SUNRISE: Schools, University ‘N’ (and) Resources In the Sciences and Engineering-A NSF/GMU GK-12 Fellows Project

SUNRISE FELLOWSHIP ANNOUNCEMENT

SUNRISE is a new GK-12 project aimed at partnering STEM graduate students (“Fellows”) with school teachers from three different school divisions. The objective of this project is to build a unique model of collaboration among elementary and middle schools, school division administration, and GMU to foster systemic efforts in implementing Information Technology (IT) rich science, technology, engineering and mathematics (STEM) content-knowledge into G4-6 education by graduate Fellows, with the potential to fundamentally change the delivery of science instruction and long term professional development of science teachers. This would be supported by science topics from contemporary areas such as GPS, nanotechnology, and oceanography which would be brought into classroom via lessons with hands-on experiments. The innovative aspect of the project is the IT theme that matches the employment demography of the Northern Virginia region, which will eventually absorb a large portion of the K-12 students participating in this project.

Graduate students from diverse ethnic backgrounds will be selected as Fellows. Fellows will be trained in both pedagogy and in communication skills. Project SUNRISE will forge will close partnerships with the School Division science and mathematics coordinators as well as school principals and teachers in developing and implementing a plan that would make the Fellows valuable resources to the teachers in the classrooms. This project provides the opportunity for individuals of demonstrated ability to engage in a program of study leading to the Masters and Doctoral degree in STEM disciplines.

The SUNRISE 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 a diverse elementary school student population.

ELIGIBILITY

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

Fields of Study: SUNRISE Research Fellowships are available to full-time individuals seeking Masters or Doctoral degrees in STEM disciplines i.e. engineering and the physical, biological, and computational sciences (such as Math, Biology, Physics, Chemistry, Environmental) at George Mason University. Students majoring in Science Education are not eligible.

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

Research: Students must be involved in research in a STEM discipline and one of the recommendation letters must be from their current research advisor.
**STIPENDS AND ALLOWANCES**

The SUNRISE Fellowship will provide graduate students with $30,000 stipend per year and $10,500 per year for cost of education (tuition and books). A separate allowance for conference travel is also available.

**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, statement of purpose, and letters of recommendation. In addition, candidates may be required to participate in a personal/telephone interview. Also approval of the Fellows research advisors will be taken before final decisions.

**CONDITIONS OF AWARDS**

Students must be enrolled full time to qualify for Fellowships and must maintain full time status during Fellowship years. After an award is made, a major change in the plan of study requires prior approval by the SUNRISE Fellowship Committee. Also a change of degree to a non-STEM degree after a Fellowship is awarded will immediately terminate the Fellowship. The Fellows are expected to spend 15 hrs/week on this project which includes at least 10 hrs/week in the K-12 classroom. This is a 12 month appointment from July 1st to June 30th. Your availability in summer starting July 1st is one of the important factors for the award.

Each SUNRISE Fellow will be required to submit an interim progress report, due midway through the each Fellowship year, and an annual progress report, due at the end of each Fellowship year using a format specified by the SUNRISE Fellowship Committee for the assessment of Fellows. The Fellowship is for a maximum of 2 years. Annual renewal and continuation of Fellowship support is contingent upon satisfactory academic performance, satisfactory progress toward the appropriate degree, and adherence to the terms of the award.

**PROGRAM ADMINISTRATION**

George Mason University administers the SUNRISE Fellowship Program through the Systems Engineering and Operations Research Department at the Volgenau School of Information Technology and Engineering. To apply for SUNRISE Fellowship please complete the application form along with this advertisement. Completed applications, requests for information, and inquiries concerning all aspects of the SUNRISE program and award administration should be directed to:

Dr. Rajesh Ganesan  
GMU/NSF SUNRISE Fellows Program  
Dept of SEOR  
4400 Univ. Dr. MS 4A6  
Fairfax, VA 22030  
Phone: (703) 993-1693  
Fax: (703) 993-1521  
Email: rganesan@gmu.edu
SUNRISE-A NSF/GMU 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

- All applicants must have a 3.0/4 overall GPA or better
- To Apply please fill the
  1) Application form (2 pages)
  2) Informed consent document (2 pages)
  3) An official copy of all undergraduate and graduate transcripts (photocopy accepted)
  4) Three (3) completed evaluation and recommendation forms (each 3 pages). One of the letters must be from your research advisor.
  5) A carefully worded statement of purpose and career plans (1-2 pages)
  6) Curriculum vitae (Resume) reflecting previous education, experiences and current research interests.

All responses should be typewritten and replies limited to the space provided, except where essential to answer a question fully or where an explanation on a separate sheet is specifically requested. Answer all questions fully and accurately, sign and date the application in the space provided.

The candidates will be short-listed based on their applications and recommendations. The short-listed candidates will be asked to participate in a personal/telephone interview.

For consideration in the Fellowship competition, all applications received by April 30th and supporting material received by May 15th 2011 will receive priority and applicants will be notified on or before June 15th 2011 of the disposition of their applications. Applications received after April 30th 2011 will be considered only toward any unfilled Fellowships by the start date of July 1st 2011. An application will not be evaluated unless complete. Failure to follow these instructions will result in disqualification.

Mail all application materials to:

Dr. Rajesh Ganesan
GMU/NSF SUNRISE Fellows Program
Dept. of SEOR
4400 Univ. Dr. MS 4A6
Fairfax, VA 22030
Phone: (703) 993-1693 Fax: (703) 993-1521
APPLICATION PROCEDURE

Please follow the instructions carefully and adhere to deadlines as indicated.

Paragraph DELETED

1. Complete all forms contained in this packet. **Do not send a resume or vita in lieu of filling in all information requested in this application.** You may wish to use the following checklist as a guide for completing all steps in the application process:

- Complete the SUNRISE Fellowship Graduate Application (2 pages)
- Request a transcript (undergraduate degree, masters (if applicable, until Fall 2010), Ph.D. (if applicable, until Fall 2010) from each institution that you have attended in the past. A photocopy will also be accepted, but originals are needed if the Fellowship is awarded.
- Request that three (3) individuals who can speak to your academic potential complete the “SUNRISE Confidential Recommendation Form.” (3 pages). One of the letters must be from your research advisor.
- Complete the “SUNRISE Statement of Purpose and Career Plans Form.” (1-2 pages)
- Complete the “Informed Consent Sheet.” (2 pages)
- Complete a curriculum vita reflecting previous education, experience and current research interests.
- Mail your completed application by April 30th 2011 to

  Dr. Rajesh Ganesan  
  GMU/NSF SUNRISE Fellows Program  
  Dept. of SEOR  
  4400 Univ. Dr. MS 4A6  
  Fairfax, VA 22030

**NOTICE OF AWARDS:** Recipients of the SUNRISE Fellowship will be notified by mail on or before June 15th 2011.