

Increase Recruitment & Retention of Underrepresented Students in STEM Majors through Nuclear Safety Research

**Grant: NRC-27-10-513
Eleanor L. Hoy, Ph. D.**

Quarterly Performance Report April 30, 2012

I. SPECIFIC AIMS AND OBJECTIVES (October 1, 2011 – March 31, 2012)

- The Head Turn lab will continue to be developed and prepared for use. Actual testing of camera and software will begin on 'date'/soon/in the near future/.
- Continuation of research.
- Purchase of additional lab related materials (see Year 2 budget).
- Updating of the website; publication of reports and documents to NRC and NSU; advertising of scholarship; internship information; availability of STEM recruitment information on the internet and at no less than 20 high schools.
- Completion of all required reports.
- Planning for major events during summer grant period.
- Purchase additional materials and equipment after consultations with the PI, Co-PI and Consultant.
- Continue collaboration with the PI, Co-PI, Consultant, and Computer Science graduate student in order to further establish the Head Turn Lab.
- Review of students for Fall 2012 scholarships.
- Continuous advertisement of NRC Dollars for Scholars scholarship program on the Norfolk State University College of Science, Engineering, and Technology website.

II. PROGRESS AND RESULTS (October 1, 2011 – March 31, 2012)

- Vetting of possible Psychology faculty to add to research team.
- PI, Co-PI, graduate student and consultant met several times to discuss the hardware, software, and configurations for development of the Head Turn apparatus and lab.
- Computer, special camera, other test equipment have been put in place in the lab.
- New Computer Science graduate student began work on programming that would connect the camera with the computer.
- The Co-PI and graduate students continued to familiarize themselves with software similar to what has been ordered for the Head Turn project.
- Received a significant number of applications based on continued promotion of scholarship availability. Project promoted on the Norfolk State University and the College of Science, Engineering, and Technology websites.
- Head Turn research related paper was published in the peer reviewed journal, International Journal of Engineering Research and Innovation, in the Spring 2012 edition.

- Spring 2012 Scholarship recipients were selected and awards were made. 100%

Last Name - Initial	First Name	Amount
H	Monique	\$ 1,500.00
S	Ambria	\$ 3,000.00
L	Jacque	\$ 1,500.00
V	Christian	\$ 1,500.00
M	Desmond	\$ 1,500.00
C	Reginald	\$ 3,000.00
C	Brett	\$ 1,500.00
V	Lara	\$ 1,000.00
J	Jamila	\$ 1,500.00
F	Belinda	\$ 1,500.00
M	Zakiya	\$ 2,500.00
Total		\$20,000.00

III. Significance

Since actual testing of Head Turn has not yet begun, there are no findings or results to report. However, this research is significant because if successful, experimentation results are designed to accurately measure changes in cognitive responses to changes in sounds for those exposed to low levels of radiation.

IV. Reason for Incomplete Goals

Most goals were completed during this reporting cycle. However, a major change in the university procurement office continues to cause slight delays in the purchase of some items needed for this research project.

V. Plans (April 1, 2012- Sept. 30, 2012)

- Selection of subject matter expert from the field of psychology to the research team
- Actual testing of camera and software will continue.
- Continuation of research.
- Awarding of the third round of scholarships to qualified STEM scholars for the Fall 2012 semester.
- Travel by researchers to related research labs or conferences for presentations and possible publications.
- Purchase of additional lab related materials (see year 2 budget).
- Updating of the website; publication of reports and documents to NRC and NSU; advertising of scholarships; availability of internship information; availability of STEM recruitment information on the internet and at various high schools.
- Completion of all required reports.
- Meeting with all related personnel.

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Scholarship Performance Metrics

April 30, 2012

1. How many students have been sponsored by NRC funding?

18 students have been funded.

2. How many students, supported by NRC funding, have received a B.S. or equivalent degrees?

0 students. The majority of students funded through NRC scholarships are freshmen and sophomore.

3. How many students, supported by NRC funding, have accepted a job and are employed in the nuclear industry?

0 students. The majority of students funded through NRC scholarships are freshmen and sophomores. Several students have internships funded by NRC.

4. How many students, supported by NRC funding, are continuing on to Graduate School in a field related to the nuclear industry?

0 Students. The majority of students funded through NRC scholarships are freshmen and sophomores.