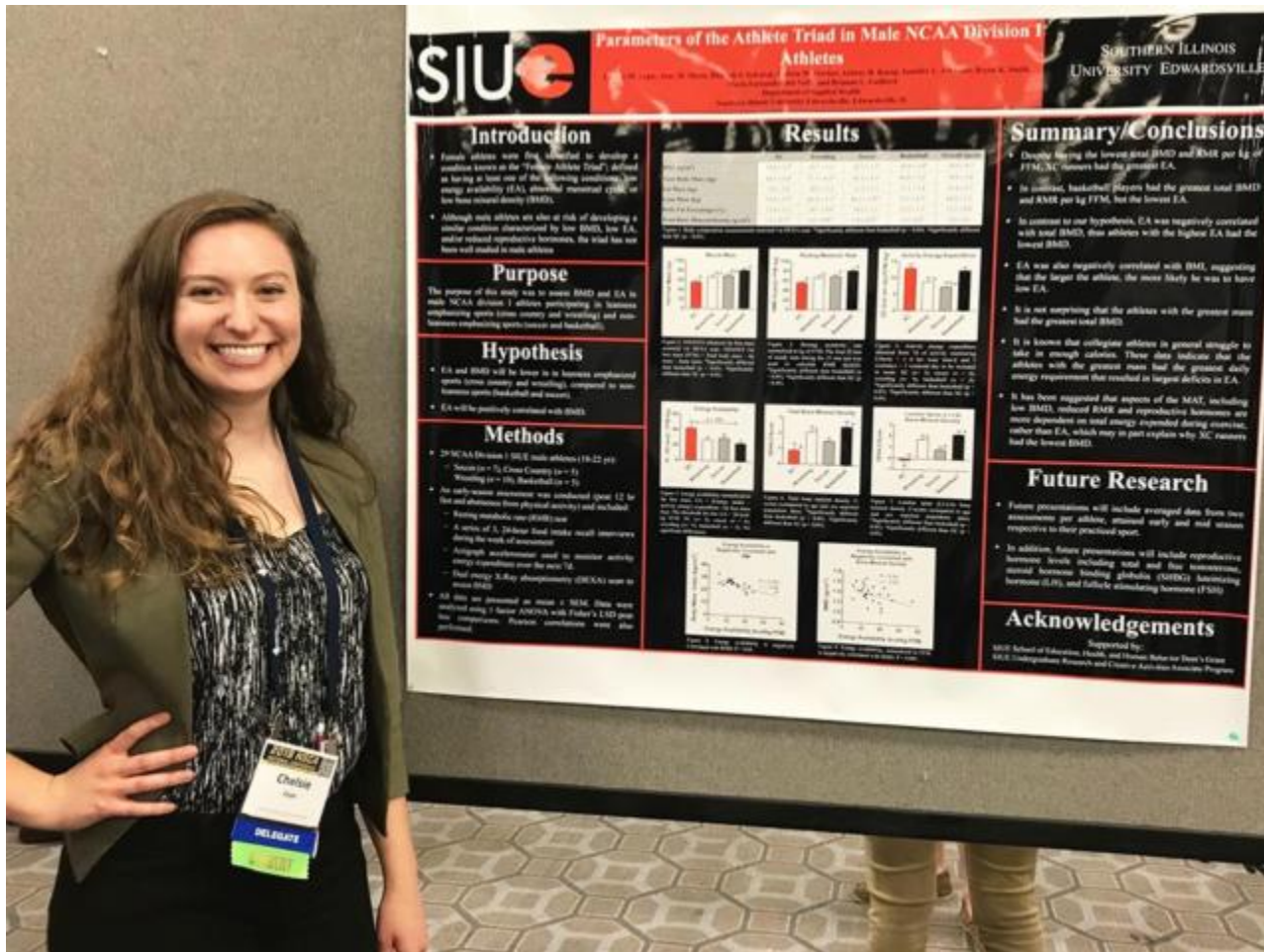


SIUE Senior Earns Competitive Research Award at Internationally-Attended Conference

by Megan Weiser
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EDWARDSVILLE - Southern Illinois University Edwardsville senior exercise science major Chelsie Zajac, of Belleville, added a major achievement to her research portfolio when she secured the only undergraduate research poster presentation award during the

2019 National Strength and Conditioning Association (NSCA) conference held July 10-13 in Washington, D.C.

Zajac conducted her research as an Undergraduate Research and Creative Activities (URCA) associate on the novel topic “Parameters of the Athlete Triad in Male NCAA Division I Athletes.” She worked under faculty mentor Brianne Guilford, PhD, associate professor and exercise physiology graduate program director in the School of Education, Health and Human Behavior’s Department of Applied Health.

“Chelsie competed against numerous undergraduate students from inside and outside the United States, and I was extremely impressed when she won the best undergraduate poster presentation award,” said Guilford. “She put in a lot of time and effort collecting data on this project, and preparing her presentation for the conference. She is highly deserving of this honor!”

According to Guilford, there is ample research on the Female Athlete Triad. Male athletes are at similar risk, though little research has been conducted on the male athlete triad. This, combined with Zajac’s belief that all genders should be represented in research, especially on topics that can affect one’s health, inspired the high-quality research project.

“Elite athletes are at risk for a chronic imbalance in energy intake and energy expenditure that can permanently compromise health and impair performance,” Zajac explained. “This condition is labeled the Female Athlete Triad and is defined as having one or more of the following: low energy availability, impaired menstruation/decreased reproductive hormones, and decreased bone density. However, there is no formal label for the male condition, and few studies have documented the prevalence of the athlete triad in males.”

Zajac calls the research process and corresponding award a team win, emphasizing her appreciation for her faculty mentor, research assistants and all others who contributed to the project.

The project’s findings are beneficial to male athletes, coaches, and strength and conditioning coaches.

“These results indicate that male athletes are also at risk for experiencing low energy availability, low bone mineral density, and decreased reproductive function,” Guilford noted. “These findings should help increase awareness in athletes and coaches, and hopefully prevent male athletes from experiencing negative health consequences associated with high energy expenditure in sport. Furthermore, our results indicate that certain sports, such as cross country, may be at greater risk for developing low bone

mineral density, despite high levels of energy availability. As we continue to analyze data from fall and winter sports, and add the reproductive hormone data, we hope to learn more about the relationship between these variables.”

Conducting research is no easy task, Zajac learned. But, she notes the experience added value to her life and academic experience, making it well worth the effort.

“I cultivated relationships with amazing, intellectual people, witnessed how diverse research can be, learned career development skills that I can utilize down the road, challenged my time management between coursework and research, and so much more,” she said. “I am grateful I said yes to this opportunity and never looked back.”

Zajac will graduate from SIUE in August. She then plans to take a gap year to teach English in Thailand.

The SIUE School of Education, Health and Human Behavior prepares students in a wide range of fields including community and public health, exercise science, nutrition, instructional technology, psychology, speech-language pathology and audiology, educational administration, and teaching. Faculty members engage in leading-edge research, which enhances teaching and enriches the educational experience. The School supports the community through on-campus clinics, outreach to children and families, and a focused commitment to enhancing individual lives across the region.