

# GRO Forum

Greater Research Opportunities Undergraduate Student Fellowships

## Where are they now? GROing and Learning

AUGUST, 2014

The 2013 Greater Research Opportunities (GRO) Fellows are having productive and fun summers as they complete internships at EPA facilities around the nation. A few of the Fellows volunteered to tell the *GRO Forum* a little bit about themselves for this issue.



ADELINE DUTTON

**Adeline Dutton** attends Lake Superior State University, Sault Ste. Marie, Mich., where she majors in fisheries and wildlife management with a minor in marine and freshwater sciences. Fisheries are important both ecologically and economically, she notes; she likes studying the interface between the two. Addie enjoys the outdoors, spending her free time fly fishing, kayaking and mountain biking. "The environment must be protected in order for the next generation to enjoy the exquisite beauty that I enjoy today," Addie says.



ERIN SMITH

**Erin Smith** chose to major in environmental and marine science at Virginia Wesleyan College, Norfolk, Va., so that she could study human impact on the environment and its ultimate effect on wildlife. "I hope to use this knowledge to find ways to mitigate these impacts and to protect and preserve marine habitats along the Atlantic coast," says Erin, who has a particular interest in research and conservation of marine mammals, especially whales. Erin is an amateur wildlife photographer and volunteers with wildlife rescue and rehabilitation organizations.





**JAIRO LUQUE VILLANUEVA**

In Mexico City, access to clean water isn't consistent, says **Jairo Luque Villanueva**. "When I was growing up, we had a water reserve tank," he says. Through his family's experience, Jairo developed an interest in water scarcity. He currently studies wastewater treatment technology at Humboldt State University, Arcata, Calif., as an environmental engineering major. Jairo is active in organizations promoting science in Native Americans and Chicanos, and is also a member of his school's Aztec dance troupe.

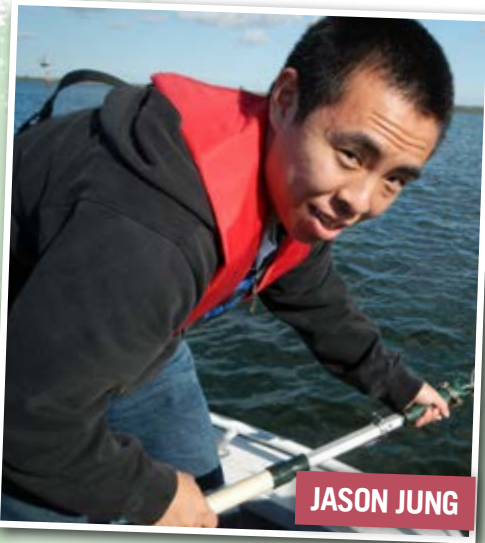


**JEWEL LIPPS**

pollution," he says. Jason's love of the outdoors is reflected in his hobbies of hiking, cycling, skiing, camping and playing sports.

**Jessica Zielinski** has childhood memories of spending time in nature with her parents, including a memorable hike involving a bee hive and two dogs. She also helped her mother pick up litter in their neighborhood. "As I grew older and more informed, I saw that the environment that I had so enjoyed growing up – and still do today – was in need of more than litter patrol," says Jess, who's studying sustainability at the University of New Haven, New Haven, Conn. "I feel it's imperative that we learn to live in balance with the natural rhythms of our planet, as opposed to throwing these systems off kilter," she notes.

To **Jewel Lipps**, studying environmental science is like being a modern-day explorer. "I want to understand the scientific processes behind the natural world and extend that knowledge to developing ways for humans to live with less environmental impact," she says. Jewel attends Southern Methodist University in Dallas, Texas. Her environmental consciousness extends to her hobbies – she enjoys upcycling old materials into new things like quilts and stuffed animals.



**JASON JUNG**

**Jason Jung** credits experiences as diverse as becoming an Eagle Scout, taking an engineering technology class in high school, and interning at a solar company as influences on his choice to study environmental engineering at the University of the Pacific, Stockton, Calif. "We need to care about the environment more because we are using up our natural resources, which is also causing a lot of



**JESSICA ZIELINSKI**



# SUMMER 2013 GRO INTERNSHIP PROJECTS

**Brittany Beebe**  
Effects of Macroalgae  
Blooms on Ecosystem  
Service Production  
in Pacific Northwest  
Estuaries  
Newport, Ore.

**Lori Bothwell**  
Environmental Issues  
in the Pacific Islands  
Honolulu, Hawaii

**Lauren Carlson**  
Green Chemistry  
Washington, D.C.

**Katherine Corcoran**  
Greenhouse Gas  
Public Outreach and  
Notification  
Dallas, Texas

**Emily Crossette**  
Green Infrastructure  
Modeling Study  
Athens, Ga.

**Adeline Dutton**  
Lake Blue-green  
Algae and Algal Toxins  
Study  
Golden, Colo.

**Paul Fleischmann**  
Evaluation of Mercury  
Source Reduction  
Measures on Mercury  
Loads in the Great  
Lakes  
Chicago, Ill.

**Marissa Giroux**  
Genomic Indicators of  
Chemical and Other  
Stressors  
Narragansett, R.I.

**John Gurak**  
Marsh Crabs: Friend  
or Foe of Coastal  
Wetlands?  
Narragansett, R.I.

**John Haugland**  
Evaluating the  
Environmental  
Efficacy of Biochar  
Corvallis, Ore.

**Amanda Holmes**  
Brownfields  
Strategic Program  
Development:  
Communication &  
Resource Leveraging  
San Francisco, Calif.

**Jason Jung**  
Sustainable Water  
Infrastructure  
San Francisco, Calif.

**Rachael Korinek**  
Solution-oriented  
Cumulative Risk  
and Near-source Air  
Quality Assessments  
Philadelphia, Pa.

**Elizabeth Lipps**  
Biogeochemistry of  
Peatland Ecosystems  
Duluth, Minn.

**Jared Lobbstaal**  
Understanding Clean  
Water Act Jurisdiction  
in South Fairbanks,  
Alaska  
Seattle, Wa.

**William Lutterman**  
Monitoring and  
Assessment of  
Surface Water Quality  
in the South Platte  
Urban Watersheds  
Denver, Colo.

**Nelson Malone**  
Environmental  
Justice Community  
Impact Assessment &  
Outreach Project  
Atlanta, Ga.

**Alexander Moix**  
Synthesis and  
Testing of Materials  
for Drinking Water  
Treatment  
Cincinnati, Ohio

**Manelisi Nhliziyo**  
The Impact of Water  
Treatment on Algal  
Toxin Reduction  
During Harmful Algal  
Blooms  
Cincinnati, Ohio

**Daniel Pasquale**  
Understanding the  
Impact of Oyster  
Reef Restoration  
& Aquaculture  
on Denitrification  
Rates & the Benthic  
Community  
Narragansett, R.I.

**Garret Price**  
National Rivers and  
Streams Assessment  
of Reference Waters  
in Region 7  
Kansas City, Kan.

**Alma Ramirez-  
Velez**  
Marine Debris Source  
Reduction Projects  
San Francisco, Calif.

**Serina Robinson**  
Integrated  
Toxicological  
Approaches for  
Assessing the  
Ecological Risks of  
Pharmaceuticals  
Duluth, Minn.

**Trey Saddler**  
Storm Water, Salmon  
and Tribal Trust: the  
Pacific Northwest at  
Its Best and Worst  
Seattle, Wash.

**Tia Scarpelli**  
Understanding How  
Weather Affects  
Infrared Imaging of  
Oil and Natural Gas  
Emissions  
Denver, Colo.

**Clint Slocum**  
Improving Use of  
Biological Indicators  
for Environmental  
Management  
Narragansett, R.I.

**Erin Smith**  
Life Aquatic  
Wheeling, W.V.

**Mark Vater**  
Functions and Values  
of Alaskan Wetlands  
Seattle, Wash.

**Peter Ventres-Pake**  
Evaluating Wetland  
Denitrification Rates  
and the Relationship  
to Soils in the Pacific  
Northwest  
Corvallis, Ore.

**Jairo Luque  
Villanueva**  
EPA Relevant  
Work in 26  
Southern California  
Congressional  
Districts  
San Diego, Calif.

**Dyrian Wandick**  
Microbiological  
Treatment of Drinking  
Water for Pesticide,  
Nitrate and Ammonia  
Removal  
Cincinnati, Ohio

**Jessica Zielinski**  
Advancing the  
Adoption of  
Sustainable Water  
Infrastructure and  
Green Infrastructure  
as Tools for Climate  
Change Adaptation  
Chicago, Ill.

**Tabea  
Zimmermann**  
Identifying and  
Preventing Nutrient  
Impairments in  
Pacific Northwest  
Estuaries  
Newport, Ore.



**LAUREN CARLSON**

"I'm encouraged to learn about the environment and mankind's interactions with it, as there is no mankind without the environment," says **Lauren Carlson**, a chemistry major at Loyola Marymount University (LMU), Los Angeles, Calif. She's also committed to serving her community through education and outreach about agricultural practices and by advocating for food justice. While Lauren considers her education and environmental advocacy to be a cornerstone of her

life, she also pursues an interest in international affairs through study abroad and service trips and dances in LMU's dance crew.

**Nelson Malone**, a chemistry major at Howard University, Washington, D.C., is interested in the relationship of the environment and human health. "I realize the immense impact of the environment on health and the detrimental consequences of our habits," he says. Nelson hopes to contribute to increasing awareness and improving environmental conditions by studying medicine and public health. Nelson is an active volunteer, helping his fraternity plan and raise funds for a dance marathon to benefit a children's charity and participating in a service trip to Ghana.



**NELSON MALONE**





**United States  
Environmental Protection  
Agency**

Office of Research  
and Development (8723P)  
Washington, DC 20460

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"Humans have made massive impacts on the natural world," notes **Roby Ventres-Pake**, who attends Western Washington University, Bellingham, Wash. "Through studying environmental science, I'm gaining tangible tools to solve the problems we've created around us," he says. Roby, a passionate cyclist, recently put more than 1,200 miles on his bike, pedaling from San Salvador, El Salvador, to Panama City, Panama, during a study abroad trip devoted to botany.

**ROBY VENTRES-PAKE**



**TABEA ZIMMERMANN**

"Learning how humans may best interact with and adapt to our changing environment is crucial for our quality of life and longevity on this planet," says **Tabea Zimmermann**, an environmental science major at Dickinson College, Carlisle, Pa. She hopes to use her education to educate people on human impacts on the earth and to develop just and sustainable ways for humans to best live in the environment. Tabea spends time outdoors "running up hills and through mud puddles" as a member of her college's cross-country team.