Undergrads make connections through biology and service

By Agnes Shin

At a recent community showcase, undergraduates involved in the Biology Service Leaders (BSL) program presented projects that ranged from testing water quality in local streams to teaching biology to people in prison.

Founded in 2013 by Tina Su ’15, the program is a service incubator that allows students to be creative in the field of biology, as well as the realm of community service. It has a formal partnership with the Office of Undergraduate Biology and the Public Service Center, and students participate in long-term service projects as well as one-time community events.

Su, a biology and chemistry double major in the College of Arts and Sciences, says she wanted to strengthen relations between Cornell and the Ithaca community and help foster a sense of responsibility in science majors by helping them understand the role that a scientist can play in a community.

“I wanted to encourage the leadership potential I saw in burgeoning scientists, to take their passions and transform them into realities working in a team of driven individuals,” Su said.

Members presented their projects on campus at the Feb. 5 showcase, which commemorated their yearlong efforts.

Charles Trautmann, executive director of Ithaca’s Sciencenter, delivered the keynote address, emphasizing the need to create connections between the Ithaca community and Cornell. The Sciencenter was founded by in 1983 by spouses of Cornell faculty members who had been concerned with the lack of science education in elementary schools.

The vision of the Sciencenter today, he said, is to build a community that empowers young students to “use science in shaping a better world” – a vision reflected in many of the projects presented at the event.

One project was “4-H₂O Monitors,” which aims to inspire an appreciation for bioenvironmental principles in elementary schoolchildren through presentations, guest speakers and interactive, hands-on activities. Staff from the Cornell Raptor Center brought in red-tailed hawks and turkey vultures to help children better understand the importance of the ecosystem’s health to...
organisms in the community, and students explored such topics as plant biology and water quality by assisting the Community Science Institute in monitoring and testing water in Fall Creek.

BSL students also helped coach Science Olympiad teams at local schools. They first started coaching the Boynton Middle School team, later expanding to teams in elementary schools through a program run by Ithaca SMArts, a club that helps children explore science, math and arts. "We wanted to show kids that science is doable," said Lena Liu ’15. "It was extremely rewarding to see the elementary schoolers so excited to learn about science."

Other students took part in the Prison Education Project, teaching introductory biology to inmates at the Auburn Correctional Facility and the Cayuga Correctional Facility. They were challenged to design the course and improve teamwork among members, as well as engage the inmates in active learning situations.

Jennifer Hoots ’16 said that the project allowed her to gain a different perspective on people who are in prison. "People are people no matter where they are and what they've done."

Another project surveyed natural areas around campus to evaluate the effectiveness of different pesticides to combat the hemlock woolly adelgid, an insect pest that attacks hemlock trees. And a science debate team hosted public debates on science, medicine and health downtown and at local schools.

Su said the BSL group also helps with one-day community events such as the AIDS Ride for Life, Can You Canoe Cayuga and Tough Turtle races.

"Founding BSL is by far one of the most meaningful experiences I have had at Cornell," she said. "I have seen tangible consequences arise out of amorphous dreams or conversations. I am constantly inspired by the talent I see both in the community and here on campus.

"For the students, I hope that BSL will infuse an entrepreneurial spirit within the biology major, and that they will be empowered through their BSL experience, ready to serve a larger community after graduation."

*Agnes Shin ’18 is a communications assistant for the College of Arts and Sciences.*