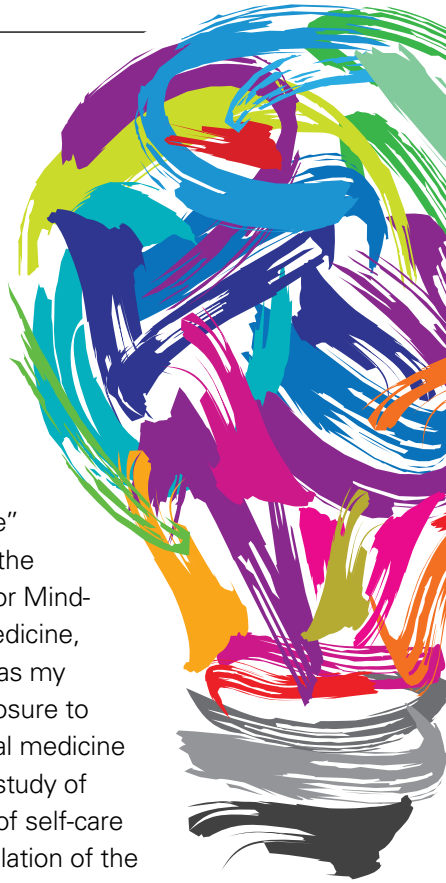
Consilience

Bridging Wisdom Across Disciplines to Create a New Model of Tinnitus Care



By Sara K. Downs, AuD

I was talking to a dear friend a couple years ago who asked me a fantastic question: "What are you doing that excites you at work right now?" This friend of mine is a genetic counselor and was more than happy to listen to my story of the "fireworks moment" I had about working with tinnitus patients. Telling of my undergraduate studies in psychology and subsequent degree in audiology, I described how the field of tinnitus had landed at an intersection that really piqued my interest. I explained how one of my favorite neuroscientists (we all have one of those, right?), Stephen Porges, had recently patented a new sound therapy protocol for sound sensitivity by stimulating the vagus nerve.

As I was explaining to her how perfectly Dr. Porges's polyvagal theory fit with Dr. Jastreboff's neurophysiological model of tinnitus, she had a big smile on her face.

"Consilience![1]" she said. She went on to explain that consilience ensues when different fields of science are broken out of their silos and create new theories, therapies, and processes by linking together principles across disciplines. I love the concept of consilience for tinnitus because tinnitus is a multisystem symptom that cannot be adequately explained or treated using any one modality on its own.

My 20 years in audiology have been focused on treating patients who have tinnitus. I was first trained in Tinnitus Retraining Therapy (TRT) by Pawel and Margaret Jastreboff in 2001. In the early days of my practice, I followed the TRT protocol down to the letter. TRT has its foundation in the neurophysiological model of tinnitus and has a protocol to follow for different types of tinnitus, hyperacusis, and misophonia patients. It is effective, and there are plenty of white papers showing this to be true.

Two of the contributing factors for successful habituation with TRT are the commitment of patients and their consistent adherence to the protocol. These can also be the clinical roadblocks to success. Depending on what else is happening in the life and health of a patient, it can be a long process, typically six to 12 months. Successful TRT depends on a skilled practitioner with lots of counseling and coaching tools at their disposal.

In those early years, I found myself searching the fields of psychology, neuroscience, and functional medicine for more tools to facilitate habituation. I became interested in nutritional and supplement support for the nervous system. I took the course "Food as Medicine" through the Center for Mind-Body Medicine, which was my first exposure to functional medicine and the study of the role of self-care and regulation of the nervous system in medicine. I went through a two-year certification process in Mind-Body Medicine (MBM) and now integrate those techniques into my audiology practice for tinnitus, hyperacusis, misophonia, and hearing loss.

While studying for my MBM certification, I learned about the polyvagal theory put forth by Dr. Stephen Porges. When I first learned the polyvagal theory, vagus nerve stimulation was already being discussed in tinnitus literature. In Porges's work we learn about how the nervous system labels sensory information through a preconscious process called neuroception. The polyvagal theory also explains that vagus nerve stimulation can be achieved through diaphragmatic breathwork and other experiential exercises, many of which are techniques I was already using in Mind-Body Medicine. That was the fireworks moment!

That moment of consilience led me to develop a protocol that uses the neurophysiological model of tinnitus as the foundation and blends together different modalities of treatment. Incorporating breathwork with other experiential exercises that encourage mind-body awareness into TRT and a sound therapy protocol customized to the hearing and tinnitus profile characteristics of the patient has been successful with patients in my clinic.

As I refined my protocol to include experiential exercises on a specific schedule, inspired by classical conditioning, habituation began to occur within six to 12 weeks. I believe this process, which I call "Active Sound Therapy," encourages neuroception to create a new "nonthreatening" label for the tinnitus signal. My hypothesis is that by priming the nervous system for change and using sound therapy on a specific schedule while interacting with the person's nervous system using experiential exercises, we can change the neuroception of tinnitus and facilitate faster habituation.

None of the different therapies in the Active Sound Therapy protocol are new. As clinicians, we stand on the shoulders of predecessors who asked questions, performed research, and created new ways of treating different health conditions. The novelty of this protocol is how it combines classic, heavily researched, and validated therapies to produce a faster, more efficient, elastic, and interactive treatment program for patients.

I have trained a small group of audiologists to use the protocol, and I look forward to collecting more data as they use it in their clinics as a way to assess its effectiveness. I am excited to bring this protocol to a wider audience of both audiologists and people who struggle with tinnitus.

I joined the ATA Board of Directors two years ago because I believe in its mission of advancing research and supporting people touched by the condition, particularly those burdened by it. As chair of the Healthcare Relations Committee, we educate healthcare professionals on appropriate tinnitus care so that no one is ever dismissively told that they "need to learn to live with tinnitus," with no meaningful information on how to move forward. The ATA does its best to fill that gap in numerous ways.

When I learned of the resignation of ATA's CEO Torryn Brazell at the start of summer, I accepted the call to serve as interim executive director, because I fully grasp the importance of the organization, particularly when it comes to keeping the spotlight on patients and their urgent need for quality care and support as we work toward better solutions and possible cures for tinnitus. I've been a healthcare professional for more than 20 years, so I feel confident that my background in healthcare management, organizational development, and leadership track record will serve the association well.

If you're feeling stuck because of tinnitus or would appreciate greater engagement, I encourage you to utilize the ATA's Tinnitus Advisor Program call line (800.634.8978, ext. 3), join an open-access online support group, or reach out to a peer-to-peer volunteer via email or telephone. For more information on these programs, visit www.ATA.org and click on the tab bar called "Your Support Network."

You can also reach me by emailing tinnitus@ata.org.

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Sara K. Downs, AuD, resides in Duluth, Minn., and is an owner and director of the Hearing Wellness Center and Tinnitus Treatment Center. She is a member of the American Tinnitus Association Board of Directors. In addition to being Board Certified in Audiology, she is also certified in Mind-Body Medicine and in providing the Safe and Sound Protocol. When Dr. Downs is off the clock, you'll likely find her in the garden, on a mountain bike, or cheering her kids on at a sporting event.

Reference

1. Wilson, E.O. (1999) *Consilience: The Unity of Knowledge*. Alfred A. Knoft, New York, NY.