STARS2: Students, Teachers, And Resources in the Sciences, Phase II A USF/ NSF GK-12 Fellows Project.

FELLOWSHIP ANNOUNCEMENT

The STARS Research Fellowship is designed to engage graduate students in the challenge of infusing engineering and science principles in to the elementary school curriculum (Grades 3-5). Graduate students from diverse ethnic backgrounds will be selected as Fellows. The FELLOWS will be involved in developing curriculum materials (lesson plans), lesson modules, assist in training the teachers with the scientific basics required for the lesson plans, and serve as the teachers aid in delivering the lesson plans in the classrooms. Project STARS has close partnerships with the School District's science and mathematics coordinators as well as the Principals and the teachers of the partner schools. The STARS partnership pool involves ten area elementary schools, three of which predominantly serve minority students.

In the past, modules developed by the Fellows in collaboration with the select mentor teachers incorporated many state-of-the-art technologies such as nanotechnology, bio-sensors, computer simulation, and robotics, and were supplemented by exciting and easy to implement hands-on activities. The modules were regularly tested and validated through the Mentor Teachers Program (**MTP**) workshops, which were organized every month by the STARS Fellows at USF. We plan to continue this trend of year-round workshops of K-5 science and math teachers and Fellows. STARS2 will focus on a paradigm shift from fact based science instruction to a focus on the fundamental principles of mathematics and science to explain scientific facts. The ultimate goal is to impact through the STARS Fellows and the cohort of mentor teachers a large number of elementary classrooms, students, and teachers.

STARS Fellows will also be deeply involved in many other supplemental activities to reinforce science education. These activities include after school programs, supporting school science clubs and science days, judging county science fairs and competitions, and our signature program—a comprehensive experiential 2 to 3 week long science summer camp and Olympiad that focus on learning, communication, team work, and decision making using the principles of science, economics, and engineering.

The STARS Research Fellowship will be awarded to individuals who have demonstrated superior scholarship and show promise for future achievement as scholars, researchers, and educators. In addition, Fellows will be expected to show initiative, drive, enthusiasm, and willingness to work in a team environment and with diverse elementary school student populations.

ELIGIBILITY

Citizenship and Ethnicity: The STARS Fellowships will be offered on a <u>competitive</u> basis to individuals <u>who are citizens and permanent residents of the United States</u>. Members of all ethnic groups are invited to apply. Minority and women applicants are especially encouraged to apply.

Fields of Study: STARS Research Fellowships are available to individuals seeking **graduate degrees** in **engineering** and the physical and biological sciences (Math, Biology, Physics, Chemistry)

Prior Degrees: Individuals holding a Doctoral degree in any field are <u>not</u> eligible to apply.

STIPENDS AND ALLOWANCES

The STARS Fellowship will provide an annual stipend of \$30,000 for up to two (2) calendar years. Fellows will be evaluated toward the end of their first year based on their performance as Fellows and progress toward their graduate degree. The evaluation outcomes would be used to determine the length of the contract renewal (up to one year). The Fellowship will pay in-state and out-of-state tuition for up to 24 graduate credits hours per year.

EVALUATION AND SELECTION OF FELLOWS

The Fellowship Committee will evaluate the applicants' qualifications and make final selections for the award. Fellows will be selected on the basis of scholastic achievement and ability as evidenced by academic records, involvement in university/community leadership activities, statement of purpose, and letters of recommendation. In addition, candidates will be required to participate in a personal/telephone interview. <u>Students not already enrolled at USF will have to complete the application procedure to USF's Graduate School and the intended graduate program to secure admission.</u>

CONDITIONS OF AWARDS

STARS Fellows are required to enroll full-time in an applicable graduate program at USF. After an award is made, a major change in the plan of study requires prior approval by the STARS Fellowship Committee. Graduate Fellowship recipients are not permitted to accept additional employment or receive funding from any other sources while they are STARS Fellows without the permission of the STARS Fellowship Committee.

Each STARS Fellow will be required to submit an annual progress report at the end of each Fellowship year using a format specified by the STARS Fellowship Committee for assessment of the progress made by the Fellow in his/her degree program. Annual renewal and continuation of Fellowship support is contingent upon superior performance on assigned duties of the fellowship, satisfactory progress toward the appropriate degree, and adherence to the terms of the award.

Students are required to establish in-state residency by the end of the first year. If in-state residency is not established, the student will be responsible for paying the out-of-state portion of their tuition fees.

PROGRAM ADMINISTRATION

The University of South Florida administers the STARS Fellowship Program through the College of Engineering, and Department of Industrial and Management Systems Engineering. Completed applications, requests for information, and inquiries concerning all aspects of the STARS program and award administration should be directed to:

USF/NSF STARS Fellows Program C/o Department of Industrial and Management Systems Engineering, The University of South Florida 4202 E. Fowler Avenue, ENB 118 Tampa, FL 33620 Fax: (813) 974-5953 Email: <u>vnanduri@mail.usf.edu</u>

ABOUT THE UNIVERSITY OF SOUTH FLORIDA

The University of South Florida (USF), a globally engaged and internationally focused research university. The USF System is a multi-campus, public research university that has achieved the highest level of Carnegie Foundation classification as a top tier research university with very high research activity, with grants and contracts exceeding \$310 million during 2005/2006. USF was identified as one of America's two fastest growing research universities in 2004, as noted by the *Chronicle for Higher Education*. The USF System engages a rich diversity of faculty and students through stellar academic and research programs across four campuses, including USF Health, which is comprised of the College of Medicine and it affiliate partners.

The College of Engineering is comprised of six departments, including Chemical Engineering, Civil and Environmental Engineering, Computer Science and Engineering, Electrical Engineering, Industrial & Management Systems Engineering, and Mechanical Engineering. The College offers seven ABET-accredited engineering programs, seven doctoral programs and houses eleven centers and institutes. Enrollment consists of approximately 2,600 Undergraduate, 400 Master's and 320 doctoral students. External research contract/grant funding to the College exceeds \$27 million annually. The College has approximately 111 teaching/research faculty, more than 46 full-time research faculty, and a strong and supportive alumni base, both locally and nationally. The College of Engineering is engaged in a number of exciting interdisciplinary initiatives in the areas of bioengineering, nanotechnology, functional materials, pattern recognition, critical infrastructures and sustainability in energy, water, health and transportation. A wide spectrum of research centers includes the Center for Urban

Transportation Research (CUTR) which has generated more than \$60 million in externally funded research; the Center for Robot-Assisted Search and Rescue (CRASAR) which serves as a crisis response and research organization; the Clean Energy Research Center (CERC); the Center for Wireless and Microwave Information Systems (WAMI); and the Nanomaterials and Nanomanufacturing Research Center (NNRC).

A USF/NSF GK-12 Fellows Project APPLICATION INSTRUCTIONS

Please read the entire application and descriptive information before completing the application. Review the eligibility requirements and be sure that you meet them before you apply. Applications from ineligible persons will not be considered, nor will exemptions from these requirements be granted.

REQUIREMENT

1. All applicants must have a 3.0/4 overall GPA or better. Applicants must have a minimum GRE score of 1200 (combined V&Q).

Please note the list of materials required for STARS application.

- 1. Fellowship application
- 2. Unofficial copy of GRE test scores
- 3. An official copy of all undergraduate and graduate transcripts
- 4. Three (3) completed evaluation and recommendation forms
- 5. A carefully worded one-page statement that addresses, "Your current goals and future plans for your professional career. Your reasons for selecting your major field of study. Why the STARS Program appeals to you and what unique abilities you bring to the program."
- 6. Curriculum vitae (Resume) reflecting previous education, experiences and current research interests.

<u>Students not already enrolled at USF are encouraged to submit applications to USF and</u> <u>STARS program simultaneously. However, applicants may wish to wait till their</u> <u>acceptance to STARS program to begin their application to desired graduate programs at</u> <u>USF.</u>

Interested candidates can apply any time during the year. Received applications will be reviewed periodically based on the needs of the STARS program. Students not already enrolled in the graduate programs of sciences or engineering at USF are encouraged to consult USF's admission's calendar.

STARS RESEARCH FELLOWSHIP APPLICATION

1.	Name (Least)		()
	(Last)	(First)	(Middle)
2.	Date of Birth		
3.	Present address		
4.	Home address (If different from above)	
5.	Work Address		
5.			
6.	Home phone	Cell	phone
7.	Place of birth (city, state, nation)		
8.	Check whichever is applicable: Ci	tizen of U.S.	Permanent Resident
9.	State of legal residency	(See	page 6 for required residency affidavit)
NO	TE: Title VI of the U.S. Civil Righ	nts Act requires Items 9 and	d 10.
10.	Sex:		
	O Female		
	O Male		
11.	Ethnic Origin (check one)	0	0
	O Caucasian (not Hispanic) O African-American	O Hispanic	O Asian or Pacific Islander
		O American Indian	O Other (specify)
12.	Former name(s), if any, which may	appear on transcripts	
13.	Current Status at the University? If undergrad, specify classification	O Undergrad O G	raduate
14.	Undergraduate institution		
15.	Degree received		Year completed
16.	Graduate institution		
17.	Degree received		Year completed
18.	Grade point average (indicate if so Undergraduate		

19.	Degree program in which you wish to study				
20.	Field of interest within the discipline				
21.	Number of courses completed in your program				
22.	Have you previously applied for admission to post baccalaureate study at the University of South Florida? O Yes O No				
	If yes, when?				
23.	List the date on which you took, or plan to take, the GRE				

- 24. Indicate scores received, if known. (Note that score reports must be verified by submission of score reports from the testing agency).
 Graduate Record Examination (GRE): Date
 V _____ Q___ AA ___ ADV ____
- 25. List below in chronological order every college or university you have attended as an undergraduate or graduate student.

NAME OF SCHOOL AND LOCATION	DATES OF ATTENDANCE	LIST ALL DEGREES EXPECTED OR RECEIVED WITH DATES

26. List three (3) persons who are not related to you, and who have direct knowledge of your qualifications and character. At least two of the persons listed below should be faculty members in your major academic field. Please have the "CONFIDENTIAL EVALUATION & RECOMMENDATION FORM" included in this application completed by each of the persons listed below.

1		
2		
3		

27. Fill out items A, B and C below.

A. Have you been found by any school authorities or by any court to have disrupted or interfered with the orderly conduct, processes, functions or programs of any educational institution?

O Yes O No

- B. Are you currently charged or have you been convicted or found guilty (even if adjudication withheld) of violating any federal or state law or municipal ordinance other than minor offenses involving a fine of \$25 or less?
 O Yes
 O No
- C. If you answered yes to either of the above questions, give details on a separate sheet and attach to this application.
- 28. Please read and fill out the residency affidavit included in your packet. If you are NOT claiming Florida residency you must nevertheless sign the affidavit in the appropriate space.

For consideration in the Fellowship competition, applications must be postmarked no later than April 1st. In fairness to all applicants, deadline exceptions CANNOT be granted, and incomplete applications WILL NOT be considered.

I certify that the information provided in this application is accurate and complete to the best of my knowledge. I understand that falsification of information will be sufficient grounds for disqualification of application, or cancellation of financial award.

Applicant's Signature Date	
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Information for Residency Classification

If you are claiming Florida residency for tuition purposes, please fill out this form completely. A Florida resident for tuition purposes is a person who has (or whose parent or legal guardian has) established and maintained legal residency in Florida for at least twelve months. You must be a U.S. citizen, permanent resident alien (hold a green card), or legal alien granted indefinite stay by the Immigration and Naturalization Service. Other persons not meeting the twelve-month legal residence requirement may be classified as Florida residents for tuition purposes only if they fall within one of the limited special categories authorized by the Florida Board of Regents.

Non-Florida Residents

I understand that I do not qualify as a Florida resident for tuition purposes for the term for which this application is submitted and that if I should qualify for some future term, it will be necessary for me to file the required documentation prior to the beginning of the term to be considered for Florida residency classification.

Signature (in ink):

Date:

Florida Residents

This section must be completed In full if you claim Florida residency for tuition purposes.

CHECK ONE:

_____I am an Independent person (not claimed as a dependent on parent/ legal guardian tax return).

_____I am a dependent person (claimed on parent/ legal guardian tax return).

I am a dependent person who has resided for five years with an adult relative other than my parent or legal guardian (proof will be required). am married to a person who has maintained legal residence in Florida for at least 12 months. (Required: Copy of marriage certificate)

_____I was previously enrolled at a Florida state Institution and classified as a Florida resident for tuition purposes. I abandoned my Florida domicile less than 12 months ago.

_____I am a member of the armed services of the United States and I am stationed in Florida on active military duty pursuant to military orders, or whose home of record is Florida, or I am a member's spouse or dependent child. (Required: Copy of military orders or DD2058 showing home of record)

_____I am a full-time Instructional or administrative employee employed by a Florida public school, community college, or institution of higher education, or I am the employee's spouse or dependent child. (Required: Copy of employment verification)

I am a qualified beneficiary under the terms of the Florida Prepaid College Program. (Required: Proof of participation) I am living on the Isthmus of Panama and have completed 12 consecutive months of college work at the FSU Panama Canal Branch, or I am the student's spouse or dependent child. (Required: Copy of marriage certificate or proof of dependency)

Person claiming residency should complete this section in full.

- Documents supporting the establishment of legal residence must be dated, issued, or filed 12 months before the first day of classes
 of the term for which Florida residence classification is sought. All documentation is subject to verification.
- Additional documentation other than what is required above may be requested in some cases.
- Items #3 through 11 should be filled out with information pertaining to the person claiming *Florida* residency (Item #3).

Please print:

1. Name of Student:	2. Student's Social Security Number///
3. Name of person claiming Florida residency:	4. Claimant's relationship to student:
5. Claimant's permanent legal address:	

Street/P.O. Box Code	Apt. Number	City	State	Zip
7. Date claimant began establis			/ /	
 8. Claimant's voter registration: 9. Claimant's drivers license: 		umber umber		e:/ / e:/ /
10. Claimant's vehicle registrati				e:/ /
11. Non-U.S. Citizen only: Clai		umber es of claimant's card i		e://

I do hereby swear or affirm that the above named student meets all requirements indicated in the checked category above for classification as a Florida resident for tuition purposes. 1 understand that a false statement in this affidavit will subject me to the penalties for making a false statement pursuant to 240.1201, Florida Statutes, and to 6A-10.044 (F.A.C.).

Signature of person claiming Florida residency (as listed in item #3 above)

STARS RESEARCH FELLOWSHIP

Name_____ Date_____

Provide a 1-page typed statement that addresses the following items

- Your current goals and future plans for your professional career.
- Explain your reasons for selecting your major field of graduate study.
- Why the STARS Program appeals to you and what unique abilities you bring to the program.

CONFIDENTIAL EVALUATION & RECOMMENDATION FORM

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STARS RESEARCH FELLOWSHIP PROGRAM CONFIDENTIAL EVALUATION AND RECOMMENDATION FORM

Applicant

Degree Sought_____

Field of Study

TO THE APPLICANT:

Deliver this form directly to a person who is well acquainted with your academic record and who can speak explicitly about your academic achievements and potential. You should supply this person with a stamped envelope addressed to: The Institute on Black Life, University of South Florida, 4202 E. Fowler Ave., SVC 1087, Tampa, FL 33620-6912.

Please read the following statement carefully. Signing is optional.

The Family Educational Rights and Privacy Act of 1974, as amended, opens many student records, including letters of recommendation, for the student's inspection. The law also permits a student to sign a waiver relinquishing his/her right to inspect letters of recommendation. You are not required to sign a waiver, either for admission or for the Fellowship.

I hereby waive my right of access to this recommendation and any appropriate attachments that have been written by

_____ (Name of recommender). This waiver is effective insofar as the recommendation is used solely for the purpose of admission or award of Fellowship or other financial aid, if applicable.

Name _____

Date_____ Signature _____

TO THE REFEREE:

The STARS Research Fellowship is designed to engage graduate students in the challenge of infusing engineering and science principles in to the elementary school curriculum (Grades 3-5). Graduate students from diverse ethnic backgrounds will be selected as Fellows. The FELLOWS will be involved in developing curriculum materials (lesson plans), assist in training the teachers with the scientific basics required for the lesson plans, and serve as the teachers aid in delivering the lesson plans in the classrooms. Fellows will also develop advanced modules based on their research for dissemination at the elementary school level. In the past STARS Fellows have developed advanced modules based on nanotechnology, robotics, and genetics. Project STARS has close partnerships with the School District science and mathematics coordinators as well as school Principals and teachers. The STARS partnership pool involves ten area elementary schools, three of which predominantly serve minority students. The STARS Research Fellowship will be awarded to individuals who have demonstrated superior scholarship and show promise for future achievement as scholars, researchers, and educators. In addition, Fellows will be expected to show initiative, drive, enthusiasm, and willingness to work in a team environment and with diverse elementary or secondary school student populations.

Please complete the following items:

- I have known the applicant for _____ years as his/her _____ (specify relationship). I have known him/her _____ well or _____ only slightly. 1.
- 2. Do you believe this candidate will be successful in the degree program designated above?

CONFIDENTIAL EVALUATION & RECOMMENDATION FORM

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3. Summary Evaluation: Over-all academic ability and promise for research. Comparing the applicant with a representative group of students in the same field who have had approximately the same amount of experience and training, how do you rate him/her in GENERAL ALL-AROUND ACADEMIC ABILITY AND PROMISE FOR RESEARCH?

Below Average	Average	Somewhat Above Average	Good	Unusual	Out- standing	Truly Exceptional	Inadequate Opportunity to Observe
Lowest 40%	Middle 20%	Next 15%	Next Highest 15%	Highest 10%	Highest 10%	Highest 10%	

On a separate sheet of letterhead stationery, please write your candid assessment of the applicant's promise as a graduate student in a doctoral program.

Name (pl	blease print)	Date	
` 1	1 /		

Title/position	Institution		
Address	City	_ St	_Zip

Signature_____

Please return this form to:

USF STARS Fellows Program
C/o Department of Industrial and Management Systems Engineering,
The University of South Florida
4202 E. Fowler Avenue, ENB 118
Tampa, FL 33620
Fax: (813) 974-5953