

# 'LIVING LEGEND' STEVEN WOLF REFLECTS ON CAREER SPANNING MORE THAN 50 YEARS


When well-known rehabilitation professor and scientist John Basmajian asked him to relocate to Atlanta from Boston in the early 1970s to begin a PhD in neurophysiology at Emory, Steven Wolf, PT, PhD, FAPTA, FAHA, knew very little about the "little Southern town" and in fact, had never been south of the Mason-Dixon line. Still, flattered by the invitation from a man who would become his mentor, Wolf moved to Georgia.

"I came down here thinking I'd get my degree, get out of here and return to civilization," recalls Wolf.

As it turned out, Wolf did leave Atlanta for a two-year postdoctoral fellowship in Stockholm, Sweden, but came back to Emory in 1975 and carved out an astonishing 48-year career as an Emory Division of Physical Therapy faculty member before retiring Aug. 31, 2023. While many current faculty members cite Wolf as a key factor

in positioning the division annually as one of the top-ranked physical therapy graduate programs in the country, he is regarded at both the national and international levels as one of the most well-known, decorated names in the field of rehabilitation science. The creator of the famed Emory Motor Test — later modified and renamed by a colleague, unbeknownst to Wolf, the Wolf Motor Function Test — and a pioneer of constraint induced movement therapy (CIMT) for people with stroke, Wolf, in 2009, received one of the American Physical Therapy Association's (APTA) highest honors, its prestigious APTA National Student Conclave Living Legend Award. He's also mentored dozens in the field who are now leading their own national clinical trials or are serving in leadership roles at academic institutions around the country.





For Wolf, the accolades are nice, but that's not what motivates him. Now that his career has moved towards other ventures, he wants to be remembered as a role model — someone who led by example and encouraged his colleagues to be passionate about their convictions and to give it their best.

“You've got to give it the best you can because you never want to look back and say, ‘Why didn't I try harder?’” says Wolf. “Basically, that's what I'd like to think that others see in me.”



## A Physical Therapy Pioneer

For Wolf, a career defined by hard work and a dogged determination to push his research past traditional boundaries took shape shortly after his arrival in Atlanta. About 18 months after convincing Wolf to return to Atlanta after his fellowship at the prestigious Karolinska Institute in Stockholm, Basmajian moved back to his native Canada and left the young physical therapist with a research project that examined how well people with stroke responded to muscle feedback training.

Wolf's success in developing predictors for patients led to exploring how patients with stroke would respond if you made them use their impaired upper extremity by immobilizing their good limb. This cutting-edge approach later morphed into a six-year national clinical trial in the 2000s, the EXCITE Stroke Trial, in which Wolf teamed with the University of Alabama-Birmingham's Edward Taub to develop CIMT. The trial cemented Wolf's star status within the rehabilitation field and spawned other national trials that continued to advance recovery for people with stroke. Wolf calls the project, which has enhanced the lives of stroke survivors across the world, his greatest career accomplishment.

“It was a very successful national trial,” Wolf recalls. “It was perhaps the first large national trial of a non-pharmacological approach to rehabilitation and stroke that produced substantially positive results. We were able to establish criteria of who will respond and who wouldn't. It is now a routine clinical procedure.”

Emory DPT Professor Edelle Field-Fote, PT, PhD, FAPTA, who is nationally known for rehabilitation research for spinal cord injuries and views Wolf as a mentor, emphasized the importance of his work on CIMT.

“His work with the EXCITE project was just seminal in that it changed the way we think about improving upper extremity function in people with stroke,” Field-Fote said. “And not only did it influence stroke, but it also influenced rehabilitation for spinal cord injury and for cerebral palsy to a very large extent.”

Carolee Winstein, PhD, PT, FAPTA, a recently retired long-time faculty member at the University of Southern California Division of Biokinesiology and Physical Therapy, published 26 articles with Wolf over about 25 years and served as a co-principal investigator on the EXCITE trial. In 1996, Winstein took a sabbatical and joined Wolf when he was leading the FICSIT (Frailty and Injuries Cooperative Studies of Intervention Techniques) group. Watching Wolf lead this massive national project, she recalled, was her most valuable leadership lesson.

“Steve would have weekly team meetings that he would chair and at that point, I'd never seen this before because I was doing my own research in my own lab with my own people,” said Winstein, who would go on to lead the follow-up to EXCITE, the ICARE study. “By asking me to sit in on these FICSIT group meetings, it had a huge impact on me because he was showing me how to be a leader in a big multidisciplinary clinical trial. And I learned that communication was so, so important in allowing everybody at the table to express their opinions and to drive the direction of these projects.”

Perhaps Wolf's most defining career trait is his willingness to take chances with projects that were not considered trendy or mainstream at the time.

In the mid-1980s, in response to a National Institute on Aging (NIA) request for sites to develop approaches to reduce falls in aging adults, Wolf partnered with a most unlikely person on the Emory faculty to craft a proposal: a biochemistry professor who, outside the classroom, was a tai chi grandmaster.



Wolf helped recruit Emory DPT Professor Edelle Field-Fote to Emory in 2014.

The proposal called for Wolf and his team to study two forms of rehabilitative treatment coming from opposite ends of the spectrum: new high-tech posturography machines versus tai chi, a martial arts form used by Chinese elders for more than 300 years.

“We had these dichotomous perspectives and we thought that either they’re really going to think this is cool or they’re going to think we’re absolutely crazy,” Wolf recalls. “We took a big chance in adding tai chi.”

Much to Wolf’s surprise, the NIA, an institute within the National Institutes of Health (NIH), selected his proposal, as well as seven others, from among many applications for funding. This was during a time when little attention or significance was attributed to alternative or complimentary medicine.

The end result? Wolf’s study proved that tai chi was highly effective in reducing and delaying falls in the senior population.

“We learned that when individuals perform tai chi, they’re linking their center mass with their center of gravity, so they can control the two together. And that makes you more aware of your posture and allows for stepping strategies and other behaviors to be engaged should you lose your balance,” Wolf explains.

Nearly 40 years after the study, tai chi has become a popular form of exercise in many of the country’s nursing homes and senior living facilities for its ability to enhance fitness, balance and flexibility.

“The tai chi project is a very good example of Steve’s fearlessness and doing and saying what he thinks is right, consequences be damned,” said Field-Fote.

Oddly enough, the career achievement that Wolf is least comfortable talking about is the procedure that bears his name, the Wolf Motor Function Test. It’s not that Wolf isn’t proud of the test—it’s been validated against many other well-recognized tests and continues to stand the test of time—it’s that the procedure was named after him without his knowledge. Originally named the Emory Motor Test when Wolf developed it in the 1980s, some of Wolf’s colleagues helped add a qualitative assessment component to the test and renamed it the Wolf Motor Function Test as a way to honor their colleague. Wolf first read about the name change in a publication in 2000.

“I shy away from self-aggrandizement,” Wolf says.

Instead, he has always been motivated by the “thrill of being one of the first people to learn something new” which, as a result, improved the lives of others.

“One of the things that I’ve always been fascinated in the inquiry process is that when you learn something, it even raises more questions,” Wolf explained. “Some of those are worthy of pursuit and perhaps to some extent, I’ve been lucky in figuring out, ‘Where should I go from here? What’s the next logical sequencing?’ It’s a game in a way.”

## Legendary Father and Friend

Capping an illustrious career that spanned more than 50 years, Steven Wolf is inarguably one of the most decorated, well-known physical therapists in the world. In retirement, he still serves as a consultant on a national stroke rehab trial and was recently honored by Emory with the three-day Steven L. Wolf Research Symposium that culminated in a gala celebration with friends and family from throughout the country.

But for Wolf, his greatest career accomplishments pale in comparison to raising two successful sons and being a grandfather to their four children. His oldest son is an award-winning transplant nephrologist at a large health system in Atlanta and the other is a successful businessman based in Knoxville, TN. Both earned their undergraduate degrees at Emory.

Throughout his career, Wolf received many offers to lead physical therapy programs at other prestigious institutions across the country, but he was determined to stay and be the father he never had to his sons.

“When my sons were 5 and 2, I was divorced and as someone who grew up without a father— my dad died when I was 3—I vowed to myself that I would never leave my sons,” Wolf explains. “I’m very proud of them. I’d rather talk about what they do than what I do anytime.”

The list of Emory faculty members who are glad that Wolf stayed in Atlanta is long. Emory Department of Rehabilitation Medicine Associate Professor Michael Borich, PT, DPT, PhD, who Wolf recruited to Emory 11 years ago, marvels at the passion that Wolf maintained for learning and innovation and views Wolf as not just as a mentor, but a “father figure.”

“When my mom passed away, the service was in Duluth, MN which is not the easiest place to get to,” Borich recalls. “Steve showed up and he was there for that. He literally got on a plane that morning and returned that night. He came in just to be there for support. It is hard to overstate how dedicated and loyal he is to his family and friends.”

Emory Department of Rehabilitation Professor Sarah Blanton, PT, DPT, who first met Wolf when she was a graduate student in 1991, credits Wolf with believing in her and continuously opening doors for her to advance her career whether it be presenting posters at a national society, getting published in national journals or participating in high-profile clinical trials.

Blanton will never forget how Wolf and his wife of 41 years, Lois, opened their home a few years ago to host her wedding — the same home, ironically, that Blanton’s spouse grew up in.

“It shows what kind of person he really is,” Blanton says. “He has always been there for me both professionally and personally.”

Long-time Emory Department of Rehabilitation Professor Marie Johanson, PT, PhD, FAPTA, will never forget how Wolf, in his final years on the Emory faculty, poured into the students that she co-advised with Wolf as part of the division’s new learning communities.

“Here’s this giant in the field who would come into a learning community with a group of six or seven students and was always present and listened and imparted wisdom in a gentle way from the 30,000-foot view,” Johanson recalled. “He could take a student problem and put it in a much broader, higher context and then talk to that student. I just thought it was a very powerful way to communicate and it showed a

great sense of humility to take his time to do that. I really admired that.”

Winstein, who delivered the opening keynote at the Wolf Symposium and still keeps in constant touch with Wolf, recalls Wolf’s sense of humor that brought needed levity to some high-pressure projects. During the EXCITE trial, a large group working on the project visited a Medieval Times dinner theater outside of Los Angeles.

“So, Steve decided that it would be great if we all wore a mitt on one hand while eating the meal with just the other hand,” Winstein recalled.

The entire group of researchers accepted the challenge and ate the turkey drumstick and corn on the cob meal with mitts on their dominant hands — a night that those who were in attendance still talk about nearly 30 years later.

Today, at 81, Wolf, in keeping with his reputation for taking chances, is in the process of doing research for his first attempt at writing a book — a fictitious novel based on his own unique family experience that explores the journey of a person, who later in life, discovers a family that he didn’t know existed.

“That doesn’t sound like a big deal but what I’m proposing to do in this book is to write multiple endings with multiple outcomes so that the reader can then gather some introspection about why they feel the way they do as opposed to the other alternatives,” Wolf explained.

Earlier this year, the Wolfs had a chance to travel to Italy for two weeks. They also enjoy time spent at their cabin in the North Georgia mountains. Despite the occasional down time, Lois insists that her husband, who walks, on average, about 12,000 steps a day, hasn’t slowed a bit in retirement.

“He’s busy all the time,” she said. “He’s always working on something. I really haven’t noticed much difference.”

When asked how he hopes that his colleagues remember him years down the road, Wolf recalled a recent conversation with a friend.

“Someone asked me a similar question: What would you like to have on your gravestone?” he said. “That’s one thing I can answer because I did think about that a little bit. I want it to say, ‘May the mention of my name bring a smile to the faces of my grandchildren.’ That kind of says it all.”



Long-time friends and colleagues Wolf and retired University of Southern California Professor Carolee Winstein published 26 articles together.

## Emory, National PT Community Pay Tribute to Steve Wolf with Three-Day Symposium



Tony Delitto presented loyal Boston Red Sox fan Wolf a New York Yankees’ jersey and cap.



Wolf with his sons, Joshua (left) and Adam (right).



Wolf’s wife, Lois, dedicated the song “My Guy” to her husband of 41 years.

More than 150 people, several from other states, convened at the Emory campus in late August to pay homage to one of physical therapy’s most successful, influential researchers, former long-time Emory Division of Physical Therapy Professor Steve Wolf.

The three-day Steven L. Wolf Research Symposium, nicknamed “Wolf24,” kicked off with an evening welcome reception on Thursday night followed by a two-day scientific program that covered topics such as stroke rehabilitation and recovery, neurorehabilitation, mentored research direction and a session on science, administration and leadership. Wolf closed the Saturday morning session with an address titled, “Reflections on Past, Present and Future Frontiers of Rehabilitation.”

The event concluded with a Saturday evening gala celebration in which Master of Ceremonies Tony Delitto, dean of the University of Pittsburgh School of Health and Rehabilitation Science and close friend of Wolf’s, shared a few of the practical jokes that Wolf played on him through the years including paying off a \$10 bet with just pennies and loaning Delitto a pair of socks on a road trip . . . with the toes cut out of the socks. As retribution at the gala, Delitto presented Wolf, an avid Boston Red Sox fan, with a New York Yankees’ cap and a new Babe Ruth jersey and asked Wolf to put them on in front of the dinner crowd while Delitto playfully roasted Wolf. Wolf reluctantly obliged stated that wearing Yankees’ apparel was a first — and a last — for him. Wolf’s sons, Joshua and Adam, both Emory graduates, each paid loving tributes to their father.

“Thank you for being a family mentor to all of us,” Joshua Wolf, M.D., said. “When we’ve come to you and asked questions, you’ve helped us actually think through the answers instead of just providing us the answers.”

Joshua also talked about the emphasis that their father placed on education.

“You’ve always taught all of us the value of education and knowing that when you are educated, it’s something that no one can take away from you,” he said. “It’s something that you’ll have the rest of your life and will hopefully, impart that wisdom onto others.”

Adam Wolf, a senior business executive based in Knoxville, TN recalled the words of wisdom that his dad imparted on his sons at an early age.

“My dad has always told us, ‘If the expectations that you have of yourself are higher than those who evaluate you, then you will continue to make progress in whatever you pursue,’” Adam said.

Adam recalled asking his dad recently to list the three words or phrases that he hopes people think of when they remember him. Steve Wolf responded with the words “caring,” “inspiring” and “role model.”

“Cheers to you, Pop. You nailed it,” Adam said. “Your legacy goes beyond those words. It’s the impact you made on all of us.” **EPT**