

Step Up

Overcoming some incredible odds, students thrive in Fordham's CSTEP, a New York state-sponsored program that has been propelling minority scholars to careers in the sciences, health-related fields, and other licensed professions for 25 years and counting.

Sitting in the CSTEP office on Fordham's Rose Hill campus one brisk afternoon last February, Carlisdania Mendoza was waiting to hear from Duke University—her “dream school.” The Fordham senior had already been accepted at Mount Sinai School of Medicine and Albert Einstein College of Medicine.

“It's through CSTEP that I found out I wanted to be a doctor,” she said, after checking her e-mail in the program's computer lab. Born in the Dominican Republic and raised by a single mother in the Bronx, Mendoza skipped a grade in grammar school and started college at 16, with hopes of becoming a lawyer. But a law internship changed her mind. “I didn't like it,” she said.

So CSTEP counselors pointed her toward a paid research internship at Albert Einstein College of Medicine, where she studied health disparities in divergent communities. “I never looked back,” she said.

Mendoza, who graduated from Fordham College at Lincoln Center in May, was one of about 200 CSTEP students on the Rose Hill and Lincoln Center campuses who rely on the program for academic and social support each year. Like many students in CSTEP—the Collegiate Science and Technology Entry Program—she is the first in her family to go to college. She and her peers often juggle academics, campus housing, and home-life issues on top of the hard-to-secure internships and graduate school entrance exams that are central to their chosen career paths.

At CSTEP, they find a warm, knowledgeable staff that inundates them with support. The \$8 million New York state program was founded 25 years ago, and today serves about 5,500 minority and economically disadvantaged students at 49 colleges each year.

Fordham's CSTEP chapter is one of the largest and most successful in producing graduates who go on to study in the STEM (science, technology, engineering, and math) professions, according to the New York State Education Department. In the past three years alone, 12 Fordham CSTEP students have been accepted to medical, dental, or optometry school; seven to law school; three to allied health

programs; four to graduate programs in chemistry; and seven to law school. Several

others have earned competitive fellowships.

But those awards and acceptance letters do not come easy. With the help of their counselors, CSTEP students start earning coveted—and paid—internships and research assistantships in their freshman year. The program provides tutoring for challenging classes like organic chemistry, and offers crucial guidance in the graduate school application process, including free test-prep classes for entrance exams.

“We're trying to bridge the gap between high school and college, so that students can be successful right from the beginning,” said Michael Molina, who has been the director of Fordham CSTEP for all of its 25 years. Before their freshman year, students can live on campus for the five-week Summer Scholars program, where they take math and chemistry courses, and learn college-survival skills. They also visit medical, dental, and optometry schools.

“We want them to know what they're in store for,” and preparation is key, said Molina, citing the 50 percent drop-off rate for pre-med students.

“I don't know how far I would have made it without CSTEP,” Mendoza said.

Her counselors helped her convince her mother to let her live on campus, and supported her when she came out as a lesbian, which created even more conflict at home. Academically, she said, “They stay on top of my grades. ... It's like you're accountable to someone.” And socially, she felt welcomed by her counselors and peers. “Being the only person of color in a classroom, that can get tiresome. I step in here and it's like, ‘OK, I'm home again.’”

It's that familial environment that students say keeps them coming back. It starts at the top with Molina. “If you come up here,” he said from his office in Collins Hall, “you're going to get a hug or a kiss.”

By Nicole LaRosa

Photos by Kathryn Gamble



Carlisdania Mendoza, FLC '12, celebrates at graduation with her cousin and uncle (inset, left), shortly before heading to Duke University School of Medicine, where she earned a scholarship that will pay for half of her tuition and expenses.

“You made Fordham look like the rest of New York City,” Molina told students. “You left this institution better than you found it.”



Asmaou Diallo, FCRH '12, was “very terrified” as a Fordham freshman, but her CSTEP counselors pushed her to apply for a prestigious summer program at Yale, and she “totally fell in love with research.” From left: Diallo with fellow CSTEP graduates Amadani Boncenor and Angel Melendez.

Swiveling in a chair next to Mendoza on that February day, Asmaou Diallo, FCRH '12, professed that she “would not be here” if not for CSTEP. A bubbly pre-med student from Guinea, she rattled off several reasons to be grateful for the program. “My counselor calls me and says happy birthday,” she said. “I think that’s pretty awesome.”

It is exhausting just to listen to Diallo; her energy and enthusiasm are boundless.

“I came to Fordham knowing I wanted to be a physician, but I did not know about research.” Now, she said, “You give me one molecule, I can spend my life on it.”

But just before her junior year, a serious medical problem threatened to sideline the ambitious student. A victim of female genital mutilation in Guinea, Diallo lives with pain every day of her life. It had become so intense that she had to take a semester off. CSTEP referred her for counseling and even paid for her yoga classes, which have helped her manage her pain better than the medications that made her too drowsy to study. She also found solace in her Muslim faith, leading her to put off medical school while she pursues a master’s degree in Islamic studies. That day, she was waiting to hear back on her seminary applications.

As Diallo left for class, her seat was taken by 18-year-old Brandon Mogrovejo, a soft-spoken pre-med student from Yorktown Heights, N.Y., with dark, close-cropped hair. His athletic shorts and Fordham sweatshirt gave the half-Italian, half-Ecuadorian freshman an all-American look.

“I always knew I wanted to be a doctor,” said Mogrovejo, who was working on a chemistry research project on meteorites that he “never would have found out about” without CSTEP. “Carli [Mendoza] was my mentor. She sort of braced me. I had heard the pre-med track was hard.”

According to the U.S. Census Bureau’s 2009 American Community Survey, almost three-quarters of STEM (science, technology, engineering, and math) jobs are held by non-Hispanic whites, which is just slightly higher than their overall percentage in the U.S. workforce. By contrast, non-Hispanic blacks and Hispanics each comprised six percent of all STEM workers, but 11 and 14 percent, respectively, of the overall workforce.

To look around Fordham’s McGinley Center Ballroom on March 3, however, was to see those discouraging

statistics beginning to change. Roughly 150 students and alumni turned out for CSTEP’s 25th anniversary dinner, eager to reunite and share their success stories.

Edwardo Rodriguez, Ph.D., FCRH '99, GSE '06 and '11, told the crowd what it was like coming to Fordham from “Section 8 housing, in the middle of the crack epidemic.”

“It was very difficult to find family, an academic community that I could attach myself to,” he said. “My mom could make me coffee at 3 a.m., but she couldn’t help me write a paper in APA format. CSTEP offered that feeling of community, of support, of being understood.”

Echoing that sentiment was Joseph M. McShane, S.J., president of Fordham. He said that CSTEP students and staff had “knit [them]selves together as a family,” and praised Molina as a “visionary” who is “never content.”

Molina beamed, basking in the evening’s reminiscences. “I’ve waited a long time for this moment,” he said from the podium. To his former students, he added, “You made Fordham look like the rest of New York City. You left this institution better than you found it.”

In early May, the CSTEP office was buzzing with news of the many graduate school acceptances and fellowships received by its students, but Brandon Mogrovejo, the freshman, was busy preparing for his chemistry lab final. He’d taken 20 credits that semester, and had a 4.0 GPA.

“I wanted to see how much I could handle,” he said. His days consisted only of studying and rowing crew at 5:30 each morning. “It’s my outlet,” he said.

Meanwhile, other CSTEP students were preparing to leave New York in pursuit of their long-held goals. Diallo had been accepted at Hartford Seminary, complete with a full scholarship. Mendoza had just flown back from Seattle, where she was wooed by the University of Washington School of Medicine. In the end, she chose Duke, where a scholarship will pay half of her tuition and expenses.

Reflecting back on the day she got her first medical school acceptance letter, Mendoza recalled how her mother didn’t show much enthusiasm. “I was just expecting a lot more,” she said. Then she told her CSTEP counselors, who “were so excited for me.”

“OK,” she remembered thinking, “this is what I was looking for!”

—Nicole LaRosa is an associate editor of this magazine.