Where Science Is Cool: Fairfield University's BASE Camp Informs Young Women About the Promise of Science

Fairfield, Connecticut (PRWEB) August 29, 2013

Twenty-three high school girls dove into research this summer at a unique camp exploring an array of issues, from how oceans move to leukemia cell growth to troublesome marine ‘invasions’ in the Long Island Sound.

It all took place at Fairfield University's BASE Camp, a two-week, residential camp designed to engage young women in hands-on, research-based experiences in the natural sciences, technology, engineering and mathematics (STEM). Now in its sixth year, BASE (Broadening Access to Science Education) Camp is a program free to students from Bridgeport, Connecticut, schools.

Amanda Harper-Leatherman, Ph.D., associate professor of chemistry and camp director, said the overall goal is to excite and inform female students about the promise of science. “The program specifically targets young women, based on the overall disproportional under representation of women in science, math, and engineering careers in general,” Dr. Harper-Leatherman continued. “It’s part of an effort to increase interest in the pursuit of STEM and
increase interest in the pursuit of STEM and health careers after college."

The camp also speaks to Fairfield University’s growing institutional commitment to promoting women in science. Serving as female scientist role models were faculty and undergraduates from Fairfield’s College of Arts & Sciences and School of Engineering.

Shelley A. Phelan, Ph.D., professor of biology and the Elizabeth DeCamp McInerney Chair of Health Sciences at Fairfield, started the program "because students from underfunded, inner city schools are at a major disadvantage in pursuing careers in science, given their often-limited science resources in high school, and the level of experience and aptitude typically required of science majors in the very first year of college. By the end of the first college years, many interested students leave the major - not because they can't do it, but because they were behind right from the start."

The camp, including meals and lodging, comes at no cost to students, thanks to a grant Dr. Phelan received from the National Institute on Minority Health and Health Disparity Populations, part of the National Institutes of Health.

This year was the first that engineering was taught.

“Some campers had never heard of engineering,” said Shanon Reckinger, Ph.D., assistant professor of mechanical engineering. As the Clare Boothe Luce Professor at Fairfield, Dr. Reckinger researches ocean modeling, one way to understand why climate is changing. Three of the students were studying her work this summer. Undergraduates Katherine Pitz and Blanca Aca assisted.

“Do you guys want to talk about gravity waves, and the sun and the moon at all?” inquired Pitz, a mechanical engineering major.

The answer was a unanimous yes.

For Bianca Colon-Hernandez, learning about engineering seemed a logical move because she’s curious about architectural design. And then there’s the fun part of meeting other kids with the same interests. “I don’t talk about science much at my high school with other girls,” noted the soon-to-be junior at Bullard-Havens Technical High School. “But here I’ve been talking about it with everyone.”

For Veona Lanham, 15, getting to know Dr. Reckinger and the BASE Camp experience has made her realize that she would like to major in mechanical engineering. “I want to come here,” said the Bullard-Havens student.

Several said that living in a campus residence hall made them look forward to going away to college. “I’m kind of getting the green light to go to college,” said Shante Miller, a soon-to-be senior at Bassick High School who hopes to become a medical examiner.

Dr. Reckinger observed, “They really like explaining what they’ve learned to other campers."

This was music to Dr. Harper-Leatherman’s ears. “Engineering definitely does have fewer female than male undergraduate students nationwide, so it is important to encourage high school girls into this field,” she explained.

To Dr. Phelan, a molecular cell biologist who has been awarded grants to study peroxiredoxins in breast cancer, BASE Camp is an essential annual event. Her hope is that it will inspire other young women “to pursue science and health career paths that will address public health issues.”
“We have seen so many bright young women motivated by the program, and many already declared science majors in universities - including our own,” she said. “We hope we can continue to inspire young women from our neighboring Bridgeport community for years to come.”

Read the full story at http://www.prweb.com/releases/2013/8/prweb11062571.htm