

Final Report

Expanding Your Horizons Conference 2005

The 13th annual Expanding Your Horizons (EYH) conference was held at NC State University on Tuesday, March 8, 2005. The objective of the conference is to inspire 7th grade girls to pursue careers in science, engineering and mathematics. Approximately 400 girls and 110 teachers/ chaperones, representing fifty-eight schools and twenty-three North Carolina counties attended the conference. Over sixty professional women from NC State University, businesses, government agencies and other universities across the triangle area shared their enthusiasm for science, engineering and mathematics as hands-on workshop presenters. In addition to the speakers, over thirty volunteer guides, twenty members of the steering committee and most of the Science House staff volunteered in various capacities on the day of the conference.

Proceeding the opening session of EYH 2005, a preliminary physics demonstration was conducted by Mrs. Regina Barrier, Western Outreach Coordinator of The Science House, in celebration of the International Year of Physics. Students were invited to respond and participant in the various activities. As a result of this demonstration, there were many requests from teachers asking that this educational presentation be repeated at their local schools.

The keynote speaker was Dr. Kristie Dyer, a National Research Council Fellow at the Naval Research Laboratory in Washington, DC. Previously Dr. Dyer held a National Science Foundation Fellowship in New Mexico at the National Radio Astronomy Observatory. She obtained a Ph.D. in Physics from North Carolina State in 2001. Currently, her astronomy research focuses on the earliest stages of star formation -- how the first stars in a galaxy are made, the effect the first stars have on their galaxies and what the universe looked like when all galaxies were young. While at NC State University, Dr. Dyer and a group of her fellow graduate students created the Pleiades Project, which was funded by NASA, to introduce Girl Scouts to astronomy and astronomers. The Pleiades graduate students led the Girl Scout troops in telescope viewing nights and also helped to train their teachers about how to do astronomy experiments.

In her keynote address Dr. Dyer presented "A Year in the Life of Kristy Dyer", in which she highlighted the professional and personal activities and occurrences that she occurred in her life including, writing research proposals, travel throughout the country, presentations at professional conferences, and the celebration of a daughter's first birthday. This address helped the young women to understand that as a female scientist they could have a full and rich life.

The students participated in many hands-on and interactive activities, the most popular of these included extracting DNA, applying stitches to animal skin samples, and holding a mock public meeting following a chemical spill. The College of Veterinary Medicine hosted seven sessions and approximately ninety students. This effort was sponsored and spearheaded by Dr. Barbara Sherry. As documented by their comments, students emerged from sessions thinking about new careers and the educational requirements needed to pursue them. On the feedback forms, the girls were asked to comment on ways to improve the future conferences. The most common response from the students and the teachers was to have more time in

their workshops and to have more sessions.. The responses were very positive, as one student said, “this was awesome and I’m so glad I had the opportunity [to attend].”

Following the workshop sessions a bag lunch, sponsored by the NC State Provost’s Office, was provided for all of the participants, presenters, and volunteers. After lunch, the conference was concluded by an afternoon session that included an interactive game show (*What’s My Line?*) where students guessed the professions of a panel of female scientists including a meteorologist, a paleontologist, an environmental scientist, and an engineer. Drawings were held for students to win a \$100 savings bond and teachers to win various prizes.

This year’s conference was the first to offer sessions for educators/ chaperones. Five adult sessions were provided, offering participants information on an array of topics including: NC State College of Physical and Mathematical Sciences admission requirements, the North Carolina School of Science and Mathematics, how to encourage young women to pursue studies in science, mathematics, engineering, and technology, and a Physics in the classroom demonstration.

The Expanding Your Horizons Conference is an important vehicle for NC State in working to increase women’s participation in science, engineering and mathematics. Annually senior level administrators, professional staff and graduate and undergraduate students who invest their time in the conference, represent a majority of the Colleges at NC State at EYH.

The NCSU News Service prepared and distributed press releases for the event, bringing coverage by local television stations. The College of Agriculture and Life Sciences provided photographers and videographers, who prepared a segment scheduled to be aired on UNC Television.

Registration, the opening and closing sessions were held in the Witherspoon Student Center this year. Although this smaller venue forced us to limit the number of participants, many favorable comments were made because of the more intimate atmosphere that was created in the Witherspoon Cinema.

EYH was made possible by efforts and contributions from The Science House, Provost Office, PAMS, The Howard Hughes Medical Institute, NSF Science and Technology Center for Environmentally Responsible Solvents and Processes, NCSU chapter of Women In Science and Engineering (WISE), the College of Agricultural and Life Sciences, and Cisco Systems. Cisco Systems, Inc. hosted the first annual EYH volunteer luncheon and Brueggers Bagels contributed breakfast items for workshop presenters and other volunteers, as well as coupons for free bagels,

Attachments:

EYH Steering Committee members, 2005

Workshop Presenters, 2005

Participating Schools, 2005