

# Jerry Weinberg: Guiding SIUE's research and creative activities

## Segue

This summer on Segue, Southern Illinois University Edwardsville's premier radio show, Chancellor Randy Pembroke is offering listeners a glimpse of the University community's inner workings.

On this week's episode, Pembroke interviews Jerry Weinberg, PhD, associate provost for research and dean of the SIUE Graduate School. The episode will air at 9 a.m. Sunday, July 15 on WSIE 88.7 FM The Sound.

Weinberg holds a bachelor's in nursing from Indiana State University, a bachelor's in computer science from the University of South Carolina and a doctorate in computer science from Vanderbilt University. Prior to joining the SIUE Office of Research and Projects, he was chair of the School of Engineering's Department of Computer Science and its graduate program director. In 2014, Weinberg served as president of the Illinois Association of Graduate Schools and currently serves chair of the Council of Graduate Schools Masters Committee.

Weinberg conducts research in mobile robotics, human-computer interaction and science, technology, engineering, and mathematics (STEM) educa-



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tion. He has served as the principal investigator (PI) or co-PI on over 20 grants, including nine National Science Foundation (NSF) grants totaling over \$2.5 million.

"You serve two roles for our University," Pembroke says. "Do you tend to see those roles intertwine?"

"As the associate provost for research, it's one of my responsibilities to ensure the faculty have the tools and environment to create new knowledge, make new discoveries and apply their innovations in interesting ways," Weinberg says. "As dean of the Graduate School, I must ensure that students are offered rigorous programs

that promote advanced studies, look at the boundaries of knowledge, and allow them opportunities to work with faculty to discover new things or new applications."

"I have always seen these as two roles that serve the same mission of the University," he continues, "and that is to create an environment that fosters faculty and student research, scholarship and creative activities."

Weinberg emphasizes too, that grants and contracts are crucial to the livelihood of both student and faculty research on campus.

"Grants and contracts are an essential part of the work that we do," Weinberg mentions. "Whether it's a research, educational or public service grant, each has components that serve our educational mission."

One of SIUE's largest public service missions is the SIUE Head Start/Early Head Start program. It serves more than 1,700 children and their families from birth to age five, including children with special needs, in St. Clair County. The program includes 14 early childhood centers, seven managed directly and seven collaboratively. Services include a school readiness program, educational programs for family members, and health and dental screenings.

"When we talk about funding sources from those grants, they've diversified quite a bit," Pembroke says, "Those come from state, federal and private sources."

"Yes, a variety of sources," Weinberg responds. "Of course, many of our larger grants come from federal agencies. Some of our grants have come from the National Science Foundation (NSF), the National Institutes of Health, the United States Department of Agriculture, and the National Endowment for the Humanities. We also have a number of state agencies grants."

As associate provost of research and dean of the Graduate School, it is fair to say that Weinberg is in tune with many of the research and creative activities going on around SIUE.

"Dr. Ken Witt in our School of Pharmacy has done some great research, which has been funded through the National Institutes of Health, on proteins that will help prevent or reduce the effects of Alzheimer's disease," Weinberg says. "His work has developed one patent, which will be the basis for medication in the future that maybe we'll all be taking!"

"I also have an affinity for my own work," he adds. "I have an NSF grant with a collaborator from Saint Louis

University. We are developing a human-like manipulative arm that will enable a telerebotic platform to achieve richer social interactions. Our SIUE collaborator in psychology will then conduct human testing to determine the social connection between the person communicating with the robot and the person operating the robot."

The SIUE Graduate School has made it its mission to support students pursuing master's degrees by offering the opportunity to work alongside faculty and administrators through various assistantship or fellowship positions.

"Our graduate students are increasingly important to the educational and research mission of SIUE," Weinberg says. "Teaching assistants provide incredible support to faculty and serve as near-peer mentors to undergraduates."

"Our research assistantships are funded through grants and contracts. These opportunities give students incredible research and field experiences that enhance their academic journey at SIUE."

To hear more of Pembroke and Weinberg's conversation, tune in to WSIE 88.7 FM The Sound at 9 a.m. Sunday, July 15.

By Madelaine Dearthuff, SIUE Marketing & Communications