As a 2002 GRO Fellow, Toiya Goodlow participated in a summer internship with the Office of Wastewater Management (OWM) in Washington, DC. After earning her B.S. in chemistry from Howard University, Toiya was hired by EPA shortly after graduation. Toiya currently works as a chemist for the EPA Office of Pesticide Programs in Washington, DC.

“I had a very positive experience with the GRO program,” Toiya commented. “When it was time to apply for a position after graduation, I thought I should consider the EPA. The references from my internship and my professor who introduced me to the GRO program helped tremendously, and I actually had my choice of two positions at the EPA.”

During her internship, Toiya compiled a compendium of key outreach, education, research, funding, and management activities supporting decentralized wastewater systems. Decentralized systems (commonly called onsite or septic systems) are a common method of treating individual household waste in rural areas and small towns. If properly designed, installed, and managed, decentralized systems can be an effective option for protecting public health and the environment. On the other hand, if they are not, these systems can pose a significant threat to public health and the environment. Toiya also managed logistics for the Regional Coordinators’ Meeting that summer, and acted as a point of contact between EPA HQ and the Decentralized Systems Program Workgroup.

Toiya’s GRO summer internship was not just an introduction to the working world or an abstract exercise. As she notes, “Before my work with OWM, I had no idea what decentralized wastewater systems were and how many people used them in their homes. The work I did showed me how real people are connected with the work done in EPA.” Her internship experience demonstrated the value of networking; Toiya is still in contact with her internship mentor, Joyce Hudson.

As a current EPA employee, Toiya often applies one of the valuable lessons that she learned during her internship: the importance of maintaining and fostering good working relationships with team members and peers. “The environment in which I work uses teams to complete just about every project,” Toiya said. “Our primary documents are human health risk assessments, and toxicologists, chemists, and occupational and residential exposure assessors work together to produce each document.” Teamwork is also essential when Toiya co-chairs and participates in workgroups.

For the current class of GRO Fellows, Toiya advises, “Work smart, enjoy your internship and maintain all the contacts you make during the summer.” She had a great experience in the summer of 2003 and wishes the same for the students starting their internships in 2008.

“I had a very positive experience with the GRO program.”
- Toiya Goodlow
Ashley DeBoard
Ashley was studying environmental science at Northern Arizona University, when she interned at EPA Region 9 in San Francisco, CA. Ashley’s project was to conduct an emissions inventory related to the use of diesel equipment and electricity consumption for Superfund sites in Region 9. Frank said this about Ashley’s experience:

“This internship far exceeded my high expectations of working with the EPA. While I was given a great deal of trust in developing this project, the guidance provided by my mentor in Region 9 was instrumental in my ability to have such a unique opportunity.

The role of my project was extremely interesting and educational—a great experience!”

Frank Calvosa
Frank worked with Dr. Kay Ho and colleagues at the Atlantic Ecology Division lab in Narragansett, RI for his summer 2007 internship. Frank was a chemistry major at Villanova University in Pennsylvania.

“I was responsible for collecting organisms from water matrices that would be used in toxicity tests. This was my first experience participating in field work and I must admit it was quite a challenge. In order to collect the samples, Dr. Ho and I hiked into a body of water and treaded through slimy, loose mud; getting stuck knee deep in the sediment. The truth is that my first field experience was not pleasant. However, with further instruction from Dr. Ho’s regards wanting to be brave the mud, I was able to enjoy the field work component of the research. It also proved to be an educational process as well.”


Evan Bredeweg
Evan was an environmental biology student at Pacific University in Forest Grove, OR. He was given the opportunity to work on a project that was really interesting because it gave me the opportunity to work in a government lab, which was really valuable to me. It has given me a taste of what scientific work would be like as a part of the government organization. It has also proven to me that I want to continue my education with the goal of working in a research lab and have the opportunity to do research of my own.”

Frank Calvosa
Frank Calvosa, a summer intern at the New England Regional Laboratory, North Chelmsford, MA, where he worked with project advisor Harold Stock in the National Lakes Assessment, felt a student at the University of Tulsa, in Oklahoma, summed up his experience like this:

“This project meant traveling all over the New England area. I enjoyed the traveling, seeing new places, and working outside. I believe it was a win-win situation for all involved. My expectations were greatly exceeded with this internship. I learned so much about the EPA, how it works, and the importance of the EPA. I feel this experience has helped me to narrow my area of future employment towards the area of remediation and cleaning up of sites. I would bring a lot of knowledge and experience to any future career." This summer internship was a wonderful experience. I was lucky to be able to have such an opportunity. During this summer, I learned the importance of knowing what exactly is in our environment. It also proved to be an educational process as well.”

Eric Vanderboom
Eric Vanderboom spent his summer internship in the New England Regional Laboratory, North Chelmsford, MA, where he worked with project advisor Harold Stock in the National Lakes Assessment. He wrote:

“My experience was very rewarding and enlightening. The project that I worked on was interesting because it gave me the opportunity to work on a project that was really interesting because it gave me the opportunity to work in a government lab, which was really valuable to me. It has given me a taste of what scientific work would be like as a part of the government organization. It has also proven to me that I want to continue my education with the goal of working in a research lab and have the opportunity to do research of my own.”

Words of welcome from the Director of NlCer
William H. Sanders III, DrPH, is the Director of the National Center for Environmental Research (NCER), within which the GRO Undergraduate Student Fellowship Program is housed. Dr. Sanders is looking forward to GRO Undergraduate Fellows beginning their summer internships at EPA. “I am personally thrilled to have them on board,” he said. “They will bring a lot to EPA,” he urges Fellows to ask lots of questions, bring their own perspectives to bear on problems, and use their unique skills to “connect the dots— even when the dots may be very far apart.”

Having joined EPA in 1973, Dr. Sanders has an excellent perspective on the evolution of the Agency’s approach to addressing the complex environmental and human health issues it faces. He points out that EPA has made significant progress, but notes that “we must do more.”

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Frank Calvosa
“I also had the opportunity to network and interview several environmental attorneys with the office of Regional Counsel (ORC). The relation of their personal experiences and advice, coupled with the background I received in energy and air pollution issues, has helped me to clearly define my future career objectives. I understand more about why there is a substantial need to reorient our energy sources as well as realizing the impacts that fossil fuel combustion contributes to our environmental quality. I would like to pursue this capstone through legal and policy avenues and I am hopeful that the background provided through environmental science and technical experience within Superfund will prove to be an asset in pursuing these goals.”

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