

# Are your hearing aids not enough?

Join us on March 31 for an informational webinar to see if you might be a candidate for cochlear implants. This is your opportunity to meet cochlear implant users and representatives, and have Drs. Gail Amorngpongchai and Stephanie Raval answer all of your questions.



**Wednesday, March 31, 2021**  
**1:00 p.m. - 2:30 p.m.**

To RSVP visit <http://bit.ly/3aVCQXm>.



## Meet **Amber Sulahria**

Amber Sulahria is a fourth-year audiology doctoral candidate at the University of Arizona, currently completing her externship at the University of the Pacific Hearing and Balance Center. Amber aspires to provide services in hearing health care and improve patient quality of life.

As a graduate student clinician, Amber has experienced various audiology rotations and gained distinctive skills in many different settings, including university clinics and hospitals. She is an alum of the Leadership Education in Neurodevelopmental and Related Disabilities (ArizonaLEND), where she participated in interdisciplinary and leadership training to coordinate and manage groups of individuals in a health care setting.

Amber is passionate about providing services to both the adult and pediatric population via diagnostics, hearing aids, cochlear implants and aural rehabilitation. Amber is a highly-motivated graduate clinician and eager to expand her impact as a future audiologist in collaboration with our hearing and balance team.

## Can COVID-19 Worsen Tinnitus?

**Roughly one in five Americans experience tinnitus, the perception of noise in the ears frequently compared to a ringing or similar sound. Many factors contribute to tinnitus; now we can add COVID-19, thanks to a recent study from Angela Ruskin University in Cambridge, England.**

The study, which looked at 3,103 people with tinnitus from 48 countries, was conducted in cooperation with both the British and American Tinnitus Associations. The results, published in the medical journal *Frontiers in Public Health*, found that 40% of COVID-19 patients experienced increased tinnitus symptoms.

While the majority studied in Cambridge had already been diagnosed with tinnitus, a small number appeared to have developed symptoms due to the coronavirus, leading researchers to speculate that tinnitus may be an additional, though somewhat rare, symptom of COVID-19.

Social distancing was another contributing factor, according to a significant number of tinnitus sufferers whose work and lifestyle routines were disrupted (46% of UK patients and 29% from North America). Stress, loneliness and difficulty sleeping made tinnitus more bothersome for 32% of respondents.

Other factors mentioned by participants that exacerbated tinnitus symptoms include increased video calls, noisier home environments, homeschooling and increased coffee and alcohol consumption. Along with the challenges in accessing health care due to COVID-19 restrictions, it's clear the pandemic impacts those with tinnitus across the globe.

**If you have disabling or bothersome tinnitus, schedule your appointment for a tinnitus evaluation at University of the Pacific Hearing and Balance Center today.**

# SPRING INTO SUMMER



## WITH CLEAN HEARING AIDS



**Have you ever thought about cleaning your hearing aids? Considering the conditions these delicate electronic components are exposed to regularly, such as moisture, heat, earwax and dirt, routine clean-and-checks by your provider are the best way to preserve your important investment.**

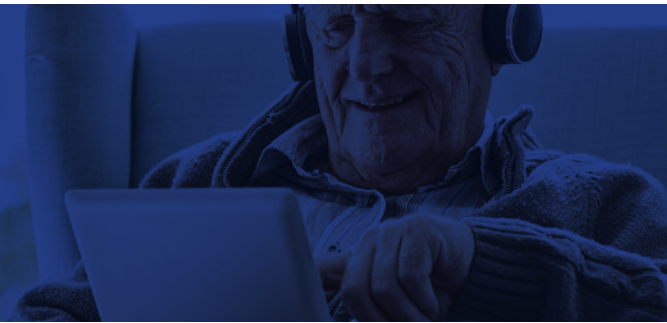
In the meantime, there are steps you can take at home to care for your hearing devices and optimize their effectiveness. Try the following cleaning tips to prepare your hearing aids for this summer!

- Be sure to apply hairspray and facial lotions before inserting your hearing aids. These harsh products create a sticky residue that is a magnet for dust and dirt.
- Wash and dry your hands before you handle your hearing devices.
- Clean your hearing devices each day with a dry, soft cloth.
- Do not use water, cleaning fluids, solvents or alcohol, as they can damage your hearing devices.

- Don't overlook the microphone inlet, which can become clogged with debris, and the battery contacts, which attract dust and dirt.
- Use storage containers—ensuring to remove device batteries—to minimize moisture and lengthen life.
- Perform listening checks with a listening tube to ensure your hearing devices sound clear, not weak or scratchy.
- Do not attempt to make any adjustments or repairs to your hearing device by yourself.
- Maintain good hygiene, and instead of cotton swabs, use over-the-counter eardrops to flush out debris.

**While these home steps can help, again, the best way to ensure your devices are working properly is to take them into an audiology clinic for a clean-and-check at your regular six-month visit or as needed.**

# Hearing Aid Technology Update



Though once considered a phenomenon for the future, artificial intelligence (AI) is readily available in today's society, from your smartphone to your television, and yes, even your hearing devices!

Before discussing how AI is used in our everyday lives, it's important to understand the three types of AI:

- **Artificial intelligence** is a computer system that can perform tasks that typically require human levels of intelligence.
- **Machine learning** is the ability of an algorithm to interpret prior data and learn from it to form certain behaviors.
- **Deep learning** is machine learning that is implemented by using deep neural networks.

AI has been successfully implemented into a variety of technologies we use daily, such as self-driving and self-parking cars, which use object detection to navigate; cameras that identify facial features and focus automatically; and smartphone facial recognition for unlocking the device and recognizing faces in our photo albums.

When it comes to hearing technology, intelligent algorithms have so far been used to reduce unwanted background noise while keeping essential sounds and providing superior feedback management.

The most recent update in hearing technology is the integration of "deep neural networks". Hearing devices are able to train themselves to process and learn from patients in real-time.

Deep neural networks are being used by hearing aid manufacturers to collect millions of real-world sounds that support your brain's ability to decipher complex sounds. Gaining access to the intricate soundscapes around us can not only improve patients' social involvement and speech recognition but can also help prevent long-term cognitive decline.

In other words, hearing devices are smarter and more efficient than ever before at not just building a path to better hearing in the short term, but rather creating a customizable, lifelong hearing strategy—one that actually learns from your experiences to improve your brain health and quality of life.

Source: Möhring, F. (n.d.). Innovation as a competitive advantage. Retrieved February 22, 2021, from <https://wdh01.azureedge.net/-/media/demant/main/media-documents/investor-relations/cmd/cmd-2018-innovation-as-a-competitive-advantage.pdf?la=en&rev=B0D9>

## Join us for an Open House

and test drive the latest hearing devices  
with AI technology today!

### April 5th – 16th

The University of the Pacific Hearing and Balance Center is offering a risk-free trial of the latest hearing technology during our Open House event.

- Complimentary hearing aid consultation
- 45-day risk-free trial
- No upfront costs
- One FREE wireless accessory with a purchase of premium, advanced or basic technology

Call today to schedule your appointment!  
**(209) 946-7378**