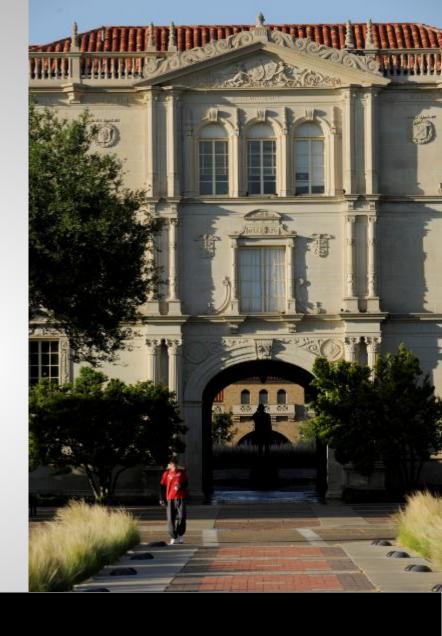
Fellowships and Funding FY 2022

Louisa J Hope-Weeks

Office of Graduate & Postdoctoral Fellowships Associate Dean of the Graduate School Professor of Chemistry and Biochemistry





National Competitive Fellowships Interest

- The US Federal Government supports many fellowship programs. If you are a US citizen, US national, or permanent resident you may be eligible to apply.
- Please indicate your interest in receiving more information on the following programs.
 - National Science Foundation Graduate Research Fellowship Program: \$138,000 in stipend and cost-of-education to support research in many science and engineering fields.
 - **Fulbright**: 6-9 months of support to conduct research or teaching in over 100 countries.
 - National Institutes of Health Ruth L. Kirschstein Pre-doctoral Individual National Research Service Award: The program enables promising pre-doctoral students with potential to develop into a productive, independent research scientists, to obtain mentored research training while conducting dissertation research.



Significant STEM Fellowships

- National Science Foundation-Graduate Research Fellowship Program (GRFP) https://www.nsfgrfp.org/
- DOD SMART (Science, Mathematics & Research for Transformation)
 Fellowships, http://smart.asee.org
- DOD National Defense Science & Engineering Fellowship, http://www.asee.org/ndseg
- National Physical Science Consortium, http://www.npsc.org
- DOE Computational Science Graduate Fellowship, http://www.krellinst.org/csgf
- DOE NNSA Stewardship Science Graduate Fellowship <u>http://www.krellinst.org/ssgf</u>
- The Hertz Foundation; http://www.hertzfoundation.org
- The National GEM Consortium for underrepresented groups; http://www.gemfellowship.org
- Ruth L. Kirschstein National Research Service Award (NRSA) programs, http://grants.nih.gov/training/nrsa.htm



The Why



- Why should students apply for externally funded fellowships and other awards?
 - Individual benefits
 - Financial
 - Prestige
 - More opportunities
 - Enhance scholarly activity
 - More publications/performances
 - More funded research projects
 - Institutional benefits
 - Increases graduate student capacity
 - Contributes to stature of university





The Opportunities

- Comprehensive, multi-year fellowship awards
- Short-term/special purpose awards
- International experiences

Travel funding for conferences &

research

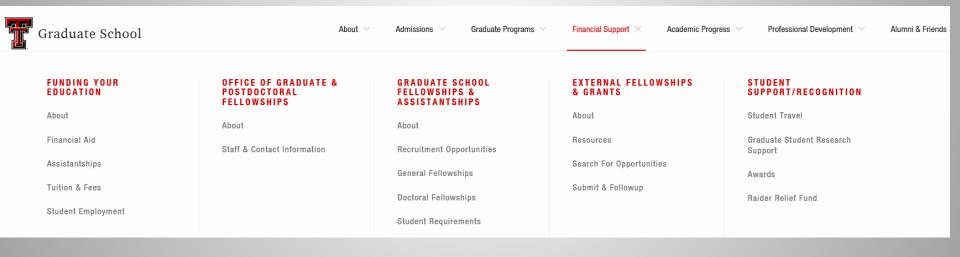


Searching for Fellowships



Go to <u>www.depts.ttu.edu/gradschool</u>

Select "Financial Support" tab





Searching for Fellowships

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Search for Opportunities

Use the search engine resources below to find external grants, fellowships, and postdoctoral positions. In addition to searching general fellowships, you can search for fellowships specific to discipline and to special population (e.g., veterans, international students, minority students).

For additional help and guidance in finding external funding opportunities, please contact the Texas Tech Librarian for Research, Instruction & Outreach - Brian Quinn ⊠.

· The Foundation Center

Funding Institutional

- · Grants.gov
- · Institute of International Education-Funding for U.S. Study
- Texas Tech University Database

First time applying for an external grant, fellowship or postdoctoral fellowship? Visit our Resources page to get an overview of the process.

Internships will not count as an external funding opportunity as required for Texas Tech Graduate School fellowships. Final funding approval is at the discretion of the Office of Graduate and Postdoctoral Fellowships.





Fulbright US Student Program

All Fulbright Grants Include:

- Round-trip Airfare
- Monthly Stipend
- Accident & Sickness Insurance
- Other <u>Possible</u> Benefits *
 - Tuition Allowance/Waiver
 - Language Training
 - Research Allowance
 - Enhancement Activities
 - Dependent Allowance
 - Disability-Related Accommodations



For more information, visit:

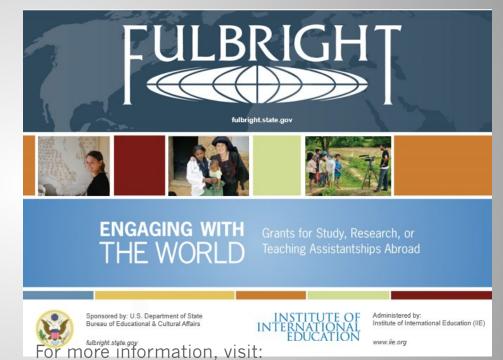


http://us.fulbrightonline.org

^{*} Varies, depending on grant type and host country

TTU's Fulbright Process

- Deadline: September, 2021
 - → For Fall, 2022 travel
- Start early on application
- Assigned faculty Fulbright mentor
- Present to Fulbright Faculty Committee
- Rework
- Submission
 - U.S. citizen by application deadline
 - At least bachelor's degree or equivalent by start of grant
 - No doctorate by application deadline
 - Proficiency in language of host country (varies by country)



http://us.fulbrightonline.org



http://www.nsfgrfp.org

Directorates:

Biological Sciences

Computer & Information Science & Engineering

STEM Education

Engineering

Geosciences

Mathematical & Physical Sciences

Social, Behavioral & Economic Sciences



Review them all!

Eligibility Requirements:

- Citizenship US, nationals or permanent residents of the US
- 2. Degree Requirements (several)
 - a. Expected start date no later than Fall 2022
 - b. Senior year to second year of graduate school
 - c. No prior MS unless 2 year break in studies
- 3. Graduate study leading to research-based master's and doctoral degrees in science and engineering.



Program Information

 Read and familiarize yourself with the GRFP Program Solicitation:

https://www.nsf.gov/pubs/2020/nsf20587/nsf20587.htm

 Read and familiarize yourself with the GRFP application site: https://www.nsfgrfp.org/



NSF Submission Deadlines

Fellowship Applications: October, 2021 (vary by discipline)

Letters of Reference: Late October, 2021 [5:00 pm ET]



Applicants submit the following information:

- Personal Information
- Education and Other Experience
- Field(s) of Study
- Graduate School Information
- Personal, Relevant Background and Future Goals Statement (3 pages max)
- Graduate Research Plan Statement (2 pages max)
- Eligibility Statement (extenuating circumstances)
- Transcripts
- Reference Letter writers (3) must be strong



NSF Review Criteria

The following elements should be considered in the review for both criteria:

- 1. What is the potential for the proposed activity to:
 - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit)
 - b. Benefit society or advance desired societal outcomes (Broader Impacts)
- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or organization to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?



Personal, Relevant Background and Future Goals

In this section you are convincing the reviewers that you have the:

- educational background
- experience
- leadership
- motivation
- other positive personal and professional characteristics to successfully carry out the research proposed



Personal, Relevant Background and Future Goals

- Intellectual Merit
 - Why you?
 - What do you bring that will make you successful, a leader in your field?
 - Describe your previous research experience(s)
 - What did you contribute?
 - What did you learn (e.g., skills experimental, software, hardware, inter-personal, etc.)?
 - Tie in your background (education and experiences) with what you plan to do (future goals).



Personal, Relevant Background and Future Goals

Broader Impacts

- How did you, personally and/or through your past research, impact society beneficially?
- Reviewers are impressed with what you 'have done,' rather than 'will do.'
- How do you plan to actively participate/give back to society?
- Don't exaggerate, be reasonable.
- Have you had to overcome a unique challenge?



Background

- Topically relevant to the mission of NSF
- Convey to reviewers that you know what has been done and the significance of the work proposed
- Do your homework (i.e., literature review)
- What is considered state-of-the-art or current thinking?
- What is your motivation for performing the research?
- Are there important benchmarks to be surpassed?
- Why is this research important?



Intellectual Merit

- What is significant about the proposed research?
- What problem will it solve?
- How will it advance knowledge?
- How will it impact science/engineering?
- You are trying to convince a review panel of experts, though not necessarily in the area you are proposing, that your research area is important enough to award you money.

Broader Impacts

 You need to convince a panel that the proposed research will impact society and that you will impact society. Be reasonable and realistic.

– Consider:

- full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM);
- improved STEM education and educator development at any level;
- increased public scientific literacy and public engagement with science and technology;
- improved well-being of individuals in society;
- development of a diverse, globally competitive STEM workforce;
- applications of research
- increased partnerships between academia, industry, and others;
- improved national security;
- increased economic competitiveness of the US; and
- enhanced infrastructure for research and education



Other suggestions:

- Make the proposal easy to read with clearly defined sections.
- Include a brief plan for accomplishing the research.
- Divide the work into phases and describe the work to be performed in each phase.

Reference Letters

- Three reference letters required.
- Important to ask someone who knows you well enough that they
 can cite specific examples of your work and/or personal
 characteristics that support your proposal
- Ask for letters well in advance Professors, Intern and Coop Supervisors, Research Supervisors
- Provide a brief synopsis (no more than a couple of pages) of yourself to your references
 - Personal and academic achievements
 - Activities your references would not be aware of that support your personal characteristics and goals





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