For high school students at Pittsburgh’s Holy Family Academy, getting hands-on experience in biology and chemistry may not only help them discover the fundamentals of science, but also spark future careers in innovation and community advancement.

Duquesne’s Bayer School of Natural & Environmental Sciences is partnering with the academy, allowing its high schoolers studying science to conduct experiments and coursework in the Bayer School’s labs.

This creates amazing learning opportunities not often provided at the academy due to limited funding for equipment and specialized classrooms.

“Lab space is expensive to build and to outfit, and the academy cannot afford this type of capital project at this point,” says Dr. Ellen Gawalt, Hillman Distinguished Professor and chair of the Bayer School’s Department of Chemistry and Biochemistry. “So when the academy presented this partnership idea to the Bayer School as part of its Network Campus Program, we felt that this was an excellent way to advance our mission of community outreach. These students need the space and expertise that they were unable to find elsewhere, and we were readily able to offer the resources.”

Holy Family Academy, a Catholic high school that opened in 2014, works to bridge education to the employment skills gap in STEM careers for Pittsburgh-area students that are generally underprepared and underrepresented in these fields.

Through a rigorous yet personalized college preparatory program and unique real-world work-study program, students pursue pathways to build future-ready skills.

According to Dr. Lisa Abel-Palmieri, A’01, GA’03, GS’03, Holy Family Academy’s head of school and chief learning officer, the goal of its Duquesne partnership is to create unique, transformative experiences for students.

“Recognizing that these young people stand to be the most important change agents in their communities, we help them find their own voices as they grow into the innovators and leaders of tomorrow,” explains Abel-Palmieri. “Partnering with Duquesne provides a college-level science experience which we hope will be a highlight in the students’ lives.”

Throughout the school year, Holy Family Academy students come to Duquesne’s campus on Fridays and spend up to three hours at the Bayer School working on science projects and experiments. They also receive workshops on study skills, tour the campus, speak with Duquesne faculty about careers in science, and attend special Duquesne events.

“Thanks to these opportunities at Duquesne, I enjoyed actually being on campus and feeling like I fit in with the other students.”

For Holy Family Academy students, spending time learning at Duquesne is more than a field trip—it’s an opportunity to explore the world of science in an environment full of inspiration, motivation and encouragement.

Tierney Bennett, a senior at the academy, discovered that going to Duquesne was a great opportunity to get advanced exposure to college life and preparation for her future career.

“When I go to college, I would like to study criminology or computer science, and hopefully enter police, FBI or detective work,” says Bennett. “During visits to the Bluff, she looked forward to working in the biology labs and conducting hands-on experiments that many students never even thought they would do—such as identifying unknown substances by heating them up or adding another liquid or solid and watching the reaction.

“Other high schools don’t give students the opportunity to learn like this, or even get the chance to be at a college to learn,” says Bennett. “Thanks to these opportunities at Duquesne, I enjoyed actually being on campus and feeling like I fit in with the other students.”