

## A. APPLICATION COVER SHEET

Affiliate: University of Arizona*		<b>Project</b> : Graduate Fellowship Program
	d by a UA graduate degree program ) at the University of Arizona upon	n (future student) or enrolled as a full time application.
First Name:		Middle Initial:
Last Name:		Student ID:
Date of Birth:		Major:
UA Department:		Minor:
Enrolled for M.S. or Ph.D.	?	Anticipated Graduation Date:
Advisor/Mentor:	Current Grad GPA:	
Demographics:	Gender:	<b>Citizenship</b> :
() Native American	() Male	( ) U.S.
() Pacific Islander	() Female	U.S. citizenship required
() African American	Person with disability	•
() Hispanic	() No	() No
() Caucasian () All Other Students	() Yes	() Yes
Local Address:		
City:	State:	Zip:
Permanent Address:		
City:	State:	Zip:
Home Phone:	Cell Pho	ne:

Secondary Email:

#### **Permanent Email**:

Outreach Project Affiliate Partners: NASA Center Specify:

Industry/Contractor Company Name:

Institution of Higher Education **Specify:** 

Other Affiliated Partners in Outreach Program **Specify:** 



## **B. DEPARTMENT NOMINATION AND APPROVAL OF COST SHARE**

The UA/NASA Space Grant Program, in collaboration with nominating departments, funds six graduate fellowships per year to exceptional graduate students studying in space sciences, engineering, public policy, earth sciences, science education, and global change-related fields who are *interested in promoting the understanding of space-related research to the public*.

Graduate Fellowships (<u>http://spacegrant.arizona.edu/opportunities/fellowships/</u>) are for one year, renewable for a second year with sufficient evidence for effort exerted toward meeting an outreach program goal.

Awards include a \$16,000 stipend per year for one or two years, full in- or out-of-state tuition and registration fees waivers, student health insurance, and a travel grant of \$1,500 (\$750 per year) to attend professional conferences. (Though totals vary based on individual circumstances, the total value of the awards made in the 2013-14 academic years was \$29,000-45,146.) Successful candidates will show a strong commitment to science education.

These awards are funded with Space Grant monies plus a required department cost-share. Specifically, **Space Grant provides**: 10K stipend, out-of-state tuition waiver, and student health insurance. **Departments provide**: 6K stipend, in-state tuition/registration fee waiver, and \$750/year travel funds.

The application form, transcripts, two letters of recommendation, and any letters of support (from those cooperating in the proposed education outreach effort) should be submitted to your department for the **appropriate signatures below**; departments must provide a cost-share for the awards and nominate applicants to the Space Grant Steering Committee. Applications forwarded by departments are due in the Space Grant Office (Room 349 of the Kuiper Space Sciences Building) by April 7, 2015. Awardees will be notified of awards in April 2015.

For further information, contact Susan A. Brew, Arizona Space Grant Consortium Program Manager at (520) 621-8556, or e-mail <u>sbrew@lpl.arizona.edu</u>.

	nominates
(Official Department Signature)	(please print signatory name)
	from the Department of
(student's name)	-
	for a 2015-2016 Space Grant Fellowship
(Department)	
	and agrees to provide the cost-share noted above.
(date)	



## C. REFERENCE FORM (Note: this form can be photocopied)

The UA/NASA Space Grant Program (http://spacegrant.arizona.edu), in collaboration with nominating departments, funds six graduate fellowships per year to exceptional graduate students *interested in promoting the understanding of space-related research to the public* and who are studying space sciences, engineering, public policy, earth sciences, science education, and global change-related fields. Applicants are asked to propose a 1-2 year project focused on educational outreach, knowledge transfer, technology transfer, science for society, and/or the promotion of science, technology, engineering and mathematics to those traditionally underrepresented.

### Name of Applicant:

### Name of Referee:

Thank you for agreeing to write a reference for the above applicant. Please ensure that you reply on a separate sheet of headed university/institution notepaper and sign the reference. Please address the following questions in your reference, attach your reply to this sheet, and return it to the applicant in a sealed envelope for onward transmission to Space Grant.

- 1. How long and in what capacity have you known the applicant?
- 2. What are your impressions of the applicant's interest/motivation in promoting the understanding of science, technology, engineering and/or mathematics to the public?
- 3. What are your impressions of the applicant's proposed outreach project?
  - a. Are the applicant's objectives compelling and are the methods appropriate?
  - b. Is the project feasible and is it achievable while the applicant pursues his or her degree?
- 4. Please very briefly comment on the applicant's self-reliance and independence, academic abilities, and professional goals as they relate to proposed outreach project.

Your assistance is greatly appreciated.

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Your assistance is greatly appreciated.

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## **D. LETTER OF SUPPORT FORM (OPTIONAL)** (*Note: this form can be photocopied*)

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Successful applicants often establish a relationship with an organization or institution (i.e., a school, museum, park/forest, or an existing educational program) as they develop their outreach project proposal. These applicants identify an "educational outreach advisor" representing this organization or program who will provide an initial letter of support that indicates their willingness to cooperate with the applicant's proposal.

## Name of Applicant:

## Name of Partner Organization:

## Name of Partner Organization Advisor:

Thank you for agreeing to write a letter of support for the above applicant. Please ensure that you reply on a separate sheet of headed institution notepaper and sign the letter. Please address the following questions in your reference, attach your reply to this sheet, and return it to the applicant in a sealed envelope for onward transmission to Space Grant.

- 1. What are your impressions of the applicant's proposed outreach project?
  - a. Are the student's objectives compelling and are the methods appropriate?
  - b. Who will be impacted?
  - c. Is the project feasible and achievable in the time frame given?
- 2. Please indicate your willingness to support the applicant's project.

Your assistance is greatly appreciated.

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## E. PROJECT PROPOSAL GUIDELINES

The UA/NASA Space Grant Program, in collaboration with nominating departments, funds six graduate fellowships per year to exceptional graduate students *interested in promoting the understanding of space-related research to the public*. Space Grant Fellowships are offered to those pursuing degrees in Planetary Sciences, Astronomy, Physics, Earth Sciences and Global Change-related fields (Atmospheric Sciences, Geosciences, Hydrology and Water Resources, Geography, Ecology and others) Evolutionary Biology, Mathematics, Remote Sensing and Spatial Analysis, and in space-related fields in any college or fields that use space-related science and tools (e.g. Public Policy, the Social Sciences, Science Education, etc.).

Applicants are asked to propose a 1-2 year project focused on educational outreach, knowledge transfer, technology transfer, science for society, and/or the promotion of science, technology, engineering and mathematics to those traditionally underrepresented.

In keeping with National Space Grant College and Fellowship Program goals, Space Grant Fellows will develop a project that promotes the understanding of space-related research to the public. Successful applications are designed in advance and tend to partner with existing educational programs (e.g. primary/secondary schools, science museums, parks/forests/reserves, 4-H and other Cooperative Extension agents, etc.). Examples include

- developing curricular and/or educational outreach materials designed to communicate science to a specific audience (all precollege-related program materials should align with Arizona and/or National Math, Science, Geography or Technology Standards);
- developing a web application with science education and/or knowledge transfer;
- developing skills in science writing and journalism;
- developing a demonstration project and associated educational materials for an existing educational program;
- developing a program that encourages those traditionally underrepresented in science, technology, engineering, and mathematics to learn more about these disciplines and/or pursue associate careers;
- designing and carrying-out some other creative science, technology, engineering, and/or mathematics outreach project;

Links to descriptions of fellowship projects from 1995 to the present are found on the <u>UA/</u><u>NASA Space Grant Graduate Fellowship Program</u> home page.

Project Description (maximum of 4 pages, including graphics, but excluding references)

Margins: 1 inch, minimum Font: 12 pt minimum, Times New Roman Title: (maximum 10 words or 100 characters, with spaces) Headings: Please use the headings listed below.

### A. Problem

- What is the nature & significance of the educational challenge you propose to address?
- Describe your target audience (numbers, demographics, etc.)
- Who are your institutional partners?<sup>1</sup>
- Briefly mention why you personally are motivated and qualified to address this challenge (i.e., your academic, research and/or professional experience, goals and/or philosophy).

### B. Technical Approach

- Methods -- how will you address the educational challenge?
- $\circ$  Please list the *major* educational materials, data, technology, and/or research results you plan to use in your educational outreach effort and their source.<sup>2</sup>
- Why is your approach appropriate? (e.g., proven track record and/or grounding in accepted education/knowledge transfer/pedagogic theory)<sup>3</sup>
- Note any permissions / approvals that might be required.

### C. Timetable

- Please summarize the major tasks / phases of the project.
- Identify milestones and/or critical paths in the task schedule.

### **D.** Expected Outcomes

• Estimate/quantify the impact of your proposed project.

### E. Evaluation

- For education activities, how will learning be assessed?
- For educational materials, how will effectiveness by determined?
- For the overall project, how will impact be measured?<sup>4</sup>
- F. Sustainability Plan
  - What steps will you take during the project to help ensure that its impact can be sustained beyond the fellowship period?

## G. References Cited (not included in page limit)

<sup>&</sup>lt;sup>1</sup> Proposals that partner with an existing educational program must carefully delineate between what is already provided by the program and what you will introduce that is *new* to the program.

<sup>&</sup>lt;sup>2</sup> Though not required, it is encouraged that at least some of the science, data, or technology involved in the project come from NASA or NASA-funded initiatives.

<sup>&</sup>lt;sup>3</sup> Any pre-college oriented program materials should align with Arizona and/or national math, science, writing, geography, and/or technology standards.

<sup>&</sup>lt;sup>4</sup> This could be the adoption of an innovation or technology, a sought-after change in behavior, a broader understanding of a concept or idea, and/or the spread of an idea/knowledge/technology to a larger audience.