GRO Forum



Environmental Protection Agency Greater Research Opportunities Undergraduate Student Fellowships





Candita Woodis

In the 1800s, Chief Manuelito of the Diné (Navajo), told his people: "My children, education is the ladder to all our needs. Tell our people to take it." It was as if the Diné people were in a canyon, he said, but if they climbed up the ladder education provided, they would see into the distance and find the resources the people needed. To share those resources, educated Diné needed to return home and work for their people.

Candita Woodis, a 2002 Greater Research Opportunities (GRO) Fellow, grew up on the Navajo Nation. She was the first Navajo to receive the GRO Fellowship, and at that time, the only Native American in the program. The Navajo Nation is made up of parts of Colorado, Utah, Arizona, and New Mexico. It has a land area of more than 27,000 square miles and a population of more than 250,000. The Navajo Nation is known for its history, culture, and numerous national monuments and historical sites, including Monument Valley, Canyon de Chelly, and Shiprock.

I encourage students to be involved in science, technology, engineering, and mathematics, because as a country and a nation we need home-grown scientists and inventors.

"All my life, my parents and community have encouraged me to get an education and come back and work for the Diné people," Candita said. "Going back has been my lifelong goal." Beginning in childhood, Chief Manuelito's words were ingrained in her by her parents, teachers and the Navajo media.

Candita experienced first-hand the environmental challenges facing the Navajo people. Jobs have been and still are scarce, and the Diné must weigh supporting their families against concern about the environment. Many Navajos, including Candita's father, worked as uranium miners,

and Candita saw the unfortunate effects of mining on her father, her community, and the land. "It was unnecessary for those miners and the environment to suffer," she said.

When Candita realized that few Navajos pursued educations in science, technology, engineering, and mathematics, she found a unique way to support both her community and environmental education. "I became very interested in scholarships and fellowships because they helped me graduate from college," Candita said. "I took the path of encouraging students to attend college by helping them with scholarship funding and encouraging them to go into environmental fields."

Candita recently began work as the senior financial aid counselor for the Office of Navajo Nation Scholarship and Financial Assistance (ONNSFA), which provides need-based financial aid to help eligible Navajo people attain their educational goals, under the condition that they bring their learning back to their people. Candita performs outreach to spread the word on available scholarships, and counsels and advises students. "I enjoy helping others achieve a college education with minimal to no debt," she said. "I encourage students to pursue degrees that they will enjoy, and where they can serve a purpose and always be needed."

As a GRO Fellow, Candita earned a Bachelor's degree from Arizona State University and a Master's from The University of Arizona. As for her GRO internship in Atlanta, GA, Candita recommended, "GRO Fellows should consider doing their internships far from home so they can experience a new city and learn about new environmental issues. It's good to be informed of local issues, but there are global issues that are affecting all of us."

In the long term, Candita hopes to get a Ph.D. and to continue helping her people. "I'd like to be involved in a project to help everyone in my community have an affordable green home," she said, "and to make homes available for individuals who have achieved their educational goals when they return." She would also like to see the Diné consider green technologies. "The Navajo Nation needs to explore green energy," she said. "We have the land and resources for wind and solar power."

GRO-ing opportunities

The last issue of the GRO Forum featured Ciarra Greene, a 2010 GRO Fellow from Northern Arizona University, Flagstaff, AZ, who was invited to participate in the 2011 Society of American Indian Government Employees (SAIGE) Conference, in Tulsa, OK. Here's an update on Ciarra's experiences at the SAIGE Conference and during the Summer Internship.

Overall, this summer has been eye opening! I've made lifelong relationships, acquired skills that I can use in a variety of settings, and discovered new fields of study that will help me achieve my own personal goals.

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At the SAIGE conference, Ciarra networked with numerous American Indians active in the Federal Government, including Larry Echo Hawk, the Assistant

Secretary-Indian Affairs in the Department of the Interior. "This network of professionals provided words of encouragement, advice on academics, career opportunities, and basic life lessons," Ciarra said. Ciarra, a member of the Nez Perce tribe, participated in the SAIGE Youth Track with 30 students from the U.S. and Canada. "We all valued the heritage and the traditions we relate to," she said. "We formed a 'family' that shared our struggles and achievements and will continue to support each other through our life journeys."

Also this summer, Janice Whitney, the Regional Indian Program Coordinator in EPA's Region 2, invited Ciarra to attend Tribal Consultation Training at Region 2 Headquarters in New York City, where Ciarra gave a short presentation on challenges of working with tribes in both the Southwest



and Northwest. "Ciarra offered some very informative and passionate remarks to the audience – she left an indelible impression," Ms. Whitney said. "I believe she will make very significant and substantive contributions on behalf of her nation in any field she chooses to pursue."

Ciarra's EPA internship hosts in Edison, NJ, Randy Braun and Helen Grebe, generously accommodated her trip to the SAIGE Conference and other opportunities. Ciarra worked with the Helicopter Monitoring Program, assessing "floatable" debris in the New York and New Jersey Harbor Complex. "Flying in the helicopter every day was not only invigorating, but also full of responsibilities," she said. Ciarra learned observation techniques, flight safety, emergency procedures, and survival techniques. She also did water sampling from the helicopter and water quality analyses back in the lab.

Fellows' reflections - summer 2011 GRO internships

I could not have asked for a more perfect project for me than the National Wetlands Condition Assessment. I cannot wait to find out what all these data mean and how we can use them to protect and conserve these amazing ecosystems.

Melinda Hopper ▶

Getting to my study plots proved tricky, as mud flats generally happen to be muddy. I managed to get myself stuck in the mud past my knees a couple times, only to be saved by my trusty field partner with either an oar or a bucket to dig me out. Though I'm not sure if coastal ecology is what I want to do, I gained a lot of knowledge on a new topic and definitely enjoyed my time exploring the marshes of the Pacific Northwest.

Rachel King ▶





I am incredibly thankful to have been afforded the opportunity to develop my own set of wings under the guidance and mentorship of EPA; the Mid-Continent Ecology Division provided an experience and an atmosphere which nurtured and fostered my interest in a positive way.

Jonné Woodard ▶

I now have tangible fruits of my summer labor from which I can build my resume for graduate school and/or job applications.

Justin Paul ▶





Introducing the 2011-2013 GRO Fellows

Holly	And	lrews
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Miami University,

Oxford, OH

Mackenzie **Billings**

California Polytechnic State University

San Luis Obispo, CA

Jacquelyn Blake-**Hedges**

College of William and Marv

Tvler Bleeker

Calvin College Grand Rapids, MI

Gina Chaput

University of New Hampsnire Durham, NH

Kevin Chen

ic Institute ot NYU Brooklyn, NY

Hannah Coe

St. Mary's College of Maryland

St. Mary's City, MD

Carlos Cruz-Quinones

University of Puerto Rico-Rio Piedras

San Juan, PR

Nicole D'Alessio University of New

Hampshire

Durham, NC

Clarice Esch

Williamsburg, VA

Western Kentucky University Bowling Green, KY

Amy Fischer

Arkansas State University Jonesboro, AR

Daniel Fultz

Alderson-Broaddus College Philippi, WV

Brendan- Michael Galloway

State University of New York Syracuse, NY

Jairo Guerrero

University of Wisconsin-Parkside Kenosha, WI

Aiden Irish

University of Portland Portland, OR

Jessica Johnson

Salisbury University Salisbury, MD

Ravin Joseph

Post University Waterbury, CT

Kimberly Kiser

Appalachian State University Boone, NC

Maxwell Lehner

Ursinus College Collegeville, PA

Deirdre **MacFeeters**

Ursinus College Collegeville, PA

Cara Mayo

Juniata College Huntingdon, PA

Brian McConnell

University of New Hampshire

Lisa McLaughlin

Texas A&M University-Kingsville Kingsville, TX

Kelsey Morgan

Juniata College Huntingdon, PA

George Osei

Alcorn State University Alcorn State, MS

Elizabeth Peters

The University of Alabama Tuscaloosa Al

Tiana Ramos

Wellesley College Wellesley, MA

Andrew Reighart

St. Mary's College of Maryland St. Mary's City, MD

Tiorra Ross

Durham NH

Howard University Washington, DC

Royanne Sanderson

University of Maryland-Baltimore County

Emily Seelen

Gustavus Adolphus College St. Peter, MN

Jared Smith

Clarkson University Potsdam, NY

Tyanna Smith

Portland State University Portland, OR

Katie Steele

Texas State University-San Marcos San Marcos, TX

Laura Terada

Loyola Marymount University Los Angeles, CA

Nessly Torres

The University of Texas at El Paso

El Paso, TX

Cory Ventres-Pake

Mount Holyoke College

Baltimore, MD

South Hadley, MA

David Wallace

Oklahoma State University Stillwater, OK

Brooke Weigel

St. Olaf College Northfield, MN

Catherine Wise

University of Southern Maine

By traveling to a new location I am content with saying I accomplished more in these 12 weeks than I have ever done with any other summer both in research and personal experiences.

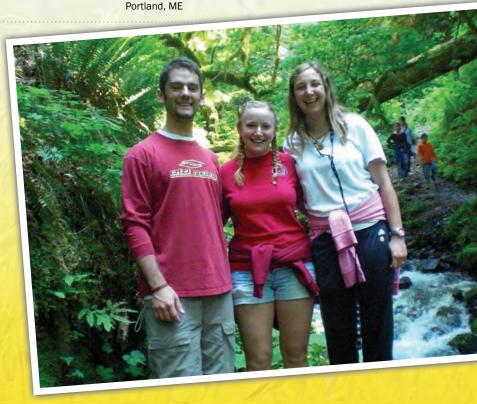
Tom Langer ▶

The other interns I met while in Corvallis are now close friends who I intend to see again and hopefully even have the chance to collaborate with professionally in the future. It was a phenomenal networking opportunity as well as one of the most mentally stimulating experiences I've had.

Allison McAtee ▶

Not only did I learn countless professional skills this summe working at the EPA but I also had a ton of fun while doing it! One of the things I most enjoyed was the exposure I got to the different kinds of research being done and interacting with other employees.







United States Environmental Protection Agency

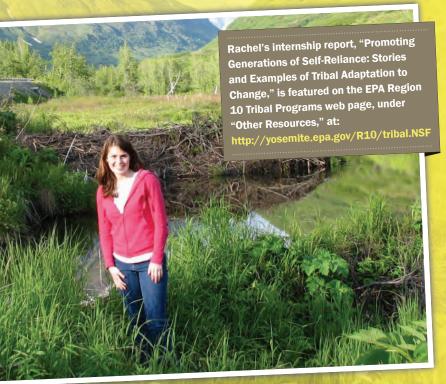
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I was able to travel to the Alaska office in Anchorage during my summer internship and meet with organizations and tribal members, learning about their work and perspectives on environmental degradation and community adaptation. It was a privilege to meet with tribal Elders and to hear their wisdom and knowledge of the world around them.

Rachel Lamb ▼



Green building design and analysis is an area that I had found interesting for some time and the completion of this internship has made me realize that I definitely would like to pursue this type of work at the graduate level.

Janique Cheesman ▶

I was proud to see that this EPA facility in Athens was walking the walk of environmental stewardship and its pursuit of human health.

Tradd Cotter ▶



