



2013 Graduate Research Fellows (GRF Program 2.0)

Request for Proposals

[SUBMISSION RECEIPT DEADLINE AT SFaz
\(Paper and Electronic\)](#)

Part One March 1, 2013 4:00 PM

Part Two March 29, 2013 4:00 PM

www.sfaz.org

<http://www.sfaz.org/live/collection/grant-opportunities/111915>

Introduction

Science Foundation Arizona (SFAz) Graduate Research Fellowship 2.0 program offers funding to Arizona's 3 research universities to recruit the best and brightest graduate students in science, technology, engineering and mathematics (STEM) and related research fields, specifically bio-science, information technology and communications, clean energy and environmental sustainability, and aerospace and defense. Research projects within these areas should be entrepreneurial to the fullest extent possible.

By March 1, 2013 the initial submittal will be the process by which the universities establish their research priorities within the above noted areas, including the University Committee and selection process. If approved by the Board, in whole or in part, at its March 15th meeting, the universities will be told the approximate number of total Fellowships to be awarded on March 18. Each university will have until March 29, 2013 to submit their list of recommended Fellows, along with a summary bio and how their research area fits into SFAz's priorities and those of the university. The university will be notified on or before April 10 of the Board approved candidates. Selected Graduate Research Fellows (GRFs) will commence their fellowship in the Fall 2013.

We refer to the individuals to whom SFAz awards graduate fellowships as SFAz GRFs or Fellows. They are expected to contribute beyond research by engagement in education. SFAz Fellows will invest the equivalent of 6-8 hours a week of their time during the academic year in teaching/mentoring activities with K-12 schools with large underserved populations outside of the university. Non-traditional out-of-degree experiences such as these are expected to significantly supplement and complement the education of the Fellow.

SFAz expects the university to assure that the successful Fellow will be associated with a high performing research program so funding for subsequent years will be available through federal grants and/or private contracts to assist completion of the degree in timely fashion. We are mindful of the concern by the national academies and professional societies that graduate education has been slow to recognize that Ph.D. students should normally graduate in 4 years beyond the B.S. degree; and normally in 2 years for the research M.S. degree. The university must address this time-to-degree concern in their proposal.

Objectives

The Graduate Research Fellowship (GRF) is intended to:

- Recruit the highest quality graduate students in the nation to Arizona's research universities to advance research in areas important to Arizona i.e, BioScience, Information Technology and Communications, Clean Energy and Environmental Sustainability, and Aerospace and Defense.
- Provide an immediate response to the need for more and better STEM teaching in Arizona K-12 schools. Fellows may participate in advancing existing formal and informal programs or seeding innovative new programs for the purpose.

- Support interdisciplinary and multidisciplinary research approaches as well as outstanding programs within traditional STEM disciplines.
- Encourage participation in pre-professional and/or internships programs that are entrepreneurial and, when possible, move the research from the laboratory into the marketplace.
- Ensure a serious focus on the time-to-degree issue to ultimately create an advantage for Arizona's programs in graduate education.
- Measure the performance of the GRF program by the increase in the competitive research capacity of the State of Arizona.

Eligibility Requirements

Universities may nominate Ph.D. and M.S. candidates in STEM fields to become an SFAz Fellow. Outstanding M.D./Ph.D. candidates are also eligible.

- One proposal per institution is permitted. Only the most exceptional M.S. students should be put forward for the award; the norm is to select a Ph.D. student for the SFAz Fellowship.
- The Vice-president for Research (or the equivalent institutional authority) will be the designated Principal Investigator (PI).
- Each university will appoint a faculty selection committee of outstanding scholars and mentors to identify the GRF nominees.
- Institutions wishing to participate in the GRF program must assure continuing support for each Fellow after the SFAz funding to the completion of the degree, assuming satisfactory progress.
- SFAz will only award Fellowships to nominees who hold US citizenship, national, or permanent resident status, at the time of the award. For any in aerospace and defense related fields, U.S. Citizenship is required. By certifying the nominee is eligible to receive the Fellowship, the universities are confirming the citizenship requirement is met.

Proposal Committee

The faculty selection committee will identify students that merit the SFAz Fellowship by screening with the same rigor used in selecting past Fellows.

Proposal Content

The first proposal, submitted by March 1, must define the criteria used by the selection committee to identify research areas within the above noted programs. By March 29th the University must have selected the students they are nominating for these awards.

At this time, we have funding confirmed for 30 GRFs, and pending confirmation from donors, that number may increase to as much as 60.

Part 1 of the proposal may not exceed 5 pages (defined below) plus the cover sheet.

The GRF Program (3 pages)

- Prior history of the Institutional GRF programs success/progress and impact;
- Relationship of a new GRF investment to the institution's strategic goals;
- Outline the most promising strategic areas for the next cohort of SFAz Fellows;
- Composition of the selection committee noting member's school or department "home" and link to their research/education web page.

K-12 Teaching/mentoring Activities and Time to Degree discussion (1 page)

- Summary of the plan to engage, monitor and assess Fellows in teaching/mentoring activities with K-12 schools.
- Statement of what the university is doing to address "the time to degree" issue for graduate students and Fellows.

Statement for selection of the potential faculty mentors (1 page)

- Include a list of mentors and links to their webpages.
- Confirm continued funding beyond Fellowships

After the SFAz Board reviews the university priorities and process, the university will be notified of the total number of awards to be given state-wide by March 18. The universities will have until March 29 to submit their nominations in priority order and by field of study.

- A template for the purpose of the nominations will be provided by March 18.
- The SFAz Board will review and select the Fellows on or before April 10.

Proposal Review

Applications will be assessed for quality, significance and relevance to Arizona and priority areas noted above.

Funding

Successful applicants will receive a cost-of-education allowance, a personal stipend plus resources in support of research and relocation for each Fellow. The total package is \$35,000 per Fellow, of which \$3,500 is to be considered the institutional allowance.

Support for the second year depends upon SFAz funding availability and evidence of outstanding performance and progress toward the M.S./Ph.D. as certified by the PI. It is

the responsibility of the institution to monitor the first year Fellow's progress. If the institution determines progress toward the degree is not satisfactory, it can terminate the Fellowship by so informing SFaz.

An annual report will be required following the first year of support indicating overall student progress for the cohort. This report and our availability of funding will determine potential second year funding, as approved by the SFaz Board of Directors.

Proposal submission Details:

The submission must include one (1) complete electronic submission and one (1) fully executed single-sided original paper copy. The Deadline for receipt of Proposals (electronic and paper) at:

Science Foundation Arizona
400 E Van Buren St, Suite 200,
Phoenix, AZ 85004

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GRFs Confirmed by SFaz on or before April 10, 2013

- Proposals will only be accepted with a fully completed original cover sheet that has been signed by the appropriate signatory authority i.e. Vice President of Research or equivalent institutional authority.

There is no formula allocation to the various universities; merit and addressing the programmatic requirements will determine the Fellowship award choices. The cognizant officer of the university can expect to be informed of the initial outcome on or before April 10, 2013.

Proposals not in compliance with the requirements specified in this RFP, or SFaz *Terms and Conditions* are ineligible and will be returned without review.

<http://www.sfaz.org/grants/grant-opportunities> [GRF posting]

<http://www.sfaz.org/grants/grantee-information> [Terms and Conditions]

