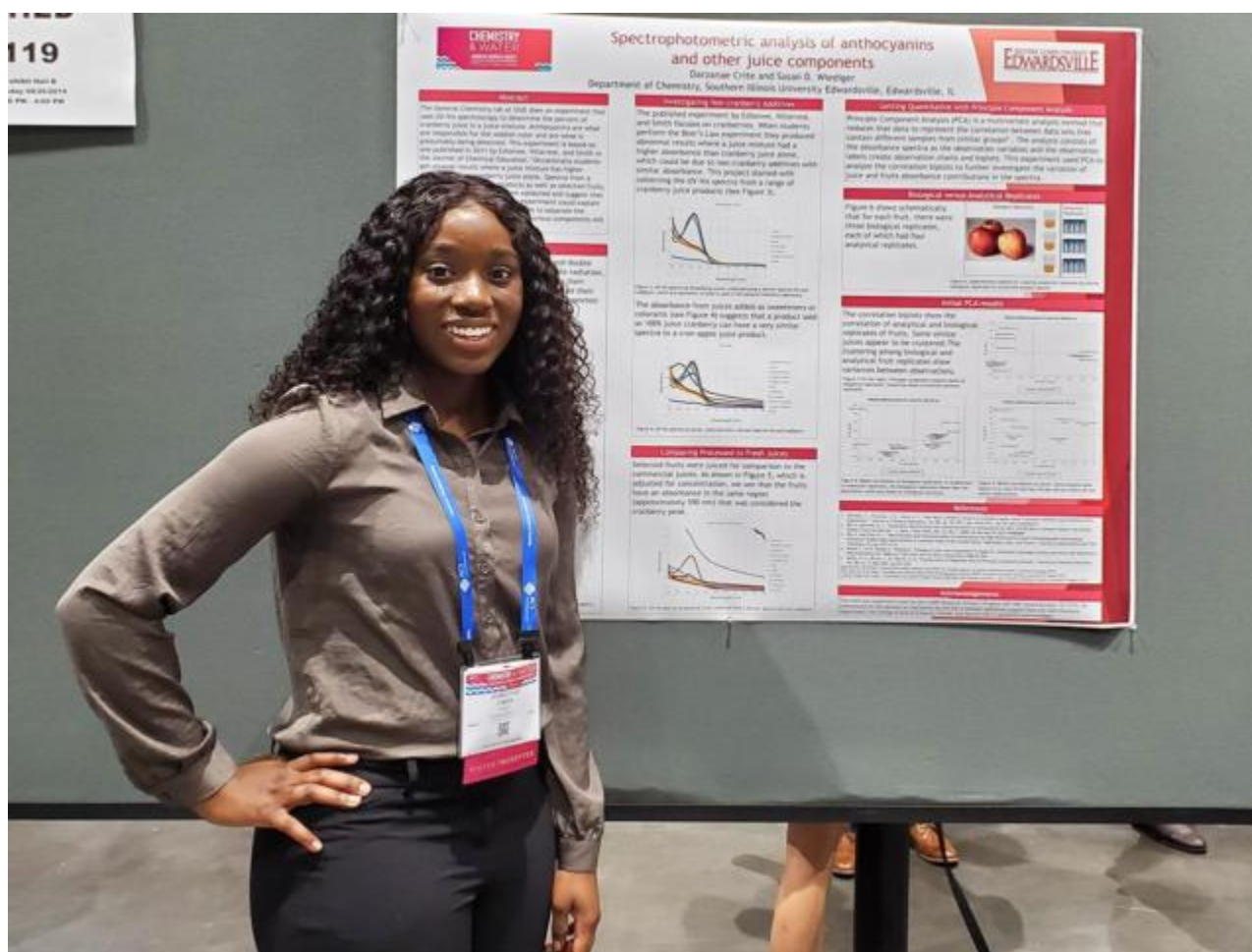


SIUE Senior Presents at ACS Fall 2019 National Meeting

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EDWARDSVILLE – Attending and presenting research at a professional society meeting can be an inspiring and eye-opening experience for college students. In late August, Southern Illinois University Edwardsville senior and forensic chemistry student Darzanae Crite shared her research at the American Chemical Society's (ACS) Fall National Meeting.

“I have been to conferences before, but the ACS meeting was bigger than any other conference or lecture I have presented at or attended,” said Crite. “I was a little nervous, but excited to present.”

Crite, of Kankakee, participated in the ACS’ fall event held Aug. 25-29 in San Diego. She joined fellow chemistry students and scholars in company with SIUE’s Sue Wiediger, PhD, professor in the Department of Chemistry within the College of Arts and Sciences.

Along with presentations, the national meeting featured workshops on career and technical topics, and provided opportunities to see the latest instrumentation and materials in the field.

“Participating in meetings of professional societies provides opportunities for academic, personal and career development for students,” Wiediger said. “They have a chance to see and hear about the most recent research from the full breadth of the chemistry profession, from students similar to themselves up to award-winning industry, academic and government scientists.”

“At the meeting, I saw that the field of chemistry is much more diverse than just molecules and elements,” noted Crite. “There were people finding ways to better diversity and accessibility in the field of chemistry. There were even people creating instruments to better analyze and solve different chemistry problems.”

The pair previously worked together on an Undergraduate Research and Creative Activities (URCA) project. Afterwards, Wiediger encouraged Crite to continue researching and helped her design a project allowing her to explore her interest in forensic chemistry.

Crite’s project was based off an SIUE general chemistry lab in which students conduct a spectrophotometric analysis of cranberry juice. When students were getting abnormal results after performing the experiment, she was inspired to find a way to investigate the absorbance results and develop a better understanding of the lab.

Using a spectra-vis and principal component analysis, Crite and Wiediger’s research focused on using a variety of cranberry juices and freshly squeezed fruits to quantitatively analyze why the absorbance of cranberry juice was sometimes lower than the absorbance of cran-apple juice. They found that using cranberry juice with added components such as apples, pears and grapes affects the absorbance concentration. These findings addressed issues in the original experiment and will help students develop a better understanding of the spectrophotometric analysis lab.

Crite has been supported by the Louis Stokes Alliances for Minority Participation (LSAMP) Research Scholar's Program, which purchased some of the software she uses in her research and provides opportunities for her to present her work.

"Darzanae has been great to work with," Wiediger said. "She can work independently and is comfortable tackling new topics to improve her knowledge."

In the future, Crite hopes to work in a forensic lab, analyze crime scenes and evidence, and eventually work towards a PhD in forensic toxicology.

"No one, even someone who does not study chemistry, should feel scared or intimidated to engage themselves in science," said Crite. "At the end of the day, everything that everyone does is to keep pushing science forward."

"Working with Dr. Wiediger and attending the national meeting have been very special opportunities," Crite added. "I have seen my chemistry skills improve, and my understanding and thinking action have made me a better analytical chemist."

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