



CONNECTIONS

Linking EEO, Diversity and Science

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EEO/Diversity Newsletter for NOAA Research

December 2011

SACNAS AND AISES STUDENTS: A Bright Future for NOAA

The Society for the Advancement of Chicanos and Native Americans (SACNAS) and the American Indian Science and Engineering Society (AISES) are two organizations working to increase the representation of minorities in the Science, Technology, Engineering and Math fields. This year, Alejandra Lorenzo, AOML and Bob Rabin, NSSL, represented OAR at their annual conferences to promote NOAA science, staff the NOAA exhibit booth and provide a workshop presentation. Below is their feedback from the conferences.

SACNAS by Alejandra Lorenzo

On my flight from Miami, FL to the SACNAS conference in San Jose, CA, there were about 20 or more students flying to the event. They were notable due to the poster tubes that they were carrying. My first impression was that they must be the students attending the conference. They looked like average students to me. Some even looked a little scary. I kept seeing the students from the plane ride, walking around the conference venue - still looking kind of average...till I started judging the posters and boy was I floored. There was nothing average about the students presenting posters or leading discussions. Impressed fails to express how impacted I was with the level of knowledge, preparation, motivation, and plain old smarts of the students in attendance. Books should never be judged by their covers (guilty). We are so used to hearing about how students are failing that we fail to see those that are not. We are so used to hearing that students don't want to learn or grow, that we fail to showcase those that do.

This is the type of conference that NOAA needs to continue to support. These students are our future Principle Investigators, administrators, and support staff and they need to know that we study everything from the Sun to the bottom of the Ocean. That we are the place they want to intern at and the agency they want to work for.



Front Row: Tome Evans, Patricia Taylor. Second Row: Queen Spriggs, Sabrina Johnson, Rosemary Pettis, Ahira Sanchez-Lugo, and Alejandra Lorenzo

The undergrads and grad students that attended the SACNAS conference are shining examples of what can be done when we challenge our students to excel. Now it's time for us to challenge ourselves and get them to work for us so we may shine brighter. With the combined efforts of four NOAA line offices and two field members, we were able to answer most of their questions and show how the

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Special Emphasis

SACNAS and AISES *(continued from page 1)*

person's career choice would fit in with the NOAA family. Being able to interact and provide information to students preparing to become the scientists, technology leaders and investigators of tomorrow was very rewarding. I loved it!

Next year's conference will be in Seattle, WA. It would be in our best interest to compel PMEL staff to attend the conference and speak to the students. It would also be of value to provide a tour of the facility along with a short poster session of the type of research conducted within OAR on PMEL grounds.

AISES by Bob Rabin

The 33rd AISES Conference was held at the Minneapolis, MN Convention Center, November 10-12, 2011. I was honored to have been given the opportunity to attend the conference. The conference highlighted academic excellence of high school, undergraduate and graduate American Indian and Alaska Native students. Student talks and posters were judged by referees. One of the first place winners at the PhD level was from the radar group, co-located with the NSSL at the University of Oklahoma. A wide range of tribal colleges and universities across the U.S. were represented. Total attendance to this conference was around 1500.

A full day of the conference featured a career fair with exhibitors from industry, universities, and federal agencies.



Students from Lakeland High School, Lac du Flambeau, WI visiting the OAR booth.

NOAA was represented by the National Ocean Service and OAR. Several enthusiastic students in environmental science, earth science, and engineering expressed interest

in internship opportunities within the NOAA labs. I hope to stay in contact with these students in order to update them on opportunities, and to direct them to the scientists/labs most closely aligned with their interests. For example, a couple of students might be a good match to work with the hydrology programs at the NSSL.

Contacts were made with representatives from tribal colleges and mainstream colleges expressing an interest for NOAA scientists to mentor students in their programs. These include Salish Kootenai College in Pablo, MT, Northwest Indian College in Bellingham, WA, and Northland College in Ashland, WI. I offered to present talks related to



Bob Rabin and Student at AISES.

student interest in atmospheric science if funding permits, and to develop "weather portals" which would be web based and focused on regional satellite imagery as a way to capture the interest of students.

I also gave a presentation titled: "Monitoring Rainfall and Severe Weather on Native Lands: Scientific and Social Challenges" (coauthored by Suzanne Van Cooten, now of the NWS, Slidell, LA). The talk was attended by students and educators. It highlighted the importance of including inter-connectivity in science, and the role Native American culture has brought, and that which it offers to the advancement of science and society as a whole. The talk is currently available on-line: http://www.ssec.wisc.edu/~rabin/AISES/aises_rabin3_11.ppt

Minneapolis is home to one of the largest Native American populations of any major US city (approximately 1%). There are 11 federally recognized tribes in Minnesota, and 11 in nearby Wisconsin, including bands of the Chippewas, Ojibwe, Dakota Sioux, and Ho-Chuck. The plight facing some of these Tribes is quite visible in an urban setting (high unemployment, etc). This brings home the importance of AISES in improving the future of our nations people.

American Indian/Alaska Native Heritage Month Presentation at NOAA - Boulder

Matthew L. Druckenmiller, a joint postdoctoral fellow with the University Corporation for Atmospheric Research and the National Snow and Ice Data Center (NSIDC), was the guest speaker at the American Indian Heritage/Alaska Native month Observance in Boulder, CO on November 14, 2011. Matthew's talk was titled, "Interfacing geophysics with local knowledge to monitor coastal sea ice in arctic Alaska."



Guest Speaker Matthew Druckenmiller. Photo by Will Von Dauster.

His presentation summarized results and lessons-learned from an ongoing research project that interfaces geophysical methods of monitoring coastal sea ice with the experiential and traditional knowledge of Iñupiat hunters from Barrow, Alaska.

Since 2006, Matthew has worked with local hunters to map and survey ice thickness along the community's ice trails that are used during spring whaling. Using these surveys, satellite imagery, and observations from hunters, his research provided a detailed record of how Barrow's whaling community responds to year-to-year variability and significant intra-seasonal changes in ice conditions.

He also discussed his developing research at the NSIDC to partner with Alaska coastal communities to develop sea ice information that is ultimately usable to local people. Matthew said that subsistence hunting is a major part of the Iñupiat culture and he learned a lot about their knowledge of sea ice because for them, it is an important part of their community and a way of life.

Matthew recently finished his PhD in geophysics at the University of Alaska Fairbanks, where he was involved in multiple interdisciplinary projects that incorporated local/traditional knowledge and science.



Barrow Whalers. Photo by Matthew Druckenmiller.

RESOURCES:

Iñupiat Heritage Center - <http://www.co.north-slope.ak.us/departments/planning/IHCsite/index.html>
Ilisagvik (Tribal College) - <http://www.ilisagvik.cc/>
ELOKA – Exchange for local observations and Knowledge of the Arctic - <http://eloka-arctic.org/>

Please check out the EEO Office library for films and books on American Indians and other Special Emphasis groups. You can visit the EEO Office website at www.eeo.oar.noaa.gov and click on EEO/Diversity Materials or call Becky Rios at 303-497-6439.

ARL/Atmospheric Turbulence & Diffusion Division

Gabrielle Barry volunteered for the Aid of Distressed Families of Appalachian Counties' (ADFAC) annual school supply distribution on August 1 - 4, 2011. More than 1,450 students throughout Anderson County and Oak Ridge received new backpacks and supplies. Gabrielle also helped the children shop for his/her school supplies according to the school and grade supply lists. ADFAC provides school supplies for struggling families with volunteers working in three-hour shifts. Gabrielle said, "It is a nice program that helps families who are underprivileged in our area which helps the students come prepared for the first day of school."

ESRL/Global Monitoring Division

Bryan Johnson participated in the Career Day at Trail Ridge Middle school in Longmont, CO, on September 16, 2011. He responded to questions about atmospheric science as part of the career day event. Bryan said the students had very good questions and some of the students were interested in learning more about ozonesondes. Students were given an introduction to an aspect of a NOAA related science that they may not have been exposed to before.



ESRL/Global Systems Division

Dr. Hongli Jiang, Forecast Application Branch (FAB), received the August Employee of the Month Award for her current research on the development of methods for fine scale and frequent updated numerical analysis. She has been testing the dynamic downscaling using Space-Time Multiscale Analysis System

(STMAS) for retrospective study of the Sept. 2010, Four Mile Canyon fire to initialize the WRF-ARW in 1km and 8km resolutions. Dr. Jiang truly hit the ground running when she joined FAB and we look forward to her future contributions, while highlighting her invaluable improvements to the Branch's research.

GLERL

Through the Partners-In-Excellence program with the Ann Arbor Public Schools, Cyrus Nikolaidis and Olivia Kincaid worked with two mentors at GLERL for 10 weeks during July and August. Cyrus, a junior at Huron High School, worked with Anne Clites on the Ice Mapping Project. He learned to make Great Lakes ice concentration maps using GIS

(Geographic Information Systems) software, which helped GLERL extend their Great Lakes ice atlas from 2002 to present. Olivia, a senior at Community High School, worked with Kerrin Mabrey on various projects in the Benthos Laboratory. The Benthos laboratory is used for examining, counting, and assessing the condition of preserved organisms such as zebra and quagga mussels that have been collected from the lake bottom. By being involved with this program, GLERL increases its visibility in the community, and the science teachers and students learn of the work being done, while providing a unique work place experience.

IN THE SPOTLIGHT: Frank E. Johnson II, NOAA Hollings Scholar at AOML

Frank E. Johnson II is a NOAA Hollings Scholar who served his summer internship with the Environmental Microbiology Program at AOML. He is currently an undergraduate student at Florida A&M University (FAMU) in Tallahassee, FL, where he majors in Environmental Science with a minor in Mathematics. He anticipates graduating with a BS in Environmental Science in May of 2013.



Frank Johnson loads sample reaction plates into a real-time quantitative PCR (polymerase chain reaction) thermocycler in the NOAA AOML Microbiology Lab for analysis of human-source fecal bacteria genetic markers from residential marine canals in the Florida Keys.

Frank originally hails from Missouri where he attended Raytown South High School and the University of Missouri – Kansas City. His research interests involve both Environmental Science and Meteorology. At FAMU, he serves as an Undergraduate Assistant Lab Technician, participating in research studies on dinoflagellates and other marine algae. Frank is also an avid musician and plays the viola. He has played with the FAMU Orchestra,

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EEO/Diversity Across OAR

Frank Johnson (continued from page 4)

and serves as a teacher-mentor with JAVACY, a strings-instrument group for young musicians. In addition he plays with the Big Bend Orchestra of Tallahassee, FL and with the All-State Orchestra of Missouri. At FAMU, he was awarded "Student of the Year" by the Environmental Science Department, and he serves as the chairperson for academic advancement with the FAMU Student Honors Society.



Frank Johnson sets up quantitative PCR reaction plates at the NOAA AOML Microbiology lab to measure the relative abundance of microbial contaminants in coastal water samples from the Florida Keys.

Frank conducted research on the environmental distribution and persistence of fecal indicator bacteria and molecular microbial source tracking markers in coastal waters, including recreational beaches, residential marine canals, and marine mammal rehabilitation facilities.

His independent project involved a study assessing coastal water quality improvements in residential canals in the Florida Keys after transitioning from septic tank and cesspit sanitary infrastructure to a municipal sewer system. Frank conducted research for a 48 hour diurnal cycle over several tidal changes in residential canals that were either on sewer system or septic/cesspit systems, comparing fecal indicators, microbial source tracking markers, and selected pathogens, using both traditional culture based methods and state-of-the-art quantitative PCR source tracking methods.

He presented a scientific poster, entitled "**Molecular Microbial Source Tracking of Fecal Indicators in the Near-shore Coastal Waters and Residential Canals in the Florida Keys**", at the 2011 National NOAA Hollings Scholarship Science Symposium in Silver Spring, MD, where he tied for 1st place in the science poster presentations.

UPCOMING EVENT:

Colorado Federal Executive Board's 20th ANNUAL MLK UNITY TRAINING & United We Serve Awards Luncheon

Thursday, January 19, 2012, 9:00 am - 3:30 pm, Grand Hyatt Denver, 1750 Welton Street, Denver Colorado 80202

Registration \$140/person, *Includes all workshop materials & awards luncheon.*

Participants will receive a certificate for 4 hours of EEO Training Credit

Facilitator: Jennifer Calderon, renowned pro-liberation, anti-racist, hip-hop feminist

Training Goal: Inspire a call to action for participants to determine their personal and professional role in embracing unity in the workplace and their community

Process: Create a journey of creative expression, dialogue, and action in the legacy of Dr. Martin Luther King Jr. using Ms. Calderon's AHA methodology of Acknowledge, Heal, Act. The training will utilize the art of the spoken word, song, and movement, along with guest speakers for a Dignitary Dialogue to bring fresh perspectives to the issues of race, class, and gender. Participants will have interactive opportunities and will end the day feeling restored and empowered with their call to action and their personal pledge.

Register Online: <https://colorado.feb.gov/register/>



HAVE A HAPPY HOLIDAY SEASON!

From the staff of the OAR EEO/Diversity Program Office

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.

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ABOUT US

The EEO Office provides services to OAR employees, managers and applicants for employment.

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.

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

WEBSITE:

www.eeo.oar.noaa.gov

KNOW YOUR RIGHTS

WHERE TO GO FOR HELP:

If you believe you have been subject to discrimination on the basis of your race, color, national origin, religion, sex, age (over 40), disability, sexual orientation, genetic information, or retaliation for participating in activities protected by the civil rights statutes, you must contact an EEO Counselor within 45 calendar days of the alleged discrimination to preserve your rights under the law.

Please contact the NOAA Civil Rights Office to initiate EEO counseling:

Voice: 301-713-0500
Toll Free: 1-800-452-6728
TDD: 301-713-0982
FAX: 301-713-0983
Website: www.eeo.noaa.gov

Mediation

NOAA Alternative Dispute Resolution (ADR) Office provides mediation and other services and seeks early resolution.

Voice: 206-526-6171
Fax: 206-527-6928.
Website: www.adr.noaa.gov

