduate Fellowship Program
http://scgf.orau.gov/
U.S. citizens in first two years of graduate study. Up to three years of MA/MS or Ph.D. support.

DoD SMART
http://smart.asee.org/
Ph.D. or Master’s. U.S. citizens only. Multi-year awards for graduate study with a maximum of five years. Includes paid summer internships in DoD laboratories.

EPA STAR
http://www.epa.gov/ncer/fellow/
U.S. citizens or permanent residents. Multi-year funding for environment-related research.

Environmental Research and Education Foundation Scholarships
http://erefdn.org/index.php/scholarships/
Various awards offered at the master’s, doctoral, and postdoctoral level to recognize excellence in research and study on waste management issues and related engineering problems. No citizenship restrictions.

Epilepsy Foundation Pre-Doctoral Research Training Fellowship
http://www.epilepsyfoundation.org/research/
Supports one year of dissertation research ($20,000) into the causes and treatment of epilepsy. Applications from all fields of research pertinent to epilepsy will be considered. No citizenship restrictions.

Explorers Club Exploration Fund
http://www.explorers.org/index.php/expeditions/funding/expedition_grants
Grants in support of exploration and field research expeditions for graduate students and post-docs. Awards typically range $500-$1500, occasionally up to $5,000.

Ford Foundation Pre-Dissertation / Dissertation / Post-Doctoral Fellowships
http://sites.nationalacademies.org/pga/fordfellowships/
Supports Ph.D. research for members of under-represented or minority groups (including women in male dominated STEM fields) U.S. citizens.

George Melendez Wright Climate Change Fellowship Program
http://coenv.washington.edu/students/melendez_wright/
$5,000-$20,000 fellowships to fund research conducted on/around National Park lands (including transboundary issues) relating to managing climate change impacts in US National Parks.
NASA Graduate Student Research Program (GSRP)
https://fellowships.nasaprs.com/gsrp/nav/
U.S. citizens in STEM fields related to NASA research at both the MA and PhD levels. Students may apply at any point during their graduate career. Twelve-month award plus mandatory participation in 10-week research experience at NASA. Renewable for 1-2 years depending on degree level.

NASA Jenkins Pre-Doctoral Fellowship Program (JPFP)
http://www.uncfsp.org/jpfp
Three years of support for U.S. citizens from groups that are under-represented in all STEM fields (including women, minorities, and the disabled.)

National Defense Science and Engineering Graduate Fellowship (NDSEG)
http://ndseg.asee.org/
U.S. citizens only. See web site for eligible fields. Must not have completed more than two years graduate study.

NOAA Dr. Nancy Foster Scholarship Program
http://fosterscholars.noaa.gov/aboutscholarship.html
Provides support for outstanding scholarship and encourages independent graduate-level research in oceanography, marine biology, or maritime archaeology, particularly by women and members of minority groups. $30,000 stipend plus additional funds to support tuition and other expenses.

NSF Graduate Research Fellowship Program (GRFP)
http://www.nsfgrfp.org/
U.S. citizen or permanent resident in first year of graduate study at latest. Three years of support.

NSF Doctoral Dissertation Improvement Grants (DDIG) – Directorate of Biological Sciences
Doctoral Dissertation Improvement Grants in selected areas of the biological sciences. Note that in 2012-13 only proposals whose focus falls within the scope of (1) the scientific area of the Behavioral Systems Cluster of IOS or (2) any scientific area in the Division of Environmental Biology (DEB) will be eligible. These grants provide partial support of doctoral dissertation research. Applicant must be studying at a U.S. institution but need not be a U.S. citizen. Deadline falls in early November.

NSF SBE Doctoral Dissertation Research Improvement Grant (DDRIG)
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13453
Grants to doctoral students in selected social, behavioral, and economic science disciplines and interdisciplinary fields to improve the quality of dissertation research. Applicant must be studying at a U.S. institution but need not be a U.S. citizen. Deadlines vary by field.

NSF East Asia and Pacific Summer Institutes (EAPSI) for U.S. Graduate Students
www.nsf.gov/eapsi
For U.S. citizen/permanent resident to participate in 8-10 week summer research experience in selected East Asian/Pacific countries.

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Ruth L. Kirschstein National Research Service Award (NRSA F31 Grants)
http://grants.nih.gov/training/nrsa.htm
This Department of Health and Human Services / NIH program offers a number of different awards for individuals working on either research doctorates or health professions (including nursing and clinical psychology) doctorates in areas of interest to DHHS and NIH. Limited to U.S. citizens. Deadlines vary.

Steven Berkeley Marine Conservation Fellowship
http://fishweb.ifas.ufl.edu/mfs/index_files/Berkeley_Fellowship.htm
$10,000 for thesis or dissertation research. Applicant must be (or become) a member of the American Fisheries Society. Research need not focus on fisheries; any topic in marine conservation is acceptable. No citizenship restrictions.

UNCF/Merck Graduate Science Research Dissertation Fellowship
African American PhD candidates in the sciences. U.S. citizen or permanent resident.

Whitaker International Fellows and Scholars Program
http://www.whitaker.org/
A variety of awards at different degree levels (entering grad student to postdoc) fund biomedical engineering / bioengineering students to travel overseas to undertake a self-designed project in this field. U.S. citizens and permanent residents only.

Xerox Minority Scholarship Program
Awards ranging from $1,000 - $10,000 to U.S. citizens and permanent residents who are full time students and of African American, Asian, Pacific Islander, Native American/Alaskan, or Hispanic/Latino descent in Chemistry, Information Management, Computing and Software Systems, Material Science, Printing Management Science, Laser Optics, Physics, and Engineering.

Zonta International Amelia Earhardt Fellowship for Women
http://www.zonta.org/WhatWeDo/InternationalPrograms/AmeliaEarhartFellowship.aspx
Women in aerospace-related science/engineering for Ph.D. research. No citizenship restrictions.

AND DON'T FORGET ABOUT THESE….
Students in STEM fields may also be eligible to apply to the following nationally competitive awards:

Fulbright U.S. Student Program
http://us.fulbrightonline.org/home.html
International research in all fields around the world. US citizens only. Early application deadline – start planning in spring to submit in early fall. STEM fields particularly encouraged.
AAUW Fellowships
http://www.aauw.org/learn/fellows_directory/
Two types of fellowships are offered: American Fellowships are for women who are U.S. citizens or permanent residents in ALL fields, including STEM fields for doctoral level work. International Fellowships support international students at U.S. universities at both the Master’s and Doctoral levels in ALL fields.

Boren Fellowships
http://www.borenawards.org/boren_fellowship
International travel for study with an emphasis on language training. Open to all fields, with STEM candidates particularly encouraged to apply. Will not support travel/study in Western Europe. U.S. citizens only.

Critical Languages Scholarships
http://clscholarship.org/
Full funding to attend an overseas summer language program in a “critical” language. For some languages no background is required and students at all stages may apply. For others pre-requisites apply, see web site for details. U.S. citizens only. Open to all fields, but STEM students are particularly encouraged to apply.

Cosmos Scholarships
http://www.cosmosclubfoundation.org/scholars/grants-program.html
Small grant ($500-$3,000) in support of research in any field to graduate students at D.C. metro area universities.

Paul and Daisy Soros Fellowships for New Americans
http://www.pdsoros.org/competition/
Supports students who are recent immigrants (e.g. naturalized citizens of the U.S.) or the children of recent immigrants for graduate study in the United States. All fields are eligible, but student must not be beyond their second year of graduate study in their chosen field.

PMF (Presidential Management Fellowships)
http://www.pmf.gov/
The PMF Fellowship places graduating graduate students in a two-year paid position in the US federal government. U.S. citizens only – rare exceptions may be possible for those on a path to citizenship. Students apply in the last year of graduate school. The recently introduced “Tech Fellows” program is an initiative within the PMF competition to attract more and better candidates from STEM and technical fields; currently it is the same application process as PMF.

SREB-State Doctoral Scholars Program
http://www.sreb.org/page/1074/doctoral_scholars.html
SREB (Southern Regional Education Board) is a regional award open to Ph.D. students at George Mason University. Two types of fellowship are offered: The Doctoral Award supports new Ph.D. students for up to three years. The Dissertation Award is a one-year award for students who have been advanced to doctoral candidacy and are working on their dissertation. U.S. citizens and permanent residents who are members of a racial or ethnic minority and plan to become a full-time college or university faculty member after earning the Ph.D. Open to most fields, with STEM fields particularly encouraged to apply.

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Smithsonian Institution Fellowship Program
http://www.si.edu/ofg/Applications/SIFELL/SIFELLapp.htm
Fellowships in a range of fields (including STEM) are offered by the Smithsonian in support of pre-dissertation, dissertation, and post-doctoral research.