



Dillon Preston »

CHEMISTRY

SCIENCE. THAT'S WHAT DILLON PRESTON knew he wanted to study. He also knew he wanted hands-on research experience as an undergraduate. That's why he chose the College of Charleston. He knew it would be his best option for both.

"Initially, I thought I wanted to study molecular biology," Dillon says. He chose the College because it didn't have a graduate program in that area, and he knew that this meant he'd get much more one-on-one attention than he could at a large university.

As it turns out, chemistry was his true calling. "I started taking chemistry classes as a freshman. Taking those courses made me fall in love with the topic. There was something so amazing about understanding how molecules work, and the professor had an infectious enthusiasm about the subject."

Dillon quickly found himself doing research with several professors. "I've been a research assistant since I was a sophomore. Much of the work I do involves attempting to synthesize certain kinds of polymers to find new ways for them to be used in organic-based solar panels. Essentially, I am developing the materials and then another team will be testing them."

He applied for and received research grants to further this work during two consecutive summers. "A lot of what I do in the lab is independent work, and teaching yourself to learn is definitely a big thing. In our chemical synthesis class, for instance, the professor oversaw the work, but we were very hands on. He'd tell us to synthesize a certain molecule. He provided the literature and procedures, but as far as the techniques and learning how to proceed, we had to look that up ourselves. That left a lot of room for things to go wrong, but that's the most effective way to learn. The fact that you have to dig in and learn for yourself, that definitely helps cement the information in your mind."

In the future, Dillon wants to lead a research team doing materials work in quantum chemistry or chemical engineering. "I know that the experiences I've had here at the College will translate directly to that." 📷



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