



PHASE

A Newsletter of Skaggs Center Internships

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January 2010

ESRL Student Coordinator Hosts Harvey Mudd College Representatives



Harvey Mudd College representatives visiting ESRL on January 12th: Barry Olsan, Director of Corporate Relations; Richard Haskell, Professor of Physics; Patrick Little, Engineering Clinic Director; Susan Martonosi, Mathematics Clinic Director; Robert Keller, Computer Science Clinic Director.

The snows in January in Boulder did not deter a visit by California representatives of Harvey Mudd College from touring ESRL on January 12th. The visit was arranged by Ann Thorne, ESRL Student Coordinator, who worked with Barry Olsan, Director of Corporate Relations, on the visit. Ann also invited community representatives, ESRL and other DOC staff to attend the meeting.

Tony Tafoya opened the meeting by presenting a power point overview of the PHASE program placements for PHASE I, II and III students, and covered significant accomplishments for 2009 and related community recruitment activities.

Patrick Little, Johnson Professor of Engineering Management, and Engineering Clinic Director, gave an overview of the Harvey Mudd College Clinic program. He relied on his colleagues for supplemental information: Richard Haskell, Physics Clinic Director; Susan Martonosi, Mathematics Clinic Director; and Robert Keller, Director of the Computer Science Clinic.

Professor Little outlined the Clinic program at Harvey Mudd and directed a discussion on ways to include ESRL participation in the future. He stated that there was a standard fee of \$45K for a year long project which would be identified by the sponsoring organization. The project would include 4-5 students and a faculty member along with an advisor from the sponsoring organization. The project would involve 1200 to 1500 hours of work and the results would be owned by the sponsoring organization.

Dr. Rich Lataitis, Deputy Director, PSD, stated that the cost was equivalent to hiring a post doc with the advantage of having a faculty member providing input into the project.

Karen Hunter, Director of the St. Vrain

Valley Mathematics, Engineering, Science Achievement (MESA) program stated that the program would benefit students but she questioned the cost of the program. It was stated that the fixed fee could be paid in advance, after the program ended or in installments and that it was comparable to hiring a post doc student. The advantage was that 3 to 4 students and a faculty member would work on the identified project and the results would be the property of the funding organization.

Ann Thorne pointed out that in preliminary telephone conversations an issue was discussed of identifying a student advisor for a Beckman Coulter grant to develop an air quality measuring instrument (that would not be of benefit to Beckman Coulter). Discussions between John Ogren, GMD, a Harvey Mudd alumni, and Patrick Little resulted in John volunteering to be an advisor to students studying black carbon and developing an air quality measuring instrument that would be economically feasible for developing countries.

After the formal presentations, Eliot Glairon and his mother were briefed by Richard Haskell on the procedures for applying for admission to Harvey Mudd. The discussion centered on extra curricular activities and goals. During the interview, James Elkins, GMD, presented a hand delivered letter of recommendation for Eliot. Richard Haskell said he would personally include it in Eliot's application.

After the planned activities for the Harvey Mudd visit, Ann Thorne requested a tour of the David Skaggs Research Center by Don Mock, ESRL Deputy Director for Administration. Don led Patrick Little, Richard Haskell, Ann Thorne, and Tony Tafoya on a historical overview of how the DOC site was envisioned and how it has developed into the DOC NIST/NOAA site that is a world class research center for standards and atmospheric and climate sciences. The tour covered the Space Weather Prediction Center, an overview of the Profiler Network and the GMD Carbon Cycle Greenhouse Gases measurement program, the Chemical Monitoring Division and the various instruments used in measuring.

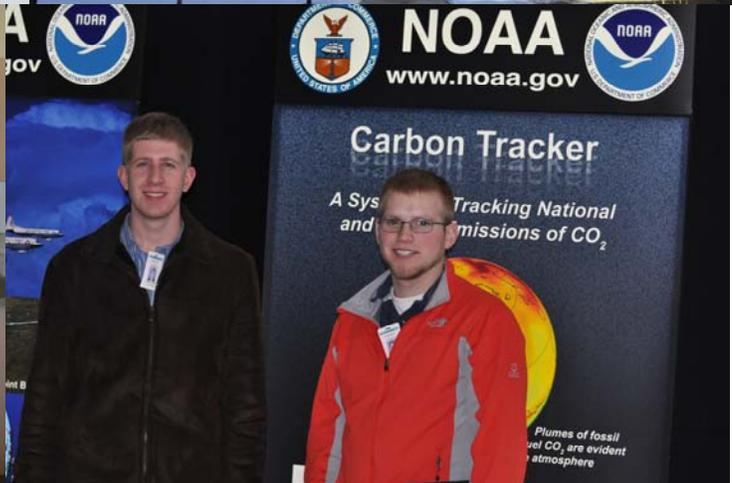
Don also gave a brief explanation of the role Dr. Susan Solomon, CSD, played in explaining the deterioration of the ozone hole in Antarctica.

Efforts will continue to see if ESRL and Harvey Mudd College can form a collaborative relationship that benefits students and ESRL.



Ann Thorne, Don Mock, Patrick Little and Richard Haskell after the ESRL tour.

HOLLINGS SCHOLARS ARRIVING FOR SITE VISITS

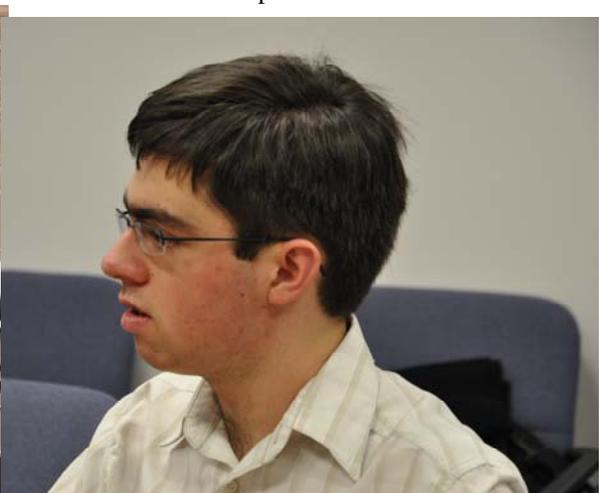


Bear Creek Apartments Kitchen area.

Chris Slocum and Justin Krosschell on their Boulder pre Internship visit and to view their summer apartments.



Mark Berguson on his first visit to Boulder on his pre Internship visit and to view apartments at Bear Creek.



Eliot Glairon, High School student applying to Harvey Mudd College, during informational interview.

Education, Science, Careers

The Objectives of the ESRL Intern Program

- 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
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Coordinator**

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

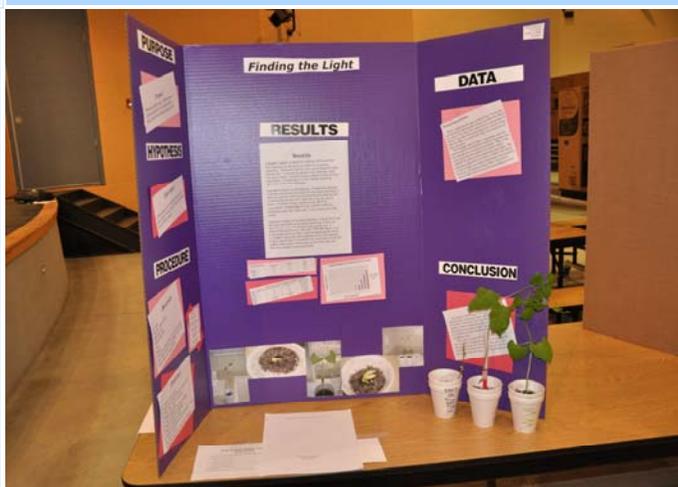
Editors: Tony Tafoya and
Ann Thorne

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 and esrl.noaa.gov/outreach/student_programs



Ann Thorne, Tom LeFebvre and Tony Tafoya participated as science fair judges at the Peak to Peak Secondary Science Fair at the Peak to Peak Charter School in Lafayette, CO. held on January 13th and 14th.

There were 220 science exhibits in categories that followed the guidelines developed by the International Science and Engineer Fair (ISEF).

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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Please add me to newsletter mailing list. (Please print or type.) Issue #1, 2010

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