Asian Profiles: Childhood Fascination with Science Leads to Careers at OAR

May was Asian Pacific American Heritage Month and in this issue we profile some of our Asian scientists at OAR.

Dr. Anand Gnanadesikan, GFDL

I was born in Summit, N.J. My parents came from India to do graduate work and met here. I got an undergraduate degree in physics at Princeton, and then went on to get a Ph.D. in physical oceanography in the MIT/Woods Hole Oceanographic Institution Joint Program. Both of my parents are statisticians, so the idea that math and science could be fun was encouraged early. I also spent a lot of time at the seashore and on the water as a youngster, and developed a love for the ocean.

My research focuses on the physics that control the large-scale vertical circulation of the ocean, and how this circulation affects global biological and chemical cycling. The role of the Southern Ocean in determining oceanic circulation is of particular interest to me. We live at a special time in history where one can actually get paid to be curious about how the world works. Traditionally, that’s been the domain of the privileged few, but it is much more open today to energetic, talented young people, especially as the challenges facing our planet become ever more clear.

I am very involved in a program called Science Olympiad, the nation’s largest team science competition. I have run the Earth Science event in N.J. for the past seven years and help coach a number of teams. One of the great things about this is that I’ve met so many great science teachers at the high school and middle school levels. I have also been involved in helping plan museum exhibitions on climate, both at the National Museum of Natural History and at the Franklin Institute in Philadelphia, Pa.

Dr. Ngar-Cheung (Gabriel) Lau, GFDL

I was born in Hong Kong. I received my elementary school, high school and undergraduate college education in Hong Kong. I then attended graduate school at the University of Washington in Seattle, and obtained a Ph.D. degree from that institution in 1978.

Since I was a child, I became very interested in natural phenomena such as rain and clouds. I also retained vivid memories of weather events that had occurred in Hong Kong during my youth, such as the passages of typhoons in summer and cold air outbreaks in winter. I had always wondered about the physical processes that are responsible for these atmospheric features. In the 1970s, there was also growing awareness of potential human impacts on the natural environment. I, therefore, decided to pursue graduate studies in the atmospheric sciences.

I have been associated with GFDL for the past 32 years. In fact, this is my one and only job since I left graduate school. I now serve as the lead scientist of the Climate Diagnostics Project. In collaboration with my colleagues, I perform research on the behavior of various types of atmospheric circulation systems appearing in observed and model-simulated atmospheres. These systems include those prevailing in the Asian monsoon region and the Americas. I also hold an adjunct teaching appointment at Princeton University,
and offer classes as well as supervise Ph.D. students.

I think climate change is one of the most important problems facing humanity in the 21st century. This global issue calls for international collaboration and understanding. It is an opportunity for talented young people from all countries and all sectors of society to consider lifelong careers in climate science. In recent years, I have traveled extensively to China, Taiwan and Hong Kong, to deliver lectures and seminars to large audiences on university campuses and other public venues. I have also written articles (mostly in Chinese) for various print media, and have given many press interviews to newspapers and television. On these occasions, I have tried to address the scientific basis of climate change, and to encourage young people to choose a profession in the climate sciences.

Fanrong Zeng, GFDL

I was born in Xian, in northwest China. During my high school years in the turn of the 80’s, when China just opened the door to the world and realized how far behind the whole country was, the national slogan was “sciences save country.” Like many young people then, I was inspired by the stories of great scientists like Albert Einstein, Sir Isaac Newton, and Thomas Edison, and I wanted to study science.

After high school, I was admitted to the Nanjing Meteorology Institute in China, where I received my B.S. in atmospheric physics. In the late 80’s there were more opportunities to study in the U.S., and I was fortunate enough to be accepted to the Meteorology Department of Rutgers University, where I obtained my M.S. in meteorology. Now I am working with the Climate Change, Variability and Prediction Group at GFDL to develop climate models and am involved in various projects in climate variability and prediction.

To me science is a wonderful field as a career. In science you can stretch your mind and have the sense of accomplishment of understanding the mystery of nature. It is exciting to be able to see how things work and how science benefits the world.

Jia Wang, GLERL

Jia Wang is an ice climatologist and modeler at GLERL. He studies lake ice, sea ice, climate change, the connections between climate and oceans, climate and lakes, and the interactions between climate, ice, and the ecosystem. Jia came to GLERL from the University of Alaska, and he is still very active in the Arctic modeling community.

Jia grew up on Hainan Island in China. Surrounded by the ocean, he was always fascinated by its power. He majored in physical oceanography as both an undergraduate and graduate student in China. As a masters’ student, Jia was the first person to develop a mathematical model of the South China Sea. As a Ph.D. student in Canada, he was the first to apply an ocean and ice model to Hudson Bay. After obtaining his Ph.D. in oceanography, he felt that his education wasn’t broad enough to address the intricacies of the atmosphere-ice-ocean system, so he got a Ph.D. in meteorology.

Jia encourages minority students to not only focus on academic areas, but also to integrate themselves into mainstream society by combining the strengths of their own family values and American culture. He visits local schools to speak about climate change, and to encourage young people to keep taking math and science classes so they may pursue a career in science.

Dr. Muyin Wang, JISAO/PMEL/NOAA

Dr. Wang was born in Beijing, China and received her B.S. and M.S. from Peking University; and Ph.D. from the University of Utah. She said that she always loved math, physics and biology since middle school, “The story of Maria Curie inspired me since then.” She is currently a research scientist at OAR working on climate variability and change in the Arctic and North Pacific. She encourages minority students to think of science as a career option, to engage with science teachers in middle and high schools, consider internships and hook up with mentors in college. She is also involved in promoting science by participating in educational outreach activities.
AOML hosted a successful Black History Month program on March 25, 2010. It featured Lt. Col. (ret.) Eldridge Williams of the legendary Tuskegee Airmen. Approximately 65 AOML employees and guests attended the presentation and participated in the ethnic luncheon.

ARL (ATDD) - Dr. LaToya Myles served as a judge for the 2010 Blacks In Government (BIG) Oak Ridge Chapter Essay Contest. She represented the judging panel and announced the contest winners during the BIG Scholarship Luncheon on February 25, 2010.

GFDL - Marian Westley was a speaker at the Young Women’s Conference in Science, Mathematics and Technology at the Princeton Plasma Physics Laboratory, Princeton, New Jersey, on March 12, 2010.

NSSL - Suzanne Van Cooten worked with leadership of the Oklahoma Climatological Survey to host a session with tribal leaders from ten different tribes at the State of Oklahoma Climate Adaptation Plan meeting. It created a dialogue to increase Native American participation in planning for climate change; and information on NOAA research programs, and NOAA educational and research opportunities with University of Oklahoma partners.

GLERL co-hosted the National Ocean Science Bowl competition on February 5, 2010. Employees served as scorekeepers, judges, moderators and timekeepers. Sixteen teams of high school students from Michigan and Ohio competed in the day-long event at the University of Michigan’s School of Natural Resources and Environment.

PMEL - EEO Advisory Committee Member Valencia McNair participated in the Northwest Indian College career fair and symposium sponsored by NOAA on May 4-5, 2010. She met with many of the students and handed out literature from PMEL and OAR. (See article on NWIC, page 4).

UPDATE: Leslie M. Hartten, ESRL/PSD/CIRES and Margaret A. LeMone, NCAR Mesoscale and Microscale Meteorology Division paper entitled, *The Evolution and Current State of the Atmospheric Sciences “Pipeline,”* has been made available via Early Online Release. People accessing AMS journals via the NOAA Library will be able to download the authors’ PDF until the paper version is released later this year: Citation: Hartten, L. M., and M. A. LeMone, 2010: AMS membership survey results: The evolution and current state of the atmospheric sciences “pipeline”. Bulletin of the American Meteorological Society, 91, doi:10.1175/2010BAMS2537.1.

CORRECTION: In the EEO March newsletter, Leslie’s email was incorrect, her correct email is: leslie.m.hartten@noaa.gov. Please email her if you have any questions on her paper.
Federal Asian Pacific American Council (FAPAC) conference celebrates 25th Anniversary

“Diverse Leadership for a Diverse Workforce” was the theme for this year’s 25th annual FAPAC conference in National Harbor, MD, May 4-7, 2010. FAPAC is an organization founded in 1985 and promotes equal opportunity and cultural diversity for Asian Pacific Americans (APAs) within the Federal and District of Columbia governments.

Over 400 individuals from various agencies, including NOAA, attended the conference. There were numerous workshops on leadership development and forums on APA’s Women Issues and Federal Workforce Issues.

Norman Mineta, former Secretary of Commerce and Transportation, and Elaine Chao, former Secretary of Labor were honored with Lifetime Achievement Awards for their service to the nation.

Secretary Eric Shinseki, Department of Veterans Affairs, was the keynote speaker at the opening ceremonies. He discussed how the U.S. is the most diverse nation and that APAs are a “microcosm of that greater mix” coming from over 40 different countries. Shinseki was born in Hawaii and graduated from the U.S. Military Academy at West Point, NY in 1965. He said his parents came to America from Hiroshima, Japan with the promise of opportunity. He said their early days included a lot of hard work and dealings with prejudice but eventual triumph. He urged the audience to preserve their cultures and traditions and highlighted the many contributions of Asian Americans in the military including the manila men fighting for New Orleans in 1815, the 20,000 Japanese who fought for the U.S. and the 90,000 active members in the reserve forces today.

Other speakers included Stuart Ishimura, EEOC Acting Commissioner; and Judy Chu, U.S. House of Representatives, the first Chinese woman elected to Congress.

Federal Women’s Program (FWP): “Star Search: Make your Talent Shine!”

On May 20, 2010, the Colorado Federal Executive Board (CFEB) FWP held their annual Professional Development seminar at the Denver Tech Center. The trainer was Christie Ward, CSP Principal, the Impact Institute. The day long event focused on the DiSC model, (dominance, influence, steadiness and conscientiousness) behavioral styles. The DiSC model provides tools to re-energize, motivate and recognize and understand a person’s needs and behavioral styles in the workplace. The participants learned how to determine their DiSC style and apply it at work. This seminar addressed OPM’s Core Competencies for Leading People and Building Coalitions. Over 200 attendees from various Federal agencies participated in the training.

Becky Rios, OAR EEO Office, participated in the steering committee and assisted with registration.

Women in Science (WIS) Sparks Students’ Passions in Science, Technology, Engineering and Math (STEM)

By Emily Stewart, Women in Science (WIS) Project Coordinator

Despite snow and slippery roads, 330 young people and their teachers descended on the University of Wyoming’s Laramie campus on May 11th for Women in Science. As the lead organizing entity, the Wyoming NASA Space Grant Consortium, our goals were to spark students’ passions in STEM fields as well as provide mentors and role models to the young people in attendance. In order to do this, we focused on what women in science look like (both in and out of the lab), worked to dispel stereotypes of women scientists, and presented a variety of hands-on inquiry based workshops, lab tours, and discussion groups.
Special Emphasis Activities

Northwest Indian College (NWIC) and NOAA Host Career Fair and Training Symposium

NOAA and NWIC co-sponsored a successful career fair and training symposium at the tribal college in Bellingham, WA, May 4-5, 2010. The purpose was to expose students to science related occupations at NOAA. The NOAA Fisheries Service has had a partnership with NWIC to increase awareness of NOAA's mission and to meet its Federal obligations with the tribes in the Northwest. This year, they invited all NOAA line EEO Offices to support the conference with exhibit booths and workshop presentations. PMEL EEO Advisory Committee member, Valencia McNair, attended the conference.

Since the event, we have received emails and anecdotes from the participants. Perhaps the most meaningful letter comes from a high school educator on the Wind River Reservation in the town of Arapahoe, WY. He shared with me that the students he brought, “underwent a transformative experience. Not only were they amazed and stimulated by the variety of workshops and talks, they also began to visualize the possibility of attending a large four year college to pursue interests in science and technology fields. It had been many months since I felt that good as a teacher. It had a unique value for those young women.”

We were pleased and honored to receive funding from NOAA’s Office of Oceanic & Atmospheric Research. At the Wyoming Space Grant Consortium, we look forward to next year and serving an even greater number of students from across the state.

The symposium featured keynote speeches by John Herrington, former NASA astronaut and Chickasaw Tribal member; Billy Frank, Jr. Nisqually Tribal leader and Chairman of the Northwest Fisheries Indian Commission; and Shana Barehand, Tribal Liaison, Washington State Dept. of Revenue and current SAIGE Board member.

NOAA Administrator Jane Lubchenco, sent a message to the students encouraging them to learn more about NOAA opportunities and to envision a career at NOAA. Dr. Lubchenco also said she was fully committed to fostering the collaboration that NOAA and NWIC have developed in regards to environmental issues.

The conference was a success and a step in the right direction in increasing awareness of NOAA to Native American students, as one student said, “NOAA really caught my attention because of its involvement with protecting and preserving the Nation’s marine resources and the research on coastal environments to promote healthy eco-systems.”

To learn more about NWIC, visit their website at www.nwic.edu.
NOAA Research EEO/Diversity Program Office

**STAFF**

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

Georgia Madrid  
EEO Specialist  
303-497-6732

Becky Rios  
Computer Assistant  
303-497-6439

**WEBSITE**

www.eeo.oar.noaa.gov

---

**ABOUT US**

The EEO Office provides services to NOAA Research employees and to applicants for employment. We are the local point of contact for EEO and Diversity issues. We coordinate EEO program activities and provide EEO training.

The EEO office functions are as follows:

**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.

---

**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)  
The NOAA ADR Office provides mediation and other services and seeks early resolution.

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

---

**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 send to:  
**Georgia Madrid**  
georgia.madrid@noaa.gov.