CONNECTIONS

Linking EEO, Diversity and Science

Issue #33 | EEO/Diversity Newsletter for NOAA Research | NOVEMBER 2016

ESRL and Howard University Build Bridge to the Future

by Susan Cobb, ESRL/GSD

NOAA leadership has committed to greater diversity and a culture of inclusiveness within NOAA. To support this effort, ESRL invited faculty and students from Howard University to visit NOAA Boulder on September 19-20, 2016, to build foundational relationships and to foster and expand engagement with ESRL scientists and programs. Howard University is a Historically Black College and University (HBCU) and the lead institution of the NOAA Cooperative Science Center NCAS (NOAA Center for Atmospheric Sciences).

During the two-day event, Dr. Vernon Morris, Professor in the Department of Chemistry and the Director of the Atmospheric Sciences Program at Howard University, showcased the NCAS research portfolio and several of their students. “I also wanted to expose the NCAS students to the research capacity and intellectual capital at ESRL,” he says. “True success would be having our students be seen as a valuable talent pool for present and future contributors to NOAA’s scientific mission.”

Photo: Howard University Students with Dr. Vernon Morris (center) and Melinda Marquis and Jennifer Mahoney (far right) Photo by Will Von Dauster.

Participating students included Keren Rosado, Jia-Fong Fan, Emily Saunders, Daniel Yeager, and Megan Payne, doctoral candidates in the Howard University Graduate Program in Atmospheric Science (HUPAS), which is a part of NCAS. Cassandra Shivers is a doctoral candidate in the Psychology Department at Howard University.

The agenda included introductions to each ESRL Division, a tour, and presentations by each student on their research. On the second day, Howard visitors and ESRL staff were divided into breakout groups for focused discussion. Both students and researchers summarized their key areas of research and identified overlapping interests. These fruitful discussions resulted in many areas of collaboration moving forward, including one student attending a National Academy of Sciences meeting with a GSD researcher this week.

(continued on page 2)

Howard University Students Visit ESRL (con't)

Photo: Cassandra Shivers gives her presentation on the Psychological and Social Factors in Decision-Mkaing in the Face of Disasters, Severe Weather and Health Threats. Photo by Will Von Dauster.

"Overall, the students were impressed with the facilities and excited about the possibilities of collaborating and working with ESRL scientists," says Dr. Morris. "It was an excellent networking opportunity but beyond that, the visit both inspired them and also helped them better understand the relevance of their research in several cases."

Looking ahead, both groups hope to expand the partnership. "We will continue to work on ways to initiate student exchange, intellectual cross-fertilization, and collaboration that will yield measurable results in the coming months," says Dr. Morris.

An article was also featured on the NCAS website:
http://ncas.howard.edu/media/ncas-fellows-and-director-visit-noaas-earth-system-research-laboratory-in-boulder-co/

8th Biennial Education and Science Forum - A lasting Impression

The NOAA Educational Partnership Program with Minority Serving Institutions (EPP/MSI) hosted their 8th Biennial Education and Science Forum with the NOAA Cooperative Remote Sensing Science and Technology Center (NOAA-CREST) August 28-31 at the City College of New York.

Photo: Left to Right: Bill Parker, NWS, VADM Manson Brown, Whit Anderson GFDL and DaNa Carlis, OAR

OAR AA Craig McLean participated in the plenary, *Advancing NOAA-Mission STEM fields through Education and Research Collaborations: Building on a Successful 15-Year Partnership with Minority Serving Institutions* which was also the theme for this year's forum. The panel highlighted the contributions of NOAA's Cooperative Science Centers (CSC) to NOAA science. NSSL Deputy Director, Lans Rothfusz, and Bob Rabin, meteorologist, participated as science judges and staffed an exhibit booth where they established several new contacts with students interested in research opportunities at NSSL. Catalina Martinez, OER, gave her presentation "Equity through inclusion: Increasing the potential for minority success in majority settings" which generated positive feedback. Her workshop focused on the issues, challenges, and barriers minorities can face in majority environments. One student said she wished her workshop kicked off the Forum to set the tone, and another said it was the best workshop of the Forum and wished it could be shared through a webinar for other faculty and students. Catalina also served on the planning committee for the Forum and co-chaired the Student Engagement Committee. GFDL Deputy Director Whit Anderson also attended the forum. He said, "The quality of the work and science on display was astounding. Interacting with the students and experiencing their excitement made a lasting impression on me. I look forward to enhancing our efforts in increasing our diversity and at the same time improving our science by broadening our interactions with EPP/MSI and NOAA-CREST."

Integrating Diversity and Inclusion into NOAA's Mission

By DaNa Carlis and Adrienne Antoine, OAR

On October 25-26, NOAA held the first annual Diversity and Inclusion Summit in Silver Spring, MD. The Summit attracted nearly 400 NOAA employees who actively engaged in a series of sessions focused on understanding best practices for Diversity and Inclusion (D&I) and outlining next steps for NOAA's Diversity and Inclusion Strategic Plan (D&ISP).

Dr. Kathryn Sullivan, NOAA Administrator, set an enthusiastic tone for the day by providing a keynote speech that reminded us how far we've come over the last year and ensured participants that this summit is a safe space to share our ideas and values. Dr. Sullivan reminded the audience that coming to work every day can be a challenge for those that don't feel a sense of inclusion and belonging. She closed with, "We do right now have more focus and momentum on this subject across NOAA...today and tomorrow are about deciding if we want to grow, expand, and deepen this or let it dissipate. I hope and pray the answer is to grow this forward."

The day progressed quickly with engaging sessions in the 5-Levels of Leadership by Chris Fuller who opened his session with John Maxwell's quote, "Everything rises or falls on leadership." Chris took the audience through the basics of John Maxwell's theories on leadership and the importance of the 1st line supervisor to retaining top talent in any organization.

Next, Bruce Stewart, formerly of the U.S. Office of Personnel Management (OPM), provided excellent insights on managing D&I. He intricately linked leadership with diversity and inclusion and requested that NOAA closely examine how organizational culture can lead to more creative solutions and foster more inclusive methods to achieving our mission. A tip for a more inclusive environment that Mr. Stewart asked the leaders to consider is to think past their normal "go-to" person when assigning the next big task for the organization.

The end of the first day featured a Q&A session led by Ben Friedman, NOAA Deputy Under Secretary for Operations, and all Line Office leaders. The key takeaway from this session was that everyone on the leadership team

Photo: Dr. Sullivan's opening keynote address.

committed to carrying the torch of diversity and inclusion through transition and making this a priority for the next administration.

Day two began with a session focused on seeing diversity and inclusion efforts in action. Five representatives from NASA presented their techniques and experiences addressing issues and integrating policies around diversity and inclusion. Dennis Andrucyk, NASA Deputy Associate Administrator of the Space Technology Mission, shared his own personal experiences and his approach to supporting D&I as a manager there. Hearing the issues, successes and techniques of another agency working to support D&I was extremely useful and provided a foundation for the final session of the summit.

For the final session, participants were divided into three teams that aligned with the goals outlined in the NOAA D&ISP. Using a facilitated process, participants worked to help outline next steps to implement the NOAA D&ISP. Having the perspectives of different line offices, staff offices, as well as representation from the field locations, headquarters and downtown, NOAA viewpoints were well represented.

This summit provided the necessary foundation for NOAA to bring together colleagues in a focused conversation on how NOAA will move forward on integrating D&I into the agency's mission.

OAR/OER: YWCA Rosie's Girls Campers

Photo: YWCA Rosie's Girls campers experience live skates while learning about URI/GSO research. Note the tray of skate eggs and tiny baby skates in the foreground!

On July 8, Catalina Martinez, Nikolai Pawlenko, University of Rhode Island (URI) personnel, and volunteers hosted 40 campers from the YWCA Rosie's Girls summer program at the URI Graduate School of Oceanography (GSO). The girls were all 11-13 years old from urban areas around Rhode Island, and most were from groups underrepresented in STEM. With the motto of 'Eliminating Racism, Empowering Women', the YWCA started this six week program in Providence to help build confidence in young girls and to introduce them to careers and educational opportunities they may not have considered.

The camp is named after Rosie the Riveter, the cultural icon from World War II who represented women in the industrial workforce who filled enormous labor gaps created by widespread enlistment of men during the war.

The objectives of the visit were to expose the girls to the marine environment and to the excitement of ocean exploration and STEM careers. Catalina carved out an itinerary that included an interaction with Julie Bersek, NOAA, and two female interns sailing on the E/V Nautilus live from the URI Inner Space Center; an introduction to marine animals and research at GSO; learning about microfossils in Dr. Becky Robinson's lab; and then a trip to the GSO beach for a fun shore field program. All in all, this enthusiastic group of young ladies got to experience science and nature in action, and gained exposure to a multitude of different women in various ocean science careers. The day was a great success (albeit a bit chaotic at times!), and could not have happened without the efforts of many individuals and organizations on and off campus who helped broaden the campers perspectives on life/career options in significant ways – while having heaps of fun!

GLERL: "Habitat Musical Chairs"

On September 22-23, 2016, GLERL employees Nicole Rice and Steve Pothoven participated in the Muskegon 3rd Grade Water Festival. They spent two days with about 500 3rd graders from Muskegon, MI area schools. This was the third year for the event, and GLERL has participated each year. Each class goes to four stations highlighting a different aspect -water quality, human use, aquatic habitats, and water cycle/properties. GLERL's station highlights the food web and the impact of invasive species. The kids played a game of "Habitat Musical Chairs" where the invasive fish always beat out the native fish. The students and teachers also got to see, touch, smell, and learn about the Lake Michigan food web. It included the opportunity to use a microscope and discover some of the tiny creatures that are living in our lakes.

Photo: Steve Pothoven is shown in the background of this picture, along with a teacher and some students. A student discovers "babies" while comparing a vile of larval perch with the live perch in the tank on the table.

PMEL – Engaging Students in Oceanography at the NOAA Science Camp

Over the course of two weeks, 21 PMEL volunteers, including five Hollings Scholars helped out NOAA's Science Camp in Seattle, WA, July 11-22. PMEL staff participated in hands on activities with middle school students that taught them about ocean sampling techniques and tools, ocean circulation, and what it's like going out to sea. Staff dedicated on average of six hours throughout the two weeks to interact with the students and engage them in oceanography.

NOAA Science Camp offers two five-day camps sessions, each attended by approximately 50 middle school campers. This year, NOAA's Cooperative Institute at the University of Washington, Joint Institute for the Study of the Atmosphere (JISAO), provided financial support for 20 students from Showalter Middle School in Tukwila, WA. This school has a diverse student body with Asians, Hispanics and African Americans making up the majority of the student body.

NOAA Science Camp also hosted two campers (one camper and one Junior Leader) from St. Paul Island, AK, in partnership with the Aleut Community of St. Paul Island Tribal Government and Thalassa Education and Outreach.

Four of those scientists also participated in a career speed networking event that introduced high school participants in the Junior Leadership Program to NOAA and the research done at PMEL. Five PMEL scientists and two Hollings Scholars also worked with the high school students teaching them about research programs in the arctic and engineering/research innovation.

Photo: Hollings Scholar (left) teaches a student about the niskin bottle. The student is holding the messenger that is sent down the cable to close the niskin bottle to collect a water sample in order to measure dissolved oxygen levels in the lake.

Photo: A student learning to use a Van Veen Grab Sampler to assess the type of sediment and what the macrofauna is at the bottom of the lake. The Van Veen Grab Sampler is an instrument to sample sediment in the ocean. Usually it is a clamshell bucket made out of stainless steel. The smallest version even fits into hand luggage.

AOML: Outreach in the greater Miami Community

Evan B. Forde with
MAST Academy @ FIU A. P. Biology Class

Evan Forde, Oceanographer, participated in educational enhancement activities in the greater Miami community. He assisted Miami-Dade county teachers in preparing weather related lesson plans and was the guest speaker for Museum of Science Project impact at the Rosenstiel School of Marine and Atmospheric Science (RSMAS). He was also a "HistoryMaker" presenter at MAST Academy at Florida International University's "TheHistoryMakers" Back to School Day" where he spoke to about 150 students.

ESRL/CSD: Student Researchers Receive Oral Presentation and Poster Awards

An all-female slate of CSD researchers presented a quarter of the posters at the 13th Annual Boulder Laboratories Poster Symposium sponsored by the Boulder Labs Diversity Council. Two of the CSD researchers, Sara Sand and Carrie Womack each received an Outstanding Presentation Award. The awards were selected by senior scientists who circulated anonymously through the poster session and noted outstanding quality in both preparation of a poster and its oral presentation. For 2016, posters were grouped along subject matter lines and academic standing of presenters, with awards presented to postdoctoral, graduate, undergraduate, and high school student researchers.

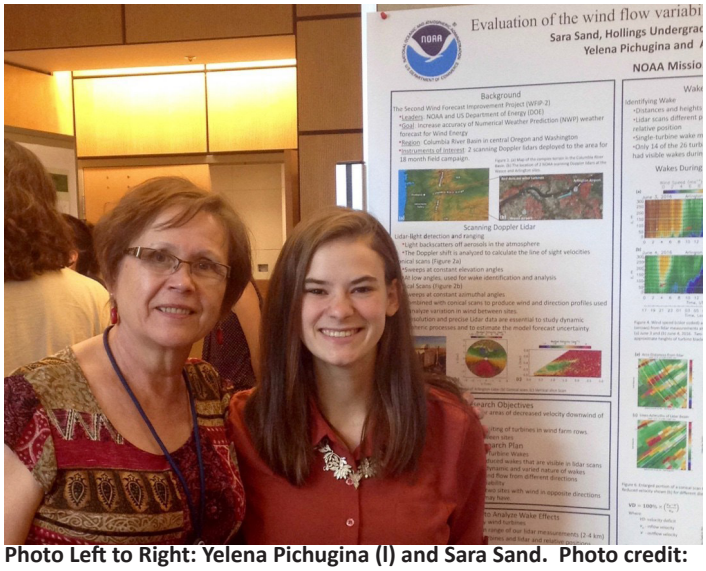

Photo Left to Right: Yelena Pichugina (l) and Sara Sand. Photo credit: Jeanne Waters.

Sara was recognized for her presentation, *Evaluation of the Wind Flow Variability Using Scanning Doppler Lidar Measurements*, with co-authors Yelena Pichugina and Alan Brewer. Sara is an honors student at Ohio University with an engineering physics major and a certificate in environmental studies. Supported by the Hollings scholarship program, Sara worked with Yelena Pichugina and the Atmospheric Remote Sensing (ARS) group for three months during the summer. She learned basics about lidars and their use in wind energy, assisting with the analysis of Doppler lidar data obtained in Oregon during the second Wind Forecast and Improvement Project (WFIP-2) to characterize wind flow over complex terrain. Sara's research involved collaborations with scientists at CU, Notre-Dame, DOE, PSD, and GSD. Her mentors also included Bob Banta and Alan Brewer.

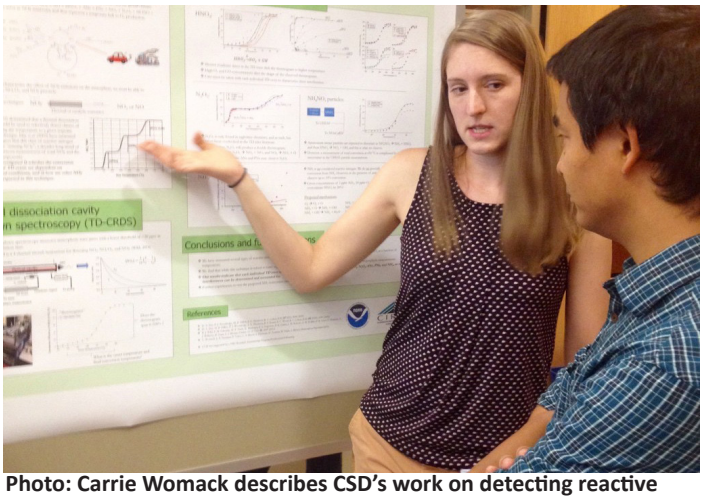

Photo: Carrie Womack describes CSD's work on detecting reactive nitrogen species critical to understanding ozone chemistry. Photo Credit: Jeanne Waters.

Carrie was recognized for her presentation, *Characterizing Interferences in an NOy Thermal Dissociation Inlet*, with co-authors Andy Neuman, Patrick Veres, Chuck Brock, Scott Eilerman, Kyle Zarzana, Bill Dubé and Steven Brown.

OAR Employees in the News:

LaToya Myles, EPP/MSI Alumn, Becomes Deputy Director at NOAA ARL/ATDD
http://www.noaa.gov/stories/eppmsi-alum-becomes-deputy-director-at-noaa-air-resources-lab

Catalina Martinez, NOAA scientist, Launched Career as Knauss Fellow
http://seagrant.gso.uri.edu/noaa-scientist-launched-career-knauss-fellow/

The Acequias of New Mexico – Managing Water To Address Climate Change

By Lis Cohen, NOAA/ESRL

Acequias—canals engineered for irrigation—are significant in an era of climate change because they are an example of a sustainable and resilient system for managing water as a commons. That's one of the main messages conveyed to the NOAA Boulder staff by Sylvia Rodriguez, Professor Emerita of Anthropology at the University of New Mexico & author of the 2006 book Water Sharing, Sanctity, and Place. Rodriguez spoke about acequias at NOAA Boulder on September 16 in a talk entitled, "Acequias, Sustainability and the Moral Economy of Water."

Photo: Sylvia Rodriguez describes acequias to the NOAA Boulder Community. Photo by Georgia Madrid.

Acequias were hand-dug, gravity-flow irrigation canals that divert stream water to sustain the agro-pastoral economy Spanish colonial settlers established in the upper Rio Grande valley of New Mexico in the 17th, 18th, and early 19th centuries. In New Mexico, acequia (pronounced ah-say-key-uh) refers to both a canal that transports irrigation water and the association of irrigators who govern, manage, and maintain the system.

Such autonomous, small-scale irrigation systems are found all over the world. They operate according to a very similar set of principles and they all face similar challenges. "Although it may look easy, effective irrigation requires considerable skill," Rodriguez told the group.

Photo: Georgia Madrid (NOAA), Sylvia Rodriguez (University of New Mexico) and David Zezula (NOAA). Photo by Lis Cohen.

For those trained from a young age, irrigation is second nature, but for newcomers, mastery of the technique is not so simple. "Attachment to the land and water is integral to who northern New Mexican farmer-ranchers feel they are," said Rodriguez. If you own land on a ditch, you have certain rights and responsibilities. You are obligated to maintain the ditch, follow rules, and pay dues. Keeping the ditches maintained makes agriculture possible and also keeps a sense of community alive.

At the NOAA event, David Zezula, Deputy Director of the Earth Systems Research Laboratory, introduced Dr. Rodriguez. Georgia Madrid, EEO specialist in NOAA's Office of Oceanic & Atmospheric Research (OAR) EEO/Diversity Program, described the connection to NOAA: "The work Sylvia Rodriguez does on acequias and water sharing relates to the science NOAA does. We need to acknowledge that."

This event occurred during "National Hispanic Heritage Month," which runs from September 15 through October 15.

Tribal Nations: Not Just Another Public Interest Group

by Annie Reiser, NOAA/ESRL

A sizeable crowd— nearly 400 in person and via webinar— joined together on August 10 at NOAA Boulder to learn about how to engage with federally recognized tribes when doing field missions for NOAA. "Your agency's work and mission are very much intertwined with the Tribes, as they are on the front line of climate change," said guest speaker, Carla Fredericks.

Carla Fredericks, Director of the University of Colorado American Indian Law School, teaches NOAA staff about the laws that form the complex relationship between American Indians and the U.S. Government.

Ms. Fredericks, Director of the American Indian Law School at the University of Colorado, described the unique and very complex relationship between Tribes and the Federal Government. In fact, the cornerstone doctrines dictating that relationship are so convoluted that the American Indian Law Program offers more than 24 credit hours on the subject.

"The Marshall Court decided three cases that form the basic framework of federal Indian law in the United States, and they are referred to as the 'Marshall Trilogy,'" said Ms. Fredericks. She explained how the Marshall Trilogy evolved by introducing some treaties, policies, and concepts of Tribal Sovereignty, Federal Trust Responsibility, and Government-to-Government Relationships, highlighting her explanations with lively stories and poignant examples. One take-home message is that the federal government has both very broad authority and trust responsibility. Because of E.O. (Executive Order) 13175, there is a NOAA Consultation Handbook that outlines procedures for formal government-to-government consultation for NOAA actions

Dr. Grace Musser, adjunct faculty member at the University of Denver, asking the audience, "What do you know about Indians?"

and policies that have direct effects on an Indian Tribe or its relationship with NOAA. "Please read that handbook!" Ms. Fredericks urged the audience.

The second guest speaker built on the discussion of this legal framework by focusing on the important trust responsibility the government has for tribal communities. "Trust is the operative word in relationships," said Professor Grace Sage Musser, an enrolled member of the Oneida Nation of Indians of Wisconsin, clinical psychologist at the University of Montana, and Adjunct Faculty member at the University of Denver.

"Building cultural knowledge is the biggest asset to building trusting relationships," emphasized Dr. Musser. Both government employees and American Indians need to move beyond some of the deep-seated stereotypes and labels each holds, she said. For example, Professor Musser urged the audience not to generalize Indian culture. There are 567 federally recognized and 62 state-recognized Tribes. "Imagine the diversity in these tribal groups!" she exclaimed. "They are not just another public interest group."

With effervescent energy, humor, and illustrative stories, Dr. Musser offered some concrete best practices to consider when forging strong and sustainable partnerships: "Experience the culture—go to their powwows, talk to them about the different songs and dances, "the heartbeat" of their nations. Tell them you are committed and how you will follow up. Develop sustained communication and information-sharing channels with consistency. Realize

(continued on page 9)

the wealth in that commitment. Be intentional; ask if they understand you. Ask for interaction—listen to all the voices and the value of the Indian knowledge while you encourage collaborative engagement and showcase that. Be deliberate about power sharing. Train stakeholders and other community members. Be a resource! Say 'call me any time – here's my number.'"

In the end, NOAA staff came away from this seminar with a better understanding of how to build respectful and long-term relationships with the Tribal communities they encounter professionally. After all, both groups share the same vision for our planet: to sustain its "heartbeat" and its inhabitants.

For questions, please email Georgia Madrid (OAR EEO/ Diversity and OAR representative to the NOAA Tribal Team) at georgia.madrid@noaa.gov or call 303-497-6732.

Roger Pulwarty honored at Indigenous Peoples Climate Change Working Group (IPCCWG) 10th Anniversary

The IPCCWG celebrated their 10th anniversary at Haskell Indian Nations University, September 22-23, 2016. The theme of the meeting was C*limate Changed: Reflections on Our Past, Present, and Future Situation.*

NOAA employees Roger Pulwarty, OAR, Doug Kluck, NESDIS, and Bill Thomas, Office for Coastal Management, were all recognized during the "Honoring Those Still on the Ground" segment of the meeting for their continued support of the IPCCWG. Roger, Bill and Bob Rabin, NSSL, also participated in the *Federal Partnerships and Collaborations* panel where they discussed NOAA science opportunities and research.

The IPCCWG (formerly the American Indian and Alaska native Climate Change Working Group) was formed in 2006 in response to the need for education and research programs in climate change at Tribal Colleges and Universities (TCU). The overarching goals of the IPCCWG are to "prepare future generations of American Indians and Alaska Natives, earth science professionals, well-trained educators, scientists, engineers and technologists, and to ensure that Indigenous tribal knowledges of landscapes and climates are valued, used and incorporated into the tribal exercise of earth science education and research."

Photo: IPCCWG Closing Circle. Photo by Bob Rabin.

Bob Rabin, NSSL, Teaches Precipitation Estimation and Wildlife Detection to Native students

Bob Rabin gave presentations to American Indian students on NOAA products for precipitation estimation and wildfire detection at the Bureau of Indian Affairs (BIA) sponsored Water Resources Technician Training Program (WRTT) in Tucson, AZ. The WRTT program is a four week program designed to provide technical knowledge for students to gain opportunities to explore career goals in

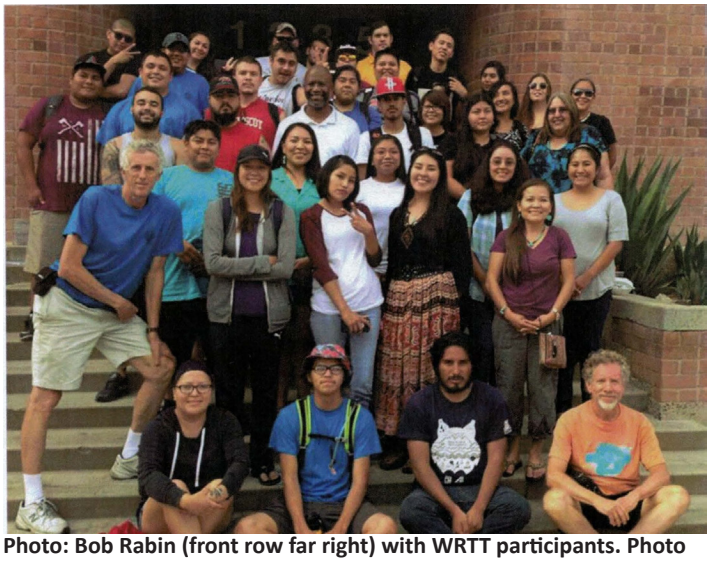

Photo: Bob Rabin (front row far right) with WRTT participants. Photo by BIA.

the water based sciences. This is the second year that Bob has participated as an instructor. BIA and OAR EEO are continuing efforts to collaborate and engage WRTT students in the water sciences.

NOAA Research EEO/Diversity Program Office

CONNECTIONS NEWSLETTER

Connections is published quarterly by the OAR EEO Office. The purpose is to share accomplishments and to link Diversity, EEO and Science within all of OAR laboratories and programs.

If you have any newsletter ideas, suggestions and stories, please email to Georgia Madrid **georgia.madrid@noaa.gov.**

Nicole Mason
EEO/Diversity Program Manager
301-734-1279

Georgia Madrid
EEO Specialist
303-497-6732

ABOUT US

VISION OF EEO OFFICE: To assist the Agency in creating a diverse workforce that is inclusive and free of discriminatory and retaliatory actions.

EEO MISSION: To bring awareness to employees, applicants for employment and management about EEO through the following:

Empowerment: Consultation services to employees, managers and applicants for employment.

Exposure: Recruitment and outreach activities for short and long-term recruitment.

Education: Federal EEO Mandated training, Special Emphasis programs and *Connections* newsletter.

Evaluation: Monitor employment statistics to prepare reports for NOAA, DOC, EEOC and OPM.

Website:
www.eeo.oar.noaa.gov

KNOW YOUR RIGHTS

EEO COUNSELING:

Federal law prohibits discrimination based on race, color, religion, national origin, sex (including sexual harassment and pregnancy discrimination), age (40 years and over), physical or mental disability, including the provision of reasonable accommodations for qualified applicants and employees with disabilities or genetic information (GINA), gender identity, and retaliation for participating in activities protected by the civil rights statutes. In addition, NOAA prohibits discrimination based on sexual orientation.

Employees, NOAA Corps Officers, or applicants for employment with NOAA who believe that they have been discriminated or retaliated against may contact an EEO Counselor. The Counselor will attempt to resolve the matter and furnish information about filing a complaint of discrimination. To preserve your rights under the law, you must contact an EEO Counselor within 45 CALENDAR DAYS of the date of alleged discrimination.

To initiate EEO Counseling or for more information, contact:
Civil Rights Office, NOAA
Phone: (301) 713-0500 or 1-800-452-6728
Fax: 301-713-0983
Website: www.eeo.noaa.gov

ALTERNATIVE DISPUTE RESOLUTION:

NOAA's Alternative Dispute Resolution (ADR) Program provides mediation and other services and seeks early resolution.
Website: www.wfm.noaa.gov/adr/