

# **Brianne Guilford receives SIUE's Vaughnie Lindsay New Investigator Award**

April 6 2018 2:52 PM



EDWARDSVILLE - Southern Illinois University Edwardsville's Brianne Guilford, PhD, has been recognized with the Graduate School's 2018-19 Vaughnie Lindsay New Investigator Award for significant research contributions to her field, respective school and department, and SIUE as a whole.

Guilford is an assistant professor in the School of Education, Health and Human Behavior's (SEHHB) Department of Applied Health and the exercise physiology graduate program director. Chancellor Randy Pembroke presented the award to her during a special reception held Wednesday, April 4 in the Morris University Center.

Guilford will receive a combined \$12,500 from the SIUE Graduate School and the SEHHB to be used in a one-year period.

"I was pleasantly shocked, ecstatic and honored to achieve this award," Guilford said. "I am grateful for the recognition and the funding that has been provided by faculty and emeriti, which has afforded me the opportunity to pursue this research. It is wonderful to be a faculty member at SIUE, a teaching-focused institution where research is encouraged and strongly supported by the Office of Research and Projects and the Undergraduate Research and Creative Activities (URCA) program."

Her project, "Do Omega-3-Fatty Acids Hold Therapeutic Potential for the Prevention of Diabetic Neuropathy?" aims to determine if fish oil exerts present beneficial effects on neuropathy by preventing peripheral nervous system inflammation in high fat diet-induced prediabetic mice. The overarching goal of this research is to provide evidence to support the use of omega-3-fatty acids to prevent neuropathy in human patients

"Millions of people suffer from diabetic peripheral neuropathy, and the prevalence of diabetes continues to rise in the U.S.," Guilford explained. "Diabetic peripheral neuropathy is the most common complication of diabetes and is extremely debilitating. Current pharmacological treatments are aimed at relieving symptoms, but do not reverse nerve damage."

"We need to change our focus from treatment to prevention, and lifestyle medication such as dietary change/supplementation and increased physical activity are key places to start," she added. "I have three family members who suffer from neuropathy, and I have seen their suffering first hand. This further drives my passion to help people who suffer from this debilitating disease."

"Building upon her previous results, Dr. Guilford's research has the potential to open a pathway for the prevention of a devastating condition that impacts millions of people," said Jerry Weinberg, PhD, associate provost for research and dean of the SIUE Graduate School. "This is exactly the level of significant impact that the award was set up to support, and that honors Dr. Vaughnie Lindsay's vision for SIUE."

A talented and impactful scholar, Guilford exemplifies SIUE's teacher-scholar approach by understanding the value of student participation in research.

“The symbiotic relationship between teaching and research is key to stimulating student interest in research and developing important hypotheses that address current issues in human health and disease,” Guilford said. “I often generate many of my ideas for hypotheses while responding to student questions or leading class discussions. In addition, by discussing current research in class, students become genuinely interested in research and approach me about pursuing their own research projects.”

Stephen Hansen, PhD, faculty emeritus, established the Lindsay Research Professorship Endowment that funds the award in honor of Lindsay, who served as graduate dean from 1973-1986. Lindsay was responsible for creating much of the infrastructure that supports faculty research and scholarly activity at SIUE. Faculty and emeriti faculty at the time of the award’s conception donated the funds to endow the award.

Those wishing to help support new investigators through the award may make a donation to the Graduate School section of the endowment at [siue.edu/give/](http://siue.edu/give/).

By preparing the next generation of leaders in a knowledge-based economy, [SIUE’s Graduate School](#) fulfills the region’s demand for highly trained professionals. Graduate School offerings include arts and sciences, business, education, health, human behavior, engineering, nursing and interdisciplinary opportunities. SIUE professors provide students with a unique integration of theoretical education and hands-on research experiences. Students can obtain graduate certificates or pursue master’s degrees, and be part of a supportive learning and rich intellectual environment that is tailored to the needs of adult learners. The Graduate School raises the visibility of research at SIUE, which ranks highest among its Illinois Board of Higher Education peers in total research and development expenditures according to the National Science Foundation. Doctoral programs are available in the Schools of Education, Health and Human Behavior (EdD) and Nursing (DNP). The School of Engineering and the Department of Historical Studies feature cooperative doctoral programs (PhD), and the College of Arts and Sciences features an environmental resources and policy cooperative PhD.