Hearing Your Best

ASSOCIATED AUDIOLOGISTS

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INFORMATION FROM

Associated Audiologists, Inc. "Hearing Your Best for Life"

Larry Upgrades to "Smart" Hearing Aids

By Larry Ruder

hen I was in high school, I attended St. Joseph's Military Academy, an all-boys military school that included ROTC training. At the age of 17, I was leading a platoon of young boys who were enrolled in the same academy in a simulated combat exercise.

As part of that exercise, I was to keep my guys hidden, and then at the appropriate time, give them the order to "FIRE!" When I gave that order and those 30 M-1 rifles all fired at the same time (blanks of course), it created the most horrific BOOM I had ever heard! It also was the beginning of my hearing loss and tinnitus journey.

As life went on, gradually and slowly my hearing worsened. All of the men in my family (dad, granddad and uncles) suffered the same fate. In almost every case, their hearing loss began with exposure to excessive noise (farming equipment, military, hunting), and then over time worsened when combined with hereditary factors. Every one of them eventually had to use hearing aids.

In my case, I did not need to wear hearing aids for a number of years because my loss was still mild enough that I could get by without them, or so I thought. By the time I turned 50, I decided that it was probably time for me to do something to hear better, so I began to try different hearing aids, especially as the technology improved.

Back in those days, hearing aid technology was not very good. Though it was the best we had to offer at the time, it was still not fun to wear hearing aids. However, if your hearing loss was bad enough (30 dB or more) hearing aids did help and wearing them was better than not wearing anything. If you only had a mild loss, or just a mild high-frequency loss, you usually chose not to tolerate the feeling of your ears being plugged up. In my case, I could hear louder sounds, but couldn't understand speech

very well.
Around the year 2000,
something great happened
for those of us who wear
hearing aids. Digital

Larry, center, with his audiologist, Dr. Dana Jacobson, left, and Tanja, Overland Park administrative staff, right. Editor's Note: Larry Ruder, audiologist, was a long-time member of the Associated Audiologists team. Now retired, he's enjoying time with his family, traveling, and he's wearing the latest hearing aid technology from Widex, Evoke. Here, Larry shares highlights from his journey to better hearing with us.

technology and "open-canal fittings" were introduced. This opened up a whole new world of opportunity for patients with hearing loss and tinnitus.

Today, you can wear a hearing aid comfortably without feeling like your ears are plugged up. You can truly understand speech better, even in noisy backgrounds, and especially in quiet environments. Wearing hearing aids is just

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Hearing Your Best



Hear Here...

By Tim Steele, Ph.D., President and CEO, Associated Audiologists, Inc.

Recently, my 20-year-old daughter Meg, who has special needs, was playing "name that song" with Alexa, which is a virtual assistant by Amazon. She was doing an impressive job and before long we were all joining in. It ended up being a fun and spontaneous family game as we competed with one another to name songs the quickest. Let's just say that I didn't do well with the latest hits and popular artists.

It's hard to believe how quickly technology has become a regular part of our daily lives. In fact, my children are still perplexed that I navigated high school and college without a mobile phone. I sometimes wonder how they would know what day it is if they didn't have a smartphone or computer nearby to check.

As we've witnessed a tremendous revolution in hearing aid technology in the past two to three years with the integration of smartphones, it's clear that technology is here to stay and things are continuing to advance and change rapidly. Sophisticated computer processing, machine learning, and artificial intelligence are realities in today's world, whether you are aware of it or not.

Sometimes this seems overwhelming, intimidating and even scary, but just like any new tool, it can be used for tremendous good. For example, most new Bluetooth-enabled hearing aid technology has features when paired with a smartphone to help find a lost hearing aid. The new hearing aid technology we explore in this issue, can detect falls and alert preferred contacts.

We also have advanced hearing aid technology that documents listening preferences, learns from the user, and even automatically senses and adjusts depending upon your environment/surroundings. Miniature wireless microphones are also available now, helping people with hearing loss hear better than normal-hearing individuals in certain difficult listening situations.

Rather than resist technology, I would challenge all of us to find healthy ways to learn and embrace the benefits it can afford us. The technological advancements in audiology are allowing us to help patients with hearing loss, tinnitus, and balance disorders in ways I never could have imagined even five years ago. It's like learning a new language or being exposed to a new culture, which initially can be frustrating, but ultimately can enrich and improve our lives.

Many of us want to remain healthy, active, engaged, and independent for as long as possible. These new technologies can help do just that. For example, who might have imagined that a smart home, coupled with someone who is using smart hearing aids, could allow someone to remain safe and independent in their own home for longer than otherwise might have been possible. In some cases, these quality of life improvements and freedoms are priceless.

Please allow the expert staff of Associated Audiologists, Inc. to help you be at your best, to embrace technology, and to change in a supportive and encouraging atmosphere. I think Matt Mullenweg said it best, "Technology is best when it brings people together." That's certainly my goal as we continue to explore innovative ways to use the best technology in our practice to help you and your families.

Dr. York Joins Practice

Associated Audiologists Inc. is pleased to announce that Jonathan York, Au.D., has recently joined

the practice.

r. York may be a familiar face to many of our Northland patients. He spent much of the conclusion of his externship in the



Northland Clinic, where he will continue to work along with Katie Petrosky, Au.D., and Danielle Dorner, Au.D.

Dr. York recently completed his Doctor of Audiology degree with Wichita State University, Wichita, Kan. His capstone project focused on the impact the Over-the-Counter Hearing Aid Act may have on private practice. He earned a Bachelor of Science degree from Manhattan Christian College, Manhattan, Kan.

Before becoming an audiologist, he worked approximately five years as a paramedic/firefighter in Junction City, Kan. "As a paramedic/firefighter, I had the opportunity to serve and make a difference in the community," Dr. York said.

But after seeing the impact his grandmother's audiologist had on her quality of life and her ability to communicate, he decided to make a career change." I wanted the opportunity to build long-term relationships with patients and have a lasting impact in their lives," he said.

Dr. York's wife, Emma, is a professional photographer. They reside in Kansas City, Mo., and have one daughter, Evie. The family is involved in their church, and enjoy spending time outdoors, hiking and camping.

> To schedule an appointment with Dr. York, call 816-442-7831.

Larry Upgrades to "Smart" Hearing Aids

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BETTER than going without hearing aids! I stress that it is not perfect and it does not eliminate your hearing problems all together. And if you think that you notice the difference, the improvement is nothing compared to the difference your friends, family and those around you notice.

As an experienced hearing aid user, each time I have moved up to newer, more advanced technology, I have been able to tell the difference. Recently, I moved from my old set of hearing aids, which were seven years old, to a new set of Widex Evoke receiver-in-the-canal hearing aids.

My old aids were Widex Dreams with thin tubes, digital technology and an open-canal fit, so they were good hearing aids. But, "Oh!" What a difference these new Evoke hearing aids make. The technology in these hearing aids puts a lot of the control about how the aids work right in my own hands. I can change how they operate depending on my environment and the background I am in. Even left alone, they are more automatic than my previous pair.

With my cell phone, I can make them louder or softer, give them more bass or treble, adjust them so the right aid is stronger than the left aid (driving down the highway and reducing road noise while enhancing the sound of my passengers), or amplify sounds more from the rear so I can hear passengers in the back seat.

In a restaurant, I can reduce the sound from the right or left if there is a loud table on either side. I can program these aids by myself so that when I get a cell phone call, the call streams through the hearing aids from my phone, allowing me to hear the speech from the phone directly in my hearing aids, loud and clear, without distracting noise from my environment. The circuitry also automatically works to help reduce background noise, while enhancing speech that I am trying to hear when in a noisy restaurant—a big advantage!

And then there is the final advantage—programming the digital circuits in the hearing aids so that they are customized correctly to produce the best performance for my hearing loss. No one does that better than Associated Audiologists. They use a protocol/formula that is guided by "real ear" measurements and measures the sound at my eardrum. The measurements obtained guide the audiologist to adjust the hearing aid circuitry, providing the best performance for my unique





hearing loss, and not some pre-set general adjustment installed by the manufacturer.

Though my hearing never will be perfect, at least not like it was when I was 17, and before that gunshot blast, these new hearing aids help me hear better than I have in years.



We are on a mission:

To improve lives through comprehensive audiology care.

Recharge Your Hearing

A Look at the Pros and Cons of Rechargeable Hearing Aids







Whether you're interested in rechargeable hearing aids because you have difficulty handling traditional hearing aid batteries, or you want a "greener" power option, most of the major hearing aid manufacturers, including Widex, ReSound, Oticon, Phonak and Starkey, now offer rechargeable hearing aid options.

But let's take a closer look at the pros and cons of this technology.

echargeable hearing aid technology has been around longer than you might think—about a decade. But until recently, battery life was limited to a few hours. Plus, the batteries made the hearing aids bulkier, and recharging wasn't always convenient.

RECHARGEABLES:

- > Offer technological advances beyond the battery, including improved signal processing and more automatic adjustments. These help you hear better and more comfortably in complex listening situations, like in the car, social settings, talking on the phone or watching TV.
- > Can be more convenient for patients who struggle with vision and/or dexterity when replacing tiny traditional hearing aid batteries.
- > Use either integrated lithium-ion batteries or field changeable silver zinc batteries. These batteries can hold a charge for around 24 hours of use. Batteries require re-charging every night by placing them in a charging station. If you stream a lot of audio, the batteries may not last a full 24-hour day.

Fortunately, recent changes in rechargeable technology have made these systems more appealing and accessible for hearing aid wearers.

Specific hearing aid manufacturers offer features to appeal to different consumers. For example, Widex rechargeable hearing aids use the Z-Power rechargeable system, which means these hearing aids can run on standard disposable hearing aid batteries, if needed. This gives the hearing aid wearer a viable back-up if they forget their charger or to charge their hearing aids the night before. Silver-zinc also is non-flammable, non-toxic and 100 percent recyclable.

This feature allows a user or your audiologist to use either type of battery, which is easier for trouble shooting if a device isn't working. Other manufacturers, like Phonak and Starkey incorporate the rechargeable battery into the hearing aid itself so it cannot be changed or checked within the clinic, and would need to be sent for repair or inspection if there are concerns.

What's the best rechargeable for you?

Lithium-ion rechargeables are simple to use and meet most consumers' requirement to stay "charged" for a full

24 hours. Silver-zinc rechargeables do the same, but do provide the back-up option of disposable batteries for those worried they might run out of power, or to use when trouble shooting a possible problem. Currently, there are some restrictions on the power level/amplification level of rechargeable options, and they don't come in all styles so rechargeable options have more limitations in available size/style of hearing aid, as well as the overall power level, which is typically for more mild to moderate types of hearing loss.

Is there a cost savings if I choose rechargeable batteries?

In most cases, the cost of rechargeables and traditional hearing aid batteries are about the same. Your initial investment when choosing rechargeable may include the charger and the cost of the first rechargeable battery or batteries. The rechargeable battery life will depend on the type of rechargeable battery your hearing aids use. The annual/routine cost of replacement rechargeable batteries is currently about the same as disposable batteries. In some cases, manufacturers will charge a regular out-of-warranty repair cost any time the rechargeable battery needs replacement, which may vary from \$250-350 per repaired device.

Bottom line, rechargeable hearing aids are now an option many consumers prefer over traditional disposable batteries.

If you're interested in learning more, schedule an appointment with a doctoral-level audiologist to discuss whether rechargeable hearing aids are right for you.

HOW TO MAXIMIZE THE LIFE OF Z-POWER RECHARGEABLE BATTERIES

Many patients who have rechargeable hearing aids, use Z-Power technology. Here are a few tips to help you get the most from this technology.

- > Always fully charge the batteries daily. This is indicated by the solid green light in the charging dock. A full charge may require up to 7 hours.
- > Don't try to extend your battery life by charging every other day as this increases the odds of fully depleting your battery. A fully depleted battery takes longer to charge and may not charge fully in time for the next use.
- > Do not reboot hearing aids after a low battery warning. If the batteries are completely drained and the aids have switched off, never attempt to power on again by opening and closing the battery door. This can over-discharge your battery. Instead, either place the aids in the charging dock or insert disposable batteries until you have time to recharge your batteries.
- > When not using your hearing aids for an extended period of time, remove your batteries or keep on your charging dock with the dock plugged in. Your batteries cannot overcharge and this will ensure your batteries are fully charged and ready to use when needed.
- > Do not place rechargeable batteries into an active drying kit that is not specifically designed for use with rechargeable devices. The circuitry in the battery door will continue to draw current even if the hearing aids are turned off. Also, the temperature range of an active drying system typically exceeds the specified rechargeable battery operating temperature which may reduce the life of the battery.
- > Only charge Z-Power batteries while installed in a hearing aid.
- > If you're not going to be using your hearing aids for over 3 hours and cannot place them on the charger, remove batteries completely from your hearing aid. Circuitry in the battery door will continue to discharge your battery even when the door is open and may lead to over-discharging your battery.
- > Do not allow your rechargeable batteries to come into contact with metal objects such as coins and keys.
- Use a soft tissue to remove any moisture from your batteries and/or charging dock prior to charging.
 Do not use rubbing alcohol or other chemicals to clean.

Hearing Your Best



ARTIFICIAL INTELLIGENCE (AI) IN HEARING AIDS

Today's hearing aids don't just make sounds louder—they're equipped with technology that helps target the sounds you want to hear, when you want to hear them, and much more.

n fact, artificial intelligence in hearing aids is relatively new to the industry. This technology is programmed to solve complex problems with intelligent solutions. It is able to "learn" from experience and can adjust in complex listening situations, and it's something many of us are already taking advantage of, whether we realize it or not, when we use our smartphones and a variety of apps.

Now, Al is set to change the hearing aid industry, bringing a wide range of capabilities to the technology that helps you hear. According to the Hearing Industries Association, hearing aids built with Al can detect your environment and learn from your preferences.

One AI hearing aid recently released is the Starkey Livio. Livio® AI is the world's first hearing aid with the ability to monitor your daily steps and activities, as well as engagement. Featuring integrated sensors and artificial intelligence, Livio AI can detect if you've fallen and can act as an assistant. It also can translate 27 different spoken languages through smartphone use.

The world of AI in hearing aids is quickly expanding.

Schedule an appointment with your audiologist to learn more about hearing aids that feature artificial intelligence, and to determine whether you are a good candidate for these advanced devices.

CLINIC CORNER

Stream Live TV with Tunity App

Whether you're watching the big game, or the latest Disney movie with your grandkids, if you have hearing loss, the experience can be as frustrating as it is fun.

Now a new application, or app, called Tunity allows users to hear live audio from televisions directly on their mobile devices, or even through Bluetooth-enabled hearing aids.



The process is simple for the user. Once Tunity is downloaded to your smartphone, just scan the television you're watching and Tunity syncs to that channel's audio using a patented deep learning and computer vision technology.

The audio then can be played on your smartphone through its speaker. Or, if you'd prefer, plug in a set of headphones and you can listen to the audio privately, controlling the volume on the headphones. If you have Bluetooth-enabled hearing aids, this app can stream the audio directly to your hearing aids via a smartphone.

In each case, having the audio played on a smartphone speaker, headphones, or directly to your hearing aids, allows you to control the volume for your listening comfort, and hear a television that you otherwise might have problems hearing.

So, if hearing the TV is a problem for you, whether your hearing aids are Bluetooth-enabled or not, this app offers a free and simple solution so you don't have to miss out, or disrupt the listening experience for those around you. Tunity currently works with over 100 U.S. channels, but only on current broadcasting, meaning the show must be airing at the time of use—it doesn't work on programs you've previously recorded.

The app is free. You can download it from Apple's App Store or Google Play.

STAFF NEWS

Legislative Liaison

Stacey Baldwin, Au.D., Clinical Services Director and Senior Audiologist, was recently appointed to the role of Legislative Liaison for Audiology for the Kansas Speech-Language-Hearing Association. In this role, she will monitor legislative happenings in Topeka,



collaborate with lobbyists at Capitol Strategies, advocate for issues important to members of KSHA, and encourage membership engagement with advocacy efforts. Dr. Baldwin coordinates efforts for all local and national legislative issues that pertain to Associated Audiologists' patients, providers, practice and the profession of audiology.

Congratulations Dr. Paul

David Paul, Au.D., our audiologist caring for patients in the Leavenworth area, was voted Best Audiologist in the Leavenworth Times Readers' Choice poll recently, bringing home first place!



Also, Dr. Paul recently returned from a two-week National Guard training deployment. Thank you for your patience during his absence.

Keep Knitting

We will be participating with the **Red Scarf Project** again for 2019 and there is still time to join us! If you knit or crochet and want to help out, contact Sarah Jo Mediavilla,



Au.D., at Associated Audiologists, 855-547-8745.

The Red Scarf Project is a multi-faceted charity program that benefits foster children once they "age out" of the system and go to college. The organization accepts donations of hand-knitted or crocheted red scarves, which are given to the college-age students on Valentine's Day each year. They also provide these students with an emergency fund donation program and book money.

The project has delivered over 20,000 scarves to foster youth in college and training programs across the U.S. since they began the Valentine's Day packages in 2005. Scarves are due Dec. 1, 2019.

You also can find project details and patterns at: https://www.fc2success.org/programsmentoring-and support/red-scarf-project/.d Scarf Reminder



Happy Anniversary!

Several members of the Associated Audiologists team are celebrating milestone anniversaries with the practice this summer. Danielle Dorner, Au.D., vestibular audiologist, Travis Hopkins Williams, Au.D., audiologist, Candi Southall, chief financial officer, and Nicole, administrative support at our Overland Park Clinic, are all celebrating five years with the practice.

Each one of these individuals makes a significant contribution to Associated Audiologists. Please join us in thanking them for all they do to serve you!

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Important information about hearing and balance health from your audiologist.

Hearing Your Best



Associated Audiologists Expands to Eastern Jackson County

To better serve our patients in Independence, Lee's Summit, Blue Springs and Eastern Jackson County, Associated Audiologists is opening a new clinic in the Cliffview Professional Building, near the intersection of 40 and 291 Highways.

Caring for patients at this location will be **David** Nissen, Au.D., senior audiologist, and Travis Hopkins Williams, Au.D., audiologist. If you currently see Dr. Nissen in Prairie Village or Dr. Hopkins Williams in Overland Park, don't worry. They will still be seeing patients in their regularly scheduled clinics as well.

The new clinic will officially open in mid-August.

If this office is a more convenient location for you, call 855-547-8745 to schedule an appointment.



Dr. David Nissen



Dr. Travis **Hopkins Williams**



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