

# SEGUE: SIUE triple alumnus gears up for ‘Solving Alzheimer’s’ Arts & Issues discussion

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Southern Illinois University Edwardsville is honored to welcome John Q. Walker, PhD, software entrepreneur, inventor and SIUE alumnus, back to campus for the inaugural Ann and Earl Lazerson Lecture on Friday, April 12.

On this week’s episode of Segue, SIUE’s premier radio show that discusses the lives and work of the people on campus and beyond, host Greg Budzban, PhD, College of Arts and Sciences (CAS) dean, interviews the alumnus about his upcoming lecture, presented by Arts & Issues, and the Ann and Earl Lazerson Endowment.

This episode will air at 9 a.m. Sunday, April 7, on WSIE 88.7 FM The Sound and [siue.edu/wsie](http://siue.edu/wsie).

Walker’s “Solving Alzheimer’s” lecture will take place at 7:30 p.m. on April 12 in the Morris University Center’s Meridian Ballroom.

The Edwardsville native’s prospects in education were similar to his classmates, he was simply interested in getting the most out of his education.

“I’m an Edwardsville kid, and I lived close enough to campus that I could bicycle there!” Walker says. “A lot of my classmates were children of people on faculty or staff. In SIUE’s earliest years, I observed that those faculty members were all iconoclasts. They came to SIUE—a brand new university—with no existing rules, departments or syllabi.”

“In some sense, the faculty worked to create a university from scratch without a rulebook,” Budzban says. “I sometimes say, ‘rules are merely suggestions with consequences,’ so that ability, creativity and freedom surrounded you.”

“Absolutely, and I did not know any differently,” Walker replies. “I have no fear or trepidation of math or science, and Dr. Earl Lazerson let me come to campus, as a high school student, to take math and science classes.”

Budzban found himself intrigued by Walker’s degree triad, noting that the study of the combination of music and mathematics goes back to the Ionian Greek philosopher Pythagoras. Upon graduation, the alum went on to become a renowned software entrepreneur.

To name a few of his career successes, Walker was a leading developer in Voice over Internet Protocol (VoIP). He also influenced the creation of IEEE 802 local-area network (LAN) and 802.11 wireless LAN (what we know as Wi-Fi). In 2002, he founded Zenph Studios, which used technology to recreate live music performances by converting piano tracks into precise keystrokes and pedal motions. The company has since

sold to piano giant Steinway & Sons. He is currently the chief technology officer and founder of uMETHOD Health in North Carolina.

“Sometimes, you do not know what your career is until you have gone through it,” Walker says. “My expertise turned out to be working with experts in other fields—not just computer science—but medicine, biology, high-speed networking, and other projects. Those who are experts in their field have a profound understanding and can do whatever they can do at the drop of a hat”

“I worked with those experts in their field and helped to build systems that replicate what they were doing.”

The first step of this process, Walker says, was to master the skills of their professions.

“You have done this kind of work in many contexts,” Budzban says. “Most recently, you have created what I would call predictive analytics for diagnostic medicine.”

“The diagnostics is not enough in this instance,” Walker mentions. “Patients and doctors must also know what’s next, what they can do about these diseases.”

Walker’s lecture, “Solving Alzheimer’s” examines his pioneering work on a multivariable approach to health that combines mathematics, statistics, artificial intelligence and bioinformatics to better understand and potentially solve issues related to Alzheimer’s disease.

“In medical situations as complex as Alzheimer’s, physicians go in using a lot of guesswork, trying a variety of tests and treatments to help alleviate symptoms,” Budzban says. “Those series of educated guesses are not working to progress our knowledge of the disease. What does the technique you developed do that is different?”

“Every single person gets to their Alzheimer’s diagnosis differently,” Walker says. “We know people’s genetics, medical history, blood chemistry over time, diet, sleep, exercise, and so on are all components that trigger this larger process.”

“By looking at your DNA results and blood tests with appropriate software, we can build quite a big picture about a person’s health. Essentially 10 years before a person’s diagnosis, we can see every bit of decay that has happened, before physicians can say ‘there’s nothing else we can do’ since the damage was already done.”

For more information and tickets to Walker’s lecture, visit [artsandissues.com](http://artsandissues.com). Tickets can also be purchased by phone at (866) 698-4253 or at the Morris University Welcome Desk.

To hear Walker and Budzban’s entire conversation, tune into this Sunday’s Segue episode at 9 a.m. on WSIE 88.7 FM The Sound and [siue.edu/wsie](http://siue.edu/wsie).