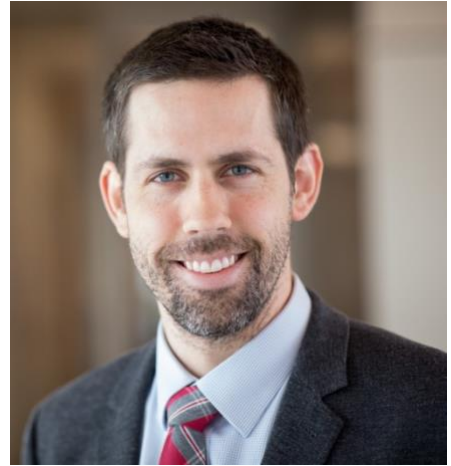


Board of Directors Spotlight: Dr. Seth Hayes

We were thrilled to welcome Seth Hays, PhD, as the newest member of ASNR's Board of Directors after our special election in May. Dr. Hays is a Professor in the Department of Bioengineering at the University of Texas at Dallas, and he has been an ASNR Member since 2021. Through his prior role on our Education Committee and regular attendance at our Annual Meeting, Dr. Hays has made important contributions to ASNR and our community. In this interview, Dr. Hays shares more about his background, his research, and his perspectives as he begins this new ASNR leadership role.



1) How did you get interested in science, and what steps did you take to get to your current role?

Not sure exactly what initially got me interested, but I actually entered into college as an aerospace engineering major before I decided it wasn't for me. When I was at UT Austin, I worked in Dr. Theresa Jones's lab as an undergrad. She had a huge impact on me and made the lab a fun and dynamic environment, and that got me hooked. In grad school at the University of Texas Southwestern Medical Center, I trained in a lab that studied basic synaptic plasticity mechanisms with electrophysiology. While I loved it and got excellent training, I knew I wanted to do something much more applied so I could have a near-term impact on healthcare. Honestly, because of timing considerations with my family, I ended up staying in Dallas and working as a postdoc on vagus nerve stimulation. I could see it had potential to be something special, and I have been working with a wonderful set of colleagues and students on how best to use this technology since then.

2) What is the focus of your current research, and what are some of your key findings?

My lab studies closed-loop vagus nerve stimulation (CLV) as a means to promote synaptic plasticity and enhance the effects of rehabilitation. I started out working on preclinical models, and we have since expanded to more engineering applications and to clinical trials. I really love how it lets me explore concepts from basic neuroscience, like the action of neuromodulators and spike-timing-dependent plasticity, but in an applied system. My group has predominantly been focused on developing and optimizing CLV to improve recovery of motor function after stroke and spinal cord injury, but I'm really excited about our recent work translating a similar approach for post-traumatic stress disorder (PTSD), where we have some promising clinical findings.

3) Why did you decide to get involved with the ASNR Board of Directors?

I was thrilled when Dr. Lewis Wheaton asked me to participate. I've had such a wonderful experience with ASNR; it is a really positive, supportive, and scientifically rigorous group. I've met and gotten to know many talented colleagues and made true friends. I enjoyed my time on the Education Committee, and I'm glad to be able to keep contributing. I originally learned about ASNR when Dr. Heidi Schambra invited me to join this committee. I'm very grateful to her for getting me involved, and I encourage everyone to tell their peers about the wonderful community here.

FAST FACTS

FAVORITE BREAKFAST CEREAL

HONEY NUT CHEERIOS; NOTHING ELSE IS EVEN CLOSE.

FAVORITE BOOKS OR MOVIES

THE STRANGER BY ALBERT CAMUS AND *LA LA LAND*.

FAVORITE PLACES TO TRAVEL

JAPAN AND NYC.

FAVORITE SCIENTIFIC JOURNALS TO FOLLOW

BRAIN STIMULATION

IF YOU DIDN'T PURSUE A CAREER IN NEUROREHABILITATION, WHAT OTHER CAREER MIGHT YOU HAVE CHOSEN?

ASTROPHYSICIST OR, REALISTICALLY, SOME BORING BRANCH OF LAW.

4) What are you most looking forward to in your role as an ASNR Board Member?

Many elements of ASNR, in particular, the Annual Meeting, the journal, and the webinars, are great, and I hope to be able to keep those going strong. I also hope to raise awareness of the strengths of ASNR among my colleagues in neural engineering and neuromodulation. There are many people with complementary skill sets who would benefit from getting exposed to the neurorehabilitation research at ASNR, and the society would grow and be stronger with their input.

5) What do you see as the biggest challenges or areas of opportunities in neurorehabilitation research right now?

The landscape for research is always challenging, but this is especially true now. We need to keep doing the best science we can, putting the focus on how we can really impact healthcare and patients, and communicate about our research as effectively as possible. On the other hand, there are also arguably more opportunities than ever to make progress. Maybe this is a bit biased, but I'm excited about the emerging evidence showing benefits with neuromodulation. There is a long way to go yet, but much like how gas mileage progressively improved with years of accumulating incremental gains, I think the field will make real, meaningful progress on how best to apply neuromodulation to maximize gains in patients.