

# From the Lab to Life-Saving Medicine

How Huma Booter is Making a Difference with Montclair's Master's in Chemistry.



When Huma Booter was finishing her graduate degree in Chemistry at Montclair State University, she could have never predicted the profound impact her research would have—not just on her career, but on the lives of patients suffering from rare diseases. Today, as a Bioanalytical Specialist at Kyowa Kirin, Huma is part of a team that is developing treatments for conditions with no other hope of cure. Her story is one of how a graduate degree, the support of dedicated professors, and the opportunity provided by the OPEN-NJ scholarship allowed her to turn a passion for science into a career that is saving lives.

For Huma, the decision to pursue a Master's in Chemistry with a focus on Biochemistry was both an academic and personal one. After completing her undergraduate degree in Biology, she knew she wanted to continue her studies in a program that would allow her to explore her fascination with biochemistry. "Montclair was the only place that offered exactly what I was looking for—a program that focused on biochemistry within a chemistry framework," Huma explains. "But more than that, it was the support I received from the faculty that made Montclair the right choice for me."

A pivotal moment in Huma's decision to enroll at Montclair came when she learned about the OPEN-NJ scholarship, a financial award for New Jersey residents in science graduate programs. This scholarship not only alleviated the financial stress of tuition but also allowed Huma to fully immerse herself in her studies without the distraction of needing a part-time job. "The scholarship helped me focus entirely on my coursework and research. It gave me the freedom to dive into my studies and really excel," she says. "That peace of mind made a huge difference in my experience and my academic success."

During her time at Montclair, Huma excelled in both her coursework and research. One of the highlights of her graduate experience was her work in a lab, which ultimately resulted in the publication of her research in the [ACS Bio & Med Chem Au](#) journal. "Getting our research published was such a rewarding experience," Huma says. "It was a recognition of all the hard work we put in, and it really helped establish my credibility as a scientist."

Today, she works at Kyowa Kirin, where she helps analyze data to support the development of treatments for rare, often terminal diseases. "What I do now has a direct impact on patients. Many of the people we are working to help have no other treatment options," she says. "Being part of a team that develops these life-saving treatments is incredibly fulfilling. It's the kind of work that reminds you why you got into science in the first place."

Although Huma's role now focuses on bioanalytical research rather than hands-on lab work, she credits her time at Montclair with shaping the analytical and problem-solving skills she uses daily in her job. "Even though I'm not in the lab anymore, the skills I learned in graduate school—like being detail-oriented, disciplined, and able to analyze data critically—are essential to my work today," she explains.

Looking back on her time at Montclair, Huma is grateful for the mentorship and support she received from her professors. "The professors at Montclair didn't just teach us—they cared about our success," she says. "They made sure we had everything we needed to thrive, both academically and personally. I always felt like I was part of a community that truly wanted to see me succeed."

For anyone considering a graduate program, Huma's advice is clear: "Montclair is a place where you can thrive—if you want a program that challenges you while also providing the support you need to succeed, it's a great place to be."

Huma's journey—from her time at Montclair State to her current role in the pharmaceutical industry—serves as a powerful reminder that the right combination of education, opportunity, and support can lead to a career that not only fulfills personal aspirations but has the potential to make a lasting, positive impact on the world.