

Environmental Protection Agency Greater Research Opportunities (GRO) Undergraduate Student Fellowships Newsletter Issue 2, 2006

ALUMNI INTERVIEW: CYNTHIA WILLIAMS

Why did you apply for the GRO Fellowship Program?

I first heard of the Minority Academic Institution (MAI) now known as Greater Research Opportunities (GRO) Fellowship Program when the Office of the Dean of the Environmental Sciences Department at Alabama Agriculture and Mechanical (A&M) University sent me an information packet. After reviewing the packet and Fellowship Program website, I realized this was a wonderful opportunity. I decided to work as hard as needed to make this opportunity happen for me. I was struggling financially to attend school while maintaining a family of four children. I knew that if I received this Fellowship I could focus on school and not finances to pay for it. I also wanted to work at an EPA facility; therefore, a required EPA Internship was to me a bonus. This gave me an opportunity to experience the work I was already dreaming about performing.

Where did you intern? What were your responsibilities?

I interned at Region 4 Clean Water Act (CWA) Enforcement Section, now known as Water Management Division's Water Programs Enforcement Branch. This was a great project to experience an internship. The Section Chief, Arthur Collins, directed that I would receive the same type of training as an enforcement agent.

This gave me an opportunity to experience almost all areas of work this section was involved in. I was able to experience two multimedia inspections of chemical plants as an assistant to the Water Enforcement Agent. The first of these multimedia inspections was with my mentor, Alenda Johnson. As an assistant to the Water Enforcement Agents, I traveled to North Carolina and participated in an inspection of wetlands as part of the Section 404/Wetlands Dredged and Fill Material Program. I also participated in the Atlanta Area Storm Water Initiative. Working in conjunction with the Region 4 CWA Enforcement Section and Georgia Environmental Protection Department, the section that I was involved with performed storm water inspections on several hundred locations around the Atlanta Metro Area. In all of the above inspections, my responsibility was to act as an assistant to the Water Enforcement Agent. I served as an assistant to enforcement agent, Chet Gala, on the development of two enforcement cases against Publicly Owned Treatment Works (POTW). This task included reviewing Discharge Monitoring Reports (DMRs), inspecting the facilities and reviewing their documentation, compiling and developing the appropriate documentation for submittal to the EPA Attorneys, and working closely with the attorneys in an effort to further develop the cases. In my down time I reviewed documents



such as Storm Water Implementation plans and National Pollution Discharge Emissions permits.those climate conditions.

What school did you go to? What year did you graduate?

I attended Alabama A&M University. I graduated in 2002 with a Bachelor of Science in Environmental Science and a minor in chemistry. By focusing on education without being concerned with finances, I was able to graduate Cum Laude.

What were your expectations? Were they met?

My expectations changed or evolved as I matriculated. When I began my academic career, my expectations were to get a well rounded education in environmental science and to work either as a public health or state environmental inspector. As I learned more

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ALUMNI INTERVIEW: CYNTHIA WILLIAMS (Continued)

about the environment and the many environmental issues located in my backyard and beyond, I wanted to be able to make a difference. When I learned about this Fellowship, I knew this was an opportunity to fulfill that desire. I feel that my education at Alabama A&M, along with my fellowship and internship prepared me to far exceed my expectations.

What was the most important thing you took away from your internship?

My internship gave me a greater understanding and appreciation of the environment and the work required to care for it. I also gained the ability to interpret Federal Regulations. The most important thing I learned in my internship is to be open minded and eager to learn. I found that if people see your enthusiasm for the environment and your desire to make a difference, they are willing to go the extra mile to explain a new concept or idea.

How did the internship change or develop your perspective on the environment?

My internship was an eye opening experience. I did not see the big picture of CWA Enforcement until I was able to experience all the different areas. At the end of my internship, I realized that all areas of a program work together to meet the needs of a Region. I also learned that caring for the environment is such a large task that it takes everyone working together to affect a change.

What advice would you give to future GRO fellowship classes?

My advice is work hard, learn your assigned task, and develop a passion for the environment. Back this up with knowledge and experience that will assist you in reaching your goals in the environmental arena.

What are you doing now? How did you get there?

I have a very exciting job serving as an Environmental Regulatory Specialist for the Shuttle Environmental Assurance Initiative in NASA? My job is to review new and proposed environmental, health, and safety regulations for potential impacts to the Space Shuttle Program (SSP). When a potential impact is identified, I work with all project elements of the SSP to determine the known impacts and prepare an integrated mitigation plan. This task means providing guidance to the project element on the regulation, integration of known impacts into a single document, and providing comments to either NASA Headquarters or to the regulatory agency.

My internship has played an integral part of my environmental career. My first position was with a small 8(a) woman-owned company. Part of my task was to work on small business opportunities at Region 4 EPA. It was also at this position that I first worked on NASA Marshall Space Flight Center (MSFC) Environmental documents. My next position was as an

Environmental, Health, and Safety Coordinator for another small 8(a) company located onsite at MSFC. Due to my internship at EPA, I was given additional consideration for this position because of my familiarity with government agencies. As part of this position, I was able to work directly with NASA Civil Service Environmental, Health, and Safety (EHS) personnel. When my present position became available, the connections I had formed within the EHS community were able to give a recommendation on my ability to fill the position.

Tell me one interesting fact about yourself?

I have had the honor of serving on the last four peer review panels for the GRO Fellowship Program. Realizing the great impact the GRO program has had on my career, it gives me great pleasure to give back to the program by serving on the peer review panel.

From a career perspective, what inspires you?

My inspiration comes from a number of sources. I am inspired to work hard so that my children and grandchildren will have a safe environment to live in. I am also inspired by people who believed in me enough to give me this Fellowship and Internship opportunity. I feel that I have a responsibility not to let any of these people down. Therefore, I am never satisfied with only pursuing the responsibilities that I know I can accomplish, but strive to perform beyond my abilities.

REFLECTIONS ON SUMMER 2006 INTERNSHIPS

Callie Van Koughnett

Callie interned at the EPA Region 1 Office in Boston in the Oceans and Coastal Protection Unit. Her project involved ocean water sampling and testing for bacteria and measuring the physical and biological parameters such as salinity, temperature, and oxygen content for a survey of Bassings Beach in Cohasset, MA.

"Some of the most useful and practical experience I gained involved acquiring engineering and city management know-how. I learned about different sewage systems, how storm drains and catch basins work, and more importantly how to read the maps and blue-prints on which they are depicted. And I was able to gain competence using ArcMap, the GIS mapping program used at EPA, which was probably the most complicated and frustrating part of my summer. All of these things will be useful to me at school and in a future career. Having such hands-on experiences can only make me more valuable as an undergrad and upcoming member of the work force. I was

able to draw on and apply topics and materials from my academic experience during the entire summer, which has helped me to cement the ideas that I have learned in the academic environment"

Megan Skrip

Megan interned in the Monitoring and Assessment Branch of the Region 2 EPA office in Edison, NJ. Her internship encompassed work in the office, laboratory, and field in providing direct support for the aquatic monitoring program.

INTRODUCING THE 2006-2007 GRO FELLOWS

Leah Barth

Bradley University Major: Biology

Research Interest: Microbial Functions in Wetlands and Agricultural soils

Evan Bredweg

Pacific University

Major: Environmental Biology

Research Interest: Environmental Toxicology

Megan Butler

Knox College

Major: Environmental Studies Research Interest: Environmental Conservation & Management

Frank Calvosa

Villanova University

Major: Chemistry

Research Interest: Analysis of Polybrominated Diphenyl Ethers in

Automobiles

Bianca Coley

Spelman University

Major: Environmental Studies

Research Interest: Biodegradation of RDX

Ashley DeBoard

Northern Arizona University

Major: Environmental Science

Research Interest: Water Consumption

and Scarcity in the Southwest

Christopher Green

University of Missouri at Kansas City

Major: Environmental Science

Research Interest: Effects of Kansas City's Transportation Networks on Air Quality

Corinne Kluge

Calvin College

Major: Environmental Engineering Research Interest: Antibiotics' Effects on Microbes in the Slow Sand Filtration Process

Cristal Lindell

University of Texas at San Antonio

Major: Chemistry and Biology

Research Interest: Chemical and Microbial Analysis of Hydrothermal Environments

Michael Moore

Humboldt State University

Major: Environmental Resources Engineering

Research Interest: Water Resources

and Quality

Stephanie Morris

Alfred University

Major: Engineering

Research Interest: Glass Engineering

Science and Materials Science

Ivv Ozmon

Virginia Wesleyan College

Major: Environmental Science

Research Interest: Resource Conservation

Esthesis Smith

Tuskegee University

Major: Environmental Science

Research Interest: Effect of Land Use on

the Lower Tallapoosa Basin

Eric Vanderboom

Pacific University

Major: Environmental Biology

Research Interest: Environmental Geology

Carolyn Vogt

Ursinus College

Major: Environmental Studies

Research Interest: Sustainability and

Environmental Education 💝



"My experience with the EPA has significantly broadened my knowledge base and capacity for fieldwork, providing me with a new repertoire of skills. I have become more adept at invertebrate and fish taxonomy; am more familiar with data collection techniques, protocols, and sample processing; and am capable of calibrating and operating various types of field equipment. I now possess greater practical familiarity with boats and generators, and my field agility has also vastly improved. This will benefit me greatly as I pursue a formal study involving fieldwork in graduate school, and eventually a career in

ecology. I also now have a better, and more personal, appreciation of watersheds and the effects of development upon them."

William Hardy

William interned in the Economics, Exposure, and Technology Division at EPA Headquarters in Washington D.C. As part of his internship, he helped organize the Presidential Green Chemistry Challenge Awards. He also created a report expressing concern over the importance of college students role in producing a sustainable environment for the future.

"My experience as an EPA intern has been truly a great adventure. I got introduced to corporate America and had the opportunity to discover our nation's capitol. I learned valuable lessons on the environment, chemistry, leadership, and self-management. I met many new people and made a variety of new acquaintances. It was an experience I will never forget, and I hope to use this knowledge to propel me toward an environmentallyconscious career."



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ALUMNI UPDATES

Dr. Brandon Jones (left) and Megan Mauter (right) attended and participated in the bi-annual EPA STAR Graduate Fellowship Conference in September 2006.

Dr. Brandon Jones

1990-1991 GRO Undergraduate Fellow MS Marine Science, University of Delaware, 1994 | Ph.D. Marine Science, University of Delaware, 2003 | Scientist in the **Environmental Protection Agency**

Megan Mauter

2001-2002 GRO Undergraduate Fellow BS Civil Engineering, Rice University BA History, Rice University | 2006 recipient of STAR Graduate Fellowship, Yale University, Ph.D. Environmental Engineering



FELLOWSHIP OPPORTUNITIES



Hello.

My name is Stephanie Willett and I'm the Team Leader for the Science to Achieve Results (STAR) and Greater Research Opportunities (GRO) Graduate Fellowship Programs. We would love to help you further your education by providing you with a graduate fellowship. If you are interested in pursing graduate studies, you are encouraged to apply. The STAR and GRO graduate announcements are currently posted on NCER's website. Pre-applications for these fellowships are due no later than November 28, 2006. For more information and to view the current announcements, please visit our website, www.epa.gov/ncer/fellow/.

If you have questions, contact me at 202-343-9737, or by e-mail at willett.stephanie@epa.gov.

