
CIARRA S. GREENE

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Natural & Cultural Resources
Environmental Science & Education
Traditional Ecological Knowledge
Community Engagement

Bachelor of Science in Chemistry • Northern Arizona University • Cumulative GPA: 3.47 /4.0
Master of Science in Science Teaching • Portland State University • Cumulative GPA: 3.93 /4.0

Portland State University

National Science Foundation (NSF) Graduate Research Fellow,
2015-present

Evaluating the impact of integrating traditional ecological knowledge in science summer camp curriculum on Native American students' understanding of the nature of science; developing partnerships with tribal camp coordinator and communities; identifying and integrating components of traditional ecological knowledge (TEK) and the nature of science (NOS) in collaboration with camp coordinators and presenters; developing quantitative and qualitative evaluation methods.

Wisdom Workforce Development, LLC

Program Coordinator, January 2015- September 2016

Developing and delivering workforce development training and support to Native Americans pursuing careers in environmental services; developing a culturally tailored multimedia training plan that includes skills training for workforce team pursuing education and career opportunities in the environmental field; utilizing Wisdom's educational model to plan specialized training modules for workforce team; recruitment and retention for workforce staff; developing workforce opportunities by securing contracts with federal, state, and local agencies; coordinating and leading site assessments and restoration activities with traditional ecological values as a foundation; and supporting environmental career pathway planning.

Wisdom of the Elders, Inc.

Curriculum Developer/Educator, January 2015- September 2016

Conceptualizing, developing and updating "Discovering Yidong Xinag" curriculum to be implemented at the Beaverton School District Highland Park STEM School in April 2015, Wisdom Summer Science Camp, and Wisdom Saturday Academy. (The curriculum is Wisdom's educational model which is culturally tailored curriculum compatible with Native American learning styles, incorporating storytelling, films, inquiry-based STEM activities, and aligned to Next Generation Science Standards.) Delivering professional development training to teachers and peer mentors; specific qualitative assessments to students; and evaluate programming through feedback and pre/post surveys.

Nez Perce Tribe (NPT) Lapwai, ID

Water Resource Specialist, October 2013- October 2014

Coordinator and manager of an EPA grant to develop a Watershed Based Plan for the Upper Lapwai Creek Watershed in north-central Idaho. Water quality sample collection and analysis, inter-agency communication and collaboration, outreach and education, distribution of project site questionnaires to the tribal population and employees, compilation of previous conservation project information and water quality data, and development.

Wetlands Field Assistant, May 2013-September 2013

Assist in identifying and delineating wetlands, conduct plant community surveys, maintain wetland inventory and database, provide cultural/traditional ecological knowledge, and serve the NPT Water Resources Division in a variety of capacities as needed. Also, served as the interim Wetlands Program Manager for nine months, further developing the Wetlands Program to focus on resource preservation and restoration with emphasis on wetlands as a cultural resource.

Arizona Science Center; Phoenix, AZ

Program Staff, September 2012- May 2013

Facilitating a fun, enjoyable, and safe program experience for children by leading them through games, activities, experiments and investigations; and setting up program areas for activities and cleans up after activities.

STEM Club/ Camp Instructor, September 2012- May 2013

Deliver STEM activities for children at 4th -8th grade levels; maintain communications with the STEM Community Programs team, Manager, and assigned assistant; contribute to project blog after each club; deliver and organize supplies at the sites. Keep attendance records for the sites; and facilitate a STEM Family night at each assigned site as assigned.

American Indian Science and Engineering Society (AISES)

AISES National Student Representative,
October 2012- November 2014

Serve as liaison for Regional Student Representatives, AISES Headquarters, AISES Professional Chapters, and Circle of Elders; serve as a member of the AISES Board of Directors and committees; improving AISES outreach components, programs management, and student services; and fulfilling role in National, Regional, and Leadership conference sessions and meetings.

AISES Region 3 Student Representative, March 2010- March 2012

Serve as Regional Liaison to Chapters in the region, communicate with National Representatives, and AISES Headquarters, disseminate and collect information pertaining the region, ensure Chapter compliance with AISES HQ requirements, and be involved in planning of and carrying out the annual Regional Conference and annual Leadership Conference.

Northern Arizona University Flagstaff, AZ

Undergraduate Researcher:
EPA- Greater Research Opportunities Fellowship 2010-2012;
NSF- Undergraduate Mentoring in Environmental Biology Program 2008-
2010; NSF 2007

Investigating a naturally occurring, metal-chelating biosurfactant, rhamnolipid, and heavy metals (specifically lead and uranium oxides), aiming to quantifying the effect of rhamnolipid presence on the solubility of the heavy metals and gain an understanding on the prospective application for bioremediation. Extensive utilization of the Inductively Coupled Plasma- Mass Spectrometer and handling of high purity and radioactive chemicals.

Environmental Education Outreach Program (EEOP), September 2007- May 2010

Using applied science to interest Native American students in environmental fields and to assist schools in improving environmental science literacy. This program consisted of Saturday Academy activities, Science Day activities, competitions, science fairs, and other various activities.

Institute for Tribal Environmental Professionals- NPT Air Quality Intern, May- August 2008

Air monitoring data collection and calculations, maintenance and verification of instruments/equipment, and attend air related trainings. Additional tasks included assisting with outreach and education materials for K-12 students and local communities.

Environmental Protection Agency (EPA) Edison, NJ

Helicopter Monitoring Program Summer Intern,
May 2011-August 2011

Aerial observation of floatable debris in the New York/New Jersey Harbor Complex that pose a health/safety hazard to the surrounding beaches and waterways, is reported to the United States Army Corps of Engineers (debris), and/or the United States Coast Guard (oil sheens). The Long Island Water Quality Sampling (26 sites) and the New Jersey Phytoplankton Sampling (16 sites) were completed biweekly via helicopter, to fulfill commitments of the National Shellfish Sanitation Program. Other tasks include microbiology laboratory analyses of water quality, including enterococci analyses.

NPT Environmental Restoration and Waste Management; Lapwai, ID

Hanford Technical Intern, July 2008- May 2012

Integrating science and traditional knowledge to develop educational plans for K-12 teachers regarding the relationship between Hanford Nuclear Reservation and the Nez Perce Tribe.

Preparing for Academic Excellence (PACE) Camp College Counselor/Mentor, July 2007-2010

Assisting 7th and 8th grade students with homework and assignments, presenting science related lessons and concepts by hands-on examples, and supervising during daily science field trips for a two- week long math and science camp.

Community Involvement and Volunteer Activities

- SHIFT Emerging Leaders Program; Fall 2016, Winter 2017- participant of culturally diverse cohort of young professionals with common goals in conservation, outdoor recreation, and cultural relevancy.
- Native American Community Advisory Council (Portland Parks and Recreation, Metro); 2015- present- provide information about Native cultures, lifeways, and values, and advise and collaborate about park development, management, and projects to include the importance of spiritual and cultural connection to heritage.
- American Indian Science and Engineering Society; November 2014- present- Council of Elders helper for coordinating elder communications and travel for National Conference and Leadership Summits; general pre-conference volunteer
- American Fisheries Society; March 2016- Oregon Chapter Meeting (conference volunteer); August 2015- Annual Meeting (pre-conference volunteer)
- Inter-Tribal Youth Climate Leadership Congress (Bureau of Indian Affairs, US Fish and Wildlife); July 2016- Junior Faculty to facilitate the development of the climate change leadership skills of youth participants, create a supportive learning environment, and provide informal mentorship.
- National Indian Education Association Convention; October 2015- pre-conference volunteer
- Portland Community College WACIPI Sixteenth Annual Traditional Powwow; January 2015, 2016- assisted with 50/50 raffle sales and directing attendees
- Yo Gabba Gabba-Live partnered with REVERB; November 2014- an organization dedicated to engaging young children and families about living more sustainably at home.
- McCall Outdoor Science School and University of Idaho's Upward Bound Program; July 2014- presenter/mentor for Native American high school students with focus on wetlands, water, and plants.
- "Ice Cold Free Water" to the less fortunate in Downtown Phoenix; summer 2012
- Arizona Science Lab; summer 2012- Assist in teaching science/engineering lessons to 3rd -8th grade students.
- National American Indian Science and Engineering Fair (NAISEF); 2011- Manage registration, judge preparation, student monitoring, and coordination of Science Bowl
- AISES Sequoyah Fellow; 2009- Lifetime commitment/member to AISES and financial contribution
- Project WET: Flagstaff Water Festival; 2008, 2009- Guiding students and leading workshop stations
- Northern Arizona Sustainable Living Fair; 2008- Supervised children's activity area
- Lewiston Little League; 2007- 2009- Girls Softball Assistant Coach
- Grand Canyon Trust; 2007- 2011- Park and trail restoration
- NAU Yellow Bike Program; 2007- 2008- Restored, tuned, and painted bikes for release on the NAU campus
- 4H Community Pride Project; 2004- 2007- Lapwai City Park Restoration, County Road Cleanup, NAIA Baseball 50/50 Raffle Tickets, Flood Victim Relief Dinner, Sent Care Packages to Soldiers in Iraq