

*Catalyst Profile*  
**Kortney Schumann**

Since parting ways with WCU, Kortney Schumann, who graduated in 2014, has a newfound interest in heavy metal, the carcinogenic kind at least. As a graduate assistant at the University of Kentucky at Lexington, this aspiring toxicologist works in the lab of Xianglin Shi, a renowned cancer researcher.

This second-year doctorate student in Kentucky's Toxicology program hopes to one-day transition from the world of academia to a federal lab. Still, Schumann's fascination with centrifuges and biological microscopes began in the classrooms of Stillwell.

In 2011, she delved into coursework for a double major in chemistry and forensic science, with a criminal justice minor. Determined to finish with honors and graduate in only three years, Schumann vied with professors and administrators, scrounging up honors contracts.

"My greatest achievement is my ability to work through challenges," said Schumann. "I had to fight for my honors hours; I had to go after that goal."

Though 18-hour semesters, a tutoring gig in the Writing and Learning Commons, and a position in the Pride of the Mountains Marching Band consumed much of her time, Schumann dedicated "every free minute of the day" to research. In February of 2013, she even received the Undergraduate Biotechnology Research Fellowship.

The \$5,000 grant supported a project in which Schumann and Channa De Silva of the Chemistry Department explored the "cell toxicity and non-specific uptake" of nanomaterials used in medical settings. Silva acted as a mentor, both in and out of the lab.

"They provided me with some outstanding opportunities," said Schumann. "As well as some very sound advice for pursuing a career in science."

During Schumann's final six months at WCU, Heather Coan of the Biology Department also provided guidance regarding graduate school options. Ultimately, Schumann would forgo a master's degree, and instead begin pursuing her doctorate at the University of Kentucky, a school that is ranked within the top three nationally for toxicology.

Though the biology-based degree has been challenging, this former Catamount has managed to earn A's and B's in all of her courses thus far. With several years of research looming, Schumann refers herself back to her own advice.

"There will be many times when you are ready to be done; when you're ready to stop the continuous work that never gives the results you want," said Schumann. "It will require a lot of time and effort even when you feel like you no longer have it in you, but you will be amazed at what you can achieve."

