

# Finding empowerment through STEM

## Hillside High hosts Girls in STEM event

By Cole Villena

Careers in science, technology, engineering and mathematics – otherwise known as STEM careers – are some of the fastest-growing and highest-paying jobs in the United States. However, a study by the United States Department of Commerce found that women only hold 24 percent of STEM jobs in the United States in 2015.

On Thursday, Feb. 22, young women at Hillside High School's Girls in STEM event were challenged to change that number. A group of 64 female students gathered in the school's media center for hands-on exposure to STEM careers, including a panel discussion featuring local STEM professionals and presentations about topics like drones and supercomputing in agriculture.

Hillside junior Dominika Lee said the event challenged her perception of what it means to be a scientist.

"When I think of science, you usually think of experiments and chemistry..." Lee said. "I never really correlated that with working with insects and the environment and helping people."

The event was a collaboration between Hillside High School, the Durham Council of PTAs and Bayer Corporation, connecting students from Hillside with STEM professionals in the Triangle. Eleven Bayer scientists, including high-performance computing technicians, microbiologists and agricultural engineers, attended the event.

"It's really interesting to see all these different women coming from different backgrounds with different careers and different college experiences all joining together with the same power behind them," Lee said. "It's important to know that there are other options for you other than just basic, stereotypical jobs of a woman."

### Connecting with each other

During their presentation, Yasmin Cardoza and Lou Gibbs allowed students to experiment with microscopes and other lab equipment as an introduction to entomology, the study of insects. Both women agreed that there were few examples of successful women in STEM when starting



**TOP:** Hillside sophomore India Dias (left) learns about Lou Gibbs' role as a microbiologist. Gibbs says she loves the outreach aspect of her career. Yasmin Cardoza (left) shows junior Dominika Lee the insects she studies as an entomologist. "They're very enthusiastic, and I think they're also very hopeful," Cardoza said.

their careers.

"I want to serve as a role model for young women so that they can see that there are women specializing in science and entomology and different areas that they can look up to," Cardoza said.

Gibbs agreed, adding that she gets a "fulfilling feeling" from connecting with young women.

"I love science," Gibbs said. "But over the past three years, what I get more fulfillment from is outreach. Talking to youngsters about my story. Answering any questions that they have... Sometimes, the kids don't even realize that (a STEM career is) an option for them.

"It's important because I know that we are capable, and sometimes we are underestimated," Gibbs said.

India Dias, 15, felt empowered by the opportunity to meet successful women in STEM and by the knowledge she gained through their presentations. She especially enjoyed a presentation given by Alyce Fowler about how a high-performance computing architect can use a scientist's "crazy ideas and data" to create a working computer system that can solve real-world problems.

"If she can do all of this with just one computer, it can mean the world if more girls can do this, too," Dias said.

### Continuing the conversation

Durham Board of Education Chair Mike Lee was present for the first half of Girls in STEM and said that he would love to have this type of event at each of Durham's public high schools.

"One of the things that we understand as a school district is having people that look like yourself... coming to talk about things that might interest you fully, increases interest and fully increases the possibility that you would actually take a look at these industries," Lee said.

"Not everyone here is going to be in a STEM career, but now they have the option," he said. "Now they've been exposed to this. They can say, 'Okay I like that.'"

Presenters said they drew just as much inspiration from the event as the students they'd met throughout the day.

"The students were brilliant," Cardoza said. "And they were so curious and so full of energy and life. There's just so much hope for everything that they can achieve in their lives."