

**Paid Environmental Sciences Internship
High School Student Involvement with REHS Program at the VCR
LTER
Summer 2009**

Background: For the past 8 years the University of Virginia, Department of Environmental Sciences through its Virginia Coast Reserve Long Term Ecological Research Program (VCR-LTER) and with support from the National Science Foundation has been heavily invested in educational outreach activities in Northampton County Schools. With the opening of the Anheuser-Busch Coastal Research Center in Oyster VA we have expanded our educational activities with additional outreach programs. The Research Experience for High School Students (REHS) program is one of these, and is being funded by grants from The Nature Conservancy through the Volgenau Foundation, and the National Science Foundation with the expectation that it will further the goals of TNC along with those of the School Yard LTER program at the Virginia Coast Reserve.

The *Virginia Coast Reserve Schoolyard LTER Mission* is to:

Enhance environmental science literacy/awareness in Northampton County, and surrounding counties, at all grade levels. To better prepare students through classroom activities and field experiences. To support the teachers by providing teacher training and curriculum resources. Our vision is that these goals will enhance the scientific mission of the VRC LTER.

The main objectives of the REHS Program are to:

1. *Provide an opportunity for highly motivated High School students to gain first hand experience in Environmental Sciences, and conduct field research under the direct supervision of a trained scientist.*
2. *Provide graduate students conducting research activities at the VCR-LTER program with enthusiastic and highly capable field assistance.*
3. *Further the conservation goals of TNC and the research goals of the VCR-LTER program.*

Participation in the REHS program will be limited to the available funding through competitive awards to both the high school students and graduate students applying to the program. It is anticipated that 4 REHS teams (1 high school student/1 graduate student/1 faculty member) can be funded during the summer of 2009. *This announcement describes the program and explains the application process for Northampton High School students who are interested in participating.*

REHS Program Description: The REHS program will partner highly motivated and qualified High School students wishing to gain first hand experience in Environmental Sciences with graduate students and faculty mentors from the University of Virginia,

Department of Environmental Sciences who are currently conducting research at the VCR-LTER. REHS summer interns will work one-on-one with their graduate student mentor to assist in the graduate student's summer field research and to develop an independent research project to be conducted by the intern. All program participants will meet on a regular basis to discuss the current status of their research projects with ABCRC scientific staff and UVA faculty. REHS summer interns will be expected to make a public presentation of their research results at the end of the project. This is an 8-week, full-time effort. However, projects may require irregular sampling periods outside the normal 8-5 time-frame due to the nature of the research project, the tide schedule, and other related phenomenon. ***High school students selected as REHS summer interns will be paid a stipend of \$2000.00 for the 8-week program.*** Each REHS team will be provided with a modest field supply budget to be used for the purchase of supplies needed by the REHS intern to complete their research project. Intern may also receive a modest travel budget to support travel to a science conference (perhaps the VCR Annual All-Scientists Meeting generally held at the University of Virginia in Charlottesville, or at the ABCRC) where they can present the results of their research project.

High School Student Interest and Application: Interested high school students are *required* to attend an evening meeting on April 22nd at the Anheuser Busch Coastal Research Center in Oyster, VA where the REHS program will be explained in detail AND graduate students from UVA's Department of Environmental Sciences will present brief descriptions of potential research projects that they are interested in supervising.

This is a competitive program, and the application deadline is April 29th. High School students wishing to participate in the program must meet the following eligibility standards:

1. Be currently enrolled at a High School in Northampton County, VA
2. Be at least 17 years of age
3. Be able to provide transportation to and from study sites on the Eastern Shore
4. Have an interest in pursuing a career in environmental science or related field
5. Have completed basic science classes

Application materials required include:

1. Academic record including a list of classes taken and grades received
2. Letter of recommendation from at least one teacher from their High School Science Faculty
3. Personal Essay describing why you are interested in participating in the REHS Program and what you hope to achieve as a result
4. A prioritized list of proposed potential research projects (described at the April 22th meeting).

A Review Committee¹ composed of UVA faculty and ABCRC staff will match high school students with graduate student/faculty mentors, and high school interns will be selected and notified by May 8, 2009.

The role of the high school student is not envisioned as a primary "gopher" for the graduate student or faculty member, but instead the high school student's role is to conduct a stand alone project, under the careful supervision of the graduate student and faculty mentor. Once the successful REHS teams have been identified, there will be a required orientation meeting involving all graduate students and high school students. Day-to-day supervision of the high school student's progress is the responsibility of the graduate student in conjunction with the mentoring faculty member. The experience is culminated with the preparation of a presentation summarizing the high school student's work and results. This, too, will involve oversight and guidance by the graduate student. As mentioned above, limited travel funding is available to attend a scientific conference to present the results of their work.

Timeline/Important Due Dates:

- February 20: Official Program announcement and call for Research Proposals from Graduate Students.
- March 20: Graduate Student Research Proposals Due.
- March 26: Announcement of Graduate Proposals Accepted
- April 22: Presentation to High School Candidates
- April 27: High School Candidate Applications Due
- May 8: Notification of High School Candidates Accepted
- June 21: Participant Introductions and Program Orientation, including visit to the ABCRC and plane flight over the VCR.
- June 29: Start of REHS Field Activities
- August 21: End of REHS Field Activities followed by Presentation Development

Questions: Any questions regarding this program can be addressed to Dr. Art Schwarzschild (acs7q@Virginia.EDU). Thanks for your interest.

¹ The Review Committee will consist of Dave Smith, Art Schwarzschild, Karen McGlathery, and John Porter from UVA, and Tom Bonniwell from the Northampton High School science faculty.