



# PHASE

## *A Newsletter of Skaggs Center Internships*

Vol. 2, Issue #8

August 2009

### Student Presentations Cap Summer Internships



Much as a single tree can define a space, the DOC Boulder Research Laboratories defined the summer space and time for student interns under the Hollings Scholars, the Educational Partnerships Program (EPP), and students from Minnesota and North Carolina A&T. (Please see page 4 for the Summer Undergraduate Research Fellowships Colloquium at NIST.)

Students from the NOAA programs came together on two occasions in July to present the results of their summer work experience. For some, the presentations served as a dry run for the formal presentations required in Silver Spring, Maryland. Student mentors, scientists, and interested employees attended the presentations to show support and to offer encouragement.

The following is an example of topics discussed by the Hollings and EPP interns:

#### MORNING SESSION

“Creation and optimization of thunderstorm guidance products from a time-lagged ensemble of High Resolution Rapid Refresh (HRRR) model forecasts” by Doug Koch.

“Proxy-model comparisons of North Atlantic sea surface temperatures prior to the 8.2 ka event” by Kelsey Watkins.

“Ozonesonde laboratory and field measurement experiments” by Rebecca Long.

“Impacts of extended periods of low solar activity on climate” by Matthew Niznik.

An analysis of tropospheric ozone over Boulder, CO” by Megan Kirchmeier.

“Interactive carbon cycle science: Conceptualizing trends with NOAA data products” by Daniel Curran.

## POSTER SESSION

“Trajectory analysis of pollutant gases in NOAA flask samples and HFC-134A as a potential leak indicator” by Markeata Lee.

“Development of gas-chromatography apparatus to measure the thermal decomposition of CH<sub>3</sub>C(0) OONO<sub>2</sub> (PAN)” by Christopher Ware.

## AFTERNOON SESSION

“Forecasting Potential Evapotranspiration (PET): Developing a new tool for water managers” by Kieran Bhatia.

“Implications of air quality on solar UV radiation” by Adele Lichtenberger.

“The Impact of Liquid Water and Ice in Arctic Clouds on Cloud Radiative Forcing and the Surface Energy Budget” by Elizabeth Maroon.

As seen from the above presentations, all of the NOAA interns were able to articulate their work using terms understood by the scientific community. The presentations were professional and the interns answered questions about their work with a calm demeanor. It was felt by all that these practice sessions were extremely

beneficial and gave the interns added confidence in speaking to their peers and to scientists. They all should do well in Silver Spring with their formal presentations. Please see page 3 for pictures.

Meanwhile the summer is still with us and so are many students from other programs. Some PHASE I students will start in August and work until school starts. PHASE II and III students working past the summer months will continue to work on their projects.

During the month of August we will start on a new brochure for next year’s recruitment, as well as developing a short power point to take to schools and universities to encourage educators to refer students to the various PHASE program options, e.g. I (High School), II (College) and III (Graduate Students and teachers).

We have also been asked to assist the Image de Denver chapter to share our student contacts and help in the recruitment of students for the upcoming conference in October to be held at the Crowne Plaza Hotel in Denver. Some of the presenters include Elizabeth Montoya, Chief of Staff, OPM, in D.C.; Dexter Brooks, Director of Federal Sector Programs, EEOC, in D.C.; Famia Magaña, Director of EEO, Defense Logistics Agency, in D.C. who will address persons with disabilities; and Sara Clemente, Office of Diversity Management, DOL, in D.C. who will address college student recruitment and placement.

## HOLLINGS SCHOLARS AND EDUCATIONAL PARTNERSHIP PROGRAM STUDENTS DURING THE SEMINAR PRESENTATIONS



Students pose after all the presentations are complete.



Students with the ESRL Global Monitoring Division director, Dr. James Butler



Doug Koch



Mathew Niznik



Rebecca Long



Daniel Curran



Adele Lichtenberger , Megan Kirchmeier



Christopher  
Ware



Kieran  
Bhatia



Elizabeth  
Maroon



Markeata  
Lee



Kelsey  
Watkins



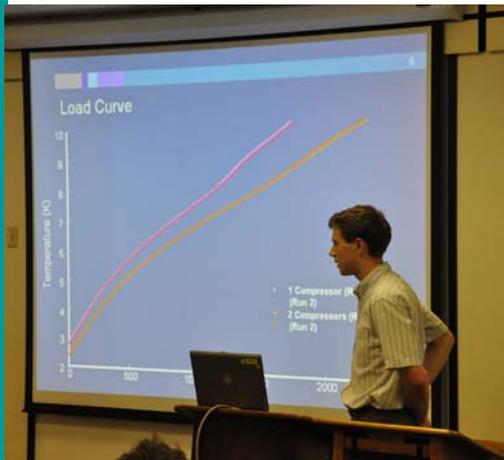
ESRL Chemical Sciences Division  
director, Dr. A.R. Ravishankara

## SURF COLLOQUIUM AT NIST, first day



NIST was the site for the SURF Student Colloquium held on August 6th and 7th, 2009.

SURF students taking a break for pictures during the SURF Student Colloquium.



Jeffrey Power explaining a load curve graph during his presentation.

Left to Right: Marianna Sofman, Whitney Patterson, Amberly Komatz and Varun Rajan who introduced the presenters.



Eric Bahr loading his presentation and Jennifer Riggs waiting while she is being introduced.

Left to Right: Jeffrey Power, Katrina Bossert and Eric Bahr during the break.

## The Objectives of the ESRL Intern Program

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- A. To seek a broad development and expansion of internship opportunities for high school, college and graduate students and high school teachers.
- B. To assist and encourage NOAA organizations in establishing goals and identifying the best possible sources for the recruitment, employment, training and advancement of student Interns.
- C. To encourage and actively support the promotion and advancement of Interns already employed.
- D. To analyze and determine the educational and professional needs of students seeking entry and advancement in employment; and, whenever possible, provide appropriate training and counseling services to meet these needs.
- E. To establish and continually upgrade a broad range of contact with supervisors and Interns across the country via personal visits, telephone calls, e-mails, and periodic newsletters.
- F. To respond to the reasonable requests from non-NOAA groups for student referrals when their objectives are supportable and similar to the ESRL PHASE program.
- G. To enhance the promotion of student excellence, pride, and camaraderie through organized and regular social gatherings which will serve to bind students together.
- H. To provide a forum for major research issues of local and national significance so that students may be better informed and may express their views through seminar presentations before their peers and supervisors.

## Key Advisory Board Functions

The key functions performed by the PHASE Advisory Board include: **Advocacy on Employment and Education Issues**, **Membership and Outreach**, and **Consultation with Students and Supervisors**. The following is a brief description of each function:

### **Advocacy on Employment and Education Issues**

The advocacy function is performed when advisory board members take a pro-active role in seeing that an employment related issue is addressed by the appropriate community, education or government organization. This function typically involves the following: assisting students and parents with local school issues, e.g. summer jobs, internships, grades and course requirements; informing the local community on student internship opportunities; and researching employment opportunities and various employment related topics such as housing, travel, and community demographics.

### **Membership and Outreach**

The membership committee is charged with an ongoing program of recruiting and retaining members of the Advisory Board. This involves coordinating a yearly membership drive for new members. The outreach function is performed by going out into the community to explain NOAA internship programs and communicating the assistance that can be provided. Typically, this function involves attending meetings and briefings, networking with NOAA agency representatives, providing orientation briefings to newcomers, attending training sessions and education workshops - both as participants and presenters.

### **Consultation**

Consultation services are typically private and are provided to students, parents and teachers who need explanations related to PHASE documents and procedures. This function typically involves mediating an issue at the lowest level before it escalates and assisting the ESRL Student Coordinator with employee issues.



***PHASE* is a publication  
of the ESRL Student  
Coordinator**

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*PHASE* seeks to inform  
employees and students on  
employment programs and  
internships.

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Ann Thorne,  
Debra Dailey-Fisher

## **MISSION**

*The mission of the Practical Hands on Application to Science Education (PHASE) program is to have students benefit from a science intern program at a Federal facility.*

*The objectives of the program are (1) for laboratories to identify student projects that provide a learning environment and focus on practical hands-on activities; (2) to provide laboratories with profiles of students who have an interest in considering NOAA and science in general as a positive career choice; and (3) to inform students of career opportunities in NOAA.*

*For more information visit: [PHASE@noaa.gov](mailto:PHASE@noaa.gov) and [esrl.noaa.gov/outreach/student\\_programs](http://esrl.noaa.gov/outreach/student_programs)*

**A SPECIAL THANK YOU TO THE  
NOAA MENTORS AND SUPPORTERS  
WHO HAVE MADE THIS SUMMER  
MEMORABLE FOR ALL THE  
INTERNS.**

Rich Lataitis  
Dave Welsh  
Kathy Lantz  
Irina Petropavlovskikh  
Arlyn Andrews  
Al Bedard  
Steve Weygandt  
Vivian LeFabvre  
Tracey Hansen  
Kathy Smith  
Amy Wagner  
Beth Russell

## **COLLABORATING ORGANIZATIONS**

### **GOVERNMENT AGENCIES:**

NOAA/OAR/ESRL  
NOAA/NWS/SWPC  
NOAA/NESDIS/NGDC  
NIST  
NTIA  
Workforce Boulder County

### **HIGHER EDUCATION:**

University of Colorado/CIRES  
CU SORCE Program

### **COMMUNITY:**

SACNAS  
MESA  
AISES  
National Image, Inc.  
Blacks-In-Government (BIG)

### **SCHOOL DISTRICTS:**

Boulder Valley (BVSD)  
St. Vrain Valley (SVVSD)



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## *A Newsletter of Skaggs Center Internships*

**Please add me to newsletter mailing list. (Please print or type.) Issue #8, 2009**

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