# OVUM

Environmental Protection Agency Greater Research Opportunities (GRO) Undergraduate Student Fellowships Newsletter Issue 3, 2005

#### **GRO-ECO Interview**

Brent Chavous, a 1999-2000 Environmental Protection Agency (EPA) Fellow, was encouraged to apply to the EPA Greater Research Opportunities (GRO) Undergraduate Student Fellowship Program by a professor at Hampton University. This fellowship afforded Brent an opportunity to conduct independent research, work for EPA, and receive money for school. Brent realized that this opportunity to be an EPA GRO Fellow was invaluable!

During the summer of 2000, Brent interned with EPA in Edison, NJ. As a member of the helicopter water-monitoring project for the New York Bight Water Quality Assessment Program, Brent learned about various EPA techniques and procedures. He monitored the water quality of public beaches by measuring their microbial density and the concentrations of dissolved oxygen along the coasts of New Jersey and Long Island, NY. Results collected by EPA were reported to state government agencies that monitor the health of the community.

While interning with EPA, Brent was pursuing his Bachelor of Science in Biological Science. During this time, he developed a deeper understanding of environmental issues such as pollution control, global warming, and waste management.

Brent earned his Bachelor of Science in Biological Science from Hampton University in May 2001. During the summer of 2001, he was a participant in the Minorities At Sea Together (M.A.S.T.) and the Minority Undergraduate Scholarship & Training (M.U.S.T) Programs. Brent took a few months to explore his employment options, and was hired as a high school science teacher in January 2002.

Brent's inquisitive mind and the skills he gained as an EPA Fellow led him to the classroom. Although he is a high school Biology I and Physical Science teacher, Brent does not consider himself a science teacher—he is a "teacher of life" who shares essential life skills with his students. For example, he helps them to develop a greater environmental awareness and to



**Brent Chavous** 

make contributions to help everyone live a better life.

Brent feels teaching is an important way to have a direct and positive impact on children's lives. Brent constantly motivates and shapes tomorrow's leaders to show compassion and respect towards each other and the environment. His fascination with science has fueled his desire to pursue a Masters degree from the University of South Carolina.

- **GRO-ECO** Interview
- 2004-2005 GRO Fellowship Class Summer Activities

## 2004-2005 GRO Fellowship Class Summer Activities

#### Erin Englert Louisiana State University Major: Environmental Engineering

Erin gained laboratory experience and learned how to use a High Pressure Liquid Chromatography device and a Gas Chromatograph machine during her internship with Louisiana State University's, EPA-funded, Hazardous Substance Research Center.

"The project that I worked on assessed the risks associated with the release of chemicals into the air and water as sediment solids become disturbed and resuspended during dredging activities. With the help of my project advisor, I compiled data that could possibly be used in the risk assessment frameworks of the US Army Corps of Engineers and the US EPA. My laboratory experience from this summer will help me in my future career goals of designing and implementing environmental protection and remediation projects and practicing environmental law."

#### Joseph Guido University of North Dakota Major: Chemical Engineering

Joseph helped his project advisor set up inspection reports for various sites, while writing inspection reports of his own and working on databases with EPA's Region 9 Water Division.

"I have learned to budget my time effectively, which will definitely help

me both in academics and my career. I have learned higher proficiency with database programs and various Microsoft applications, which will come in handy with my academics. My knowledge in issues pertaining to the environment will help me if I decide to pursue a career involving the environment. I feel ECO lets college students get a good opportunity to have a head start in life. I have learned so much, and I recommend (this) to anyone who gets the chance."

#### Krystal Hamlett Lincoln University Major: Cell and Molecular Biology

Krystal interned with EPA's Region 3 Office of Watersheds this summer where she became a productive part of a new program that will affect much of the transportation of America.

"During my internship I networked and learned a great deal about wetlands and the general framework of program development. I also learned about the influence of politics on the litigation system, and the importance of compromise, decision making, and networking."

# Clancy Kadrmas University of North Dakota Major: Chemical Engineering

At EPA's Region 9 Superfund Division, Clancy learned a lot about renewable energy and created a presentation and paper for project managers to promote renewables on their cleanup sites. Clancy also learned how to scan the Internet for useable and credible information.

"This skill is useful because it allows me to find valuable information without wasting time."

## Megan Killian Towson University Major: Environmental Science

The Diagnostics team at EPA's Region 1 Atlantic Ecology Division (AED) hosted Megan's internship this summer. As part of the Diagnostics team in the AED laboratory in Narragansett, Rhode Island, she assisted in both laboratory and field work to further the scientific development of toxicity identification and evaluation of sediments from local watersheds. Megan analyzed sediment samples for grain size, toxicity, and total organic carbon. She also analyzed water samples for total suspended solids and chlorophyll A content.

"I had never been exposed to this type of research prior to my internship; everything I did each day this summer was new to me. Now that I have some experience in this research, I feel that I have a better sense of what I may want to focus on in the future."

(continued on page 3)

### 2004-2005 GRO Fellowship Class Summer Activities (cont.)

Wendy Lucero University of California, Santa Cruz Major: Environmental Chemistry

Wendy spent this summer interning in EPA's Region 2 Microbiology Laboratory where she gained new skills, including learning how to conduct membrane filtration on beach water samples and test water samples and treated sludge.

"The knowledge gained this summer has not only given me more confidence as a scientist but also armed me with valuable experience that will help me attain a science career in the future."

Megan Mauter
Rice University
Major: Civil and Environmental
Engineering

As part of Megan's internship with the National Center for Environmental Economics in EPA's Office of Policy Economics and Innovation, she collaborated with Rice University, other parts of EPA, the Woodrow Wilson Institute Center, and the National Science Foundation. Her project gauged understanding of public trust in EPA and public acceptance of nanotechnology, resulting in the creation of a theoretical model and a preliminary paper for her office at EPA.

"This summer I had the opportunity to conduct self-directed, independent research. The freedom to undertake such an endeavor facilitated the development of research method skills, as well as the ability to effectively interview people. I also enhanced my knowledge of system dynamics modeling."

Mia Robbins
Xavier University
Major: Biology

During Mia's internship with EPA's Region 4 Air Pesticides and Toxics Management Division, she revised Children's Health placards so that they could be translated into Spanish, participated in the Pediatric Environmental Health Specialty Unit Annual Meeting in Washington, DC, reviewed grant proposals dealing with asthma reduction and waste reduction, and researched the H2E programs for the Region 4 Web site, among other activities.

"I will be able to use this knowledge about developing posters and brochures as a future pediatrician. I would recommend that others go through the EPA Fellowship Program because it gives one a sense of the real world. I learned things that will lead me in the right direction in the future."

Shaka Rucker Phoenix College Major: Economics

Shaka felt that his summer with the Office of Science and Technology in

Washington, DC, was a valuable opportunity. He learned how to do cost analysis and Web site maintenance, and gained...

"a better understanding of how EPA and the federal government work. Any student can prosper from this experience."

Kathryn Semmens
Ursinus College
Major: Environmental Studies

Through Kathryn's internship with the NEPA team at EPA's Region 3 Environmental Assessment and Innovation Division, she gained hands-on experience with the ArcView Program and learned more about NEPA.

"These skills will be, without a doubt, very valuable in my future as an environmentalist. I gained a great overview of the whole process of environmental assessment, not just by reading the law and examples of past documents and comments, but also through seeing the process in action. I cannot stress enough how great it was to see all the different projects and activities that EPA has taken on, and I felt spoiled to be able to pick from among them to best suit my interests. I think ECO is setting up interns to have the best experience possible, as only the interns know what their best fit would be in a project. Basically, I loved it and would do it again in a heartbeat."

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