

NovDec2012

# AUDIOLOGY

TODAY

The magazine of, by, and for audiologists



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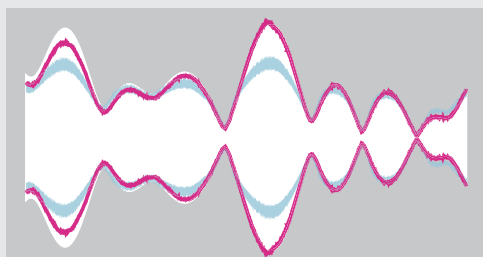


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**Hearing Conservation for Firefighters** Audiologists encounter firefighters in the hearing clinic when hearing loss negatively affects job performance and quality of life. Hearing conservation programs can eliminate these negative effects.

By Susanna E. Meyer

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**Tracing the Path to a Career in Audiology** Most practicing and retired audiologists majored in communication disorders/sciences with the intent of becoming a speech-language pathologist, but made the decision to “switch” to audiology during their sophomore or junior year of college. Is this the path you followed to a career in audiology?

By Martha W. Wilson and Marsha A. Kluesing

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**Helping Africa Hear: My Brush With “Kony 2012”** David Fabry chose a career in audiology in an effort to make a difference in the world. This year, he worked with patients in Uganda and came back to the United States with a message about collaboration, thinking big, and working small.

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**Adverse Herbal and Nutritional/Dietary Supplement Side Effects** Audiologists must continually ask new questions during the case history review that not only include the use of FDA-approved drugs, but also include herbal medicines and nutritional supplements whose side effects could impact on subjective and objective data interpretation.

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**A Narrative Psychological Framework for Audiologic Care** The Narrative Therapy approach is based on the notion that people assign meaning to their lives by organizing key events into stories from which they limit or expand their repertoire of behaviors. This approach can help patients discover hopeful, preferred, and previously unrecognized possibilities—to re-author their stories and their lives, and find their own sense of personal power and hopefulness.

By Michael A. Harvey



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#### EDITORIAL MISSION

The American Academy of Audiology publishes *Audiology Today* (AT) as a means of communicating information among its members about all aspects of audiology and related topics.

AT provides comprehensive reporting on topics relevant to audiology, including clinical activities and hearing research, current events, news items, professional issues, individual-institutional-organizational announcements, and other areas within the scope of practice of audiology.

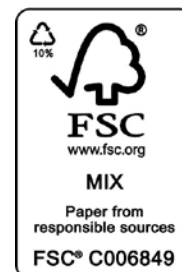
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TODAY

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# Are You Ready?

## Are you ready? Sound familiar?

Perhaps it is the carrier phrase from a central auditory test. Maybe it relates to changes in your licensure law, Medicaid, or legislation at the state level. At the federal level, it may relate to future phases of health-care reform, CMS changes, coding, access, or education. This is a common and familiar phrase and one we hear on a daily basis.

What does ready mean? Some view this as a warning, preparing one to react, while others understand readiness as a proactive activity. That is, an openness to progress or ensuring that we are equipped for the future.

Health-care reform and growth in the need for our services are examples of current realities that continue to evolve. Despite the many unknowns in these areas, there are a number of known factors that guide us in preparation for the future. A few examples:


- The number of hearing-impaired persons in United States will nearly double over the next 35 to 40 years.
- Growth in Medicaid enrollment is expected in all states with 12 states showing a greater than 40 percent increase by 2020.<sup>1</sup>
- Health care today is shifting to an outcome and value-based system.

What's an audiologist to do? How will these factors impact audiology and your work setting or practice? Do you have outcome data specific to your practice? Do you know what state and federal legislation relates to your daily activities? How do you keep up? Do you have time set aside in your daily routine to monitor issues? Where do you locate the information? How can you make a difference?

Four key activities should be going through your mind right now: (1) membership—renew your memberships to BOTH the Academy and your state audiology organization; (2) recruitment—recruit your colleagues to membership/involve in the Academy and your state organizations; (3) volunteerism—volunteer with the academy/state/local organization(s); and (4) contribution—contribute to Academy and state PACs to ensure the “audiology” voice is heard at the national and state levels.

The Academy is “at the ready,” monitoring federal legislative and regulatory issues, and strategically and proactively planning for the increasing need for hearing and balance care and wellness activities. The Academy develops national practice standards and guidelines, and initiates public policy that can be used at the state level. We build relationships with other organizations and provide input to initiatives that



affect our profession. State audiology organizations are also “at the ready” with their legislative monitoring and state-level initiatives. Both groups are “key” and have activities that serve to advocate and advance the profession. 

Deborah L. Carlson, PhD  
President  
American Academy of Audiology

### Note

1. Thompson Reuters Insurance Coverage Estimates



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# Audiology Philanthropy: Your QR (Quick Read) on Giving to the AAA Foundation

By Cheryl Kreider Carey, CAE, Executive Director, American Academy of Audiology

|       |  |  |
|-------|--|--|
| 1     | Make a one-time Annual Fund gift                               | One time (but not the only time!)  |
| 2     | Make a monthly gift through the Foundation Visionaries program | \$25.00 per month to celebrate our 25th anniversary (Unlike other anniversaries, there's no need to put a reminder on your calendar—we'll automatically bill you each month) |
| 3     | Make a tribute gift  | For the colleague/professor who means a lot to you   |
| 4     | Make a memorial gift   | For the loved one you miss   |
| 5     | Make a restricted gift   | To support your favorite program   |
| 6     | Make a matching gift   | To inspire others to give with your dollar-for-dollar contribution   |
| 7     | Make a gift of stock/other securities                          | Sure, we'll take that Apple stock  |
| 8     | Make a planned gift and join the HearAfter Society             | To leave a legacy for the future of audiology  |
| 9     | Make a corporate gift  | To show your patients that you mean business when it comes to philanthropy   |
| 10    | Donate an item to our annual Auction 4 Audiology               | We sold a handmade Dr. James Jerger doll... Can you beat that?   |
| BONUS | New for 2013: EARmark Your State Audiology Organization        | If you indicate your state, 25 percent of your gift will go back to your local audiology organization.   |

Note: Refer to the AAA Foundation's 2011–2012 Annual Report enclosed with this issue of *Audiology Today* for information on specific AAAF programs. Visit [www.audiologyfoundation.org](http://www.audiologyfoundation.org) to make a gift.

"I am so very grateful and indebted to the support and kindness of others who give to the AAA Foundation. I have never been able to donate to the Foundation before, but I am going to make a concerted effort to do so. Many, many thanks again...I feel overwhelmed with joy that the American Academy of Audiology Foundation's Member Assistance Program has made it possible for me to attend AudiologyNOW! 2012!"

—Anonymous 2012 MAP recipient





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# Make a Pact with the PAC

By Jennifer Shinn

I recently returned from my first Board of Directors' meeting at our Academy Headquarters in Reston, Virginia. One of the biggest reminders I walked away from our meeting with was the breadth and scope of the board's roles, responsibilities, and current issues at hand. One of the issues discussed at the meeting was the important role of our Academy's Political Action Committee (PAC). The PAC plays a critical and integral role with respect to our association and membership. The purpose of our Academy PAC is to support our legislative and regulatory priority issues, including federal legislative issues such as direct access and the hearing-aid tax credit.

For those unfamiliar with a PAC, it is an entity that assists in financially contributing to political candidates who support issues important to its members. This is not a new concept; it actually has been around since the late 1940s when the Taft-Hartley Act was initiated. According to the Taft-Hartley Act, corporations and unions were prohibited from using their own funds to support candidates, legislation, etc., thus the birth of the PAC. The PAC was established as a means for members to personally contribute their financial resources to the promotion of important issues. As of 2008, there were more than 4,200 individual PACs.<sup>1</sup>

The Academy's PAC was first established nearly 20 years ago, in

1994. At that time, it raised \$19,400. Unfortunately, the reality of the situation is that the Academy's PAC has demonstrated slow growth, and continues to be among the smallest when compared to other similar organizations. Currently, only nine percent of our membership contributes to the PAC. As outlined by Melissa Sinden, Academy senior director of government relations, in her recent AT article on the PAC,<sup>2</sup> Academy PAC contributions for the 2008–2010 cycle totaled only \$98,063. This is essentially only one percent growth per year, which pales in comparison to other organizations, as demonstrated in FIGURE 1.

There are several misconceptions associated with the PAC, but perhaps the biggest is how funds are distributed. There is truly no lack of transparency regarding the allocations of funds. All contributions/disbursements are public record, and these funds have always and will always assist the campaigns of individuals who demonstrate support for those issues affecting audiologists. None of these funds are ever used to support overhead costs or salaries. If you are curious, I would encourage you to review the FEC Disclosure Portal.<sup>3</sup>

Another misconception is that the PAC has large corporate donors; therefore, there is no need for individual members to contribute. This couldn't be further from the truth.


In fact, it is against government regulations to receive such support. Our PAC is a "restricted class" PAC. Included in this class are noninternational members of the Academy, our Academy staff, and family members of both groups. Nobody outside of this restricted class can contribute to the PAC. This makes it extremely important for our own members to provide annual contributions.

While I personally have given to the PAC, I admit to not necessarily understanding the true importance of my PAC contributions until recently. The question you may be asking yourself is: How does your PAC contribution benefit you as a member? Let me assure you that it's more than just the beautiful poster you receive with your \$50-plus donation. It's about advancing the profession and improving hearing and balance health care for our patients. While I could go on for pages regarding the benefit of the PAC to all audiologists, I'll give you just one simple example: direct access. Direct access will allow Medicare beneficiaries the same option that federal employees and those with private health-care plans are afforded: the ability to go directly to you, their audiologist, for their hearing and balance health care without the need for a physician referral. Your PAC donations help ensure that members of Congress who support important bills such as this one are re-elected and can

continue to serve as leaders for audiology issues on Capitol Hill.

Speaking as a fellow audiologist and member of the Academy, I encourage each and every one of you to “make a pact” with the PAC. If every Academy member committed to donating even just \$10 per month (that’s the equivalent of giving up just two soy lattes), we could raise well over \$1 million to assist the PAC in tackling the tough issues that affect all of us and our patients. I assure you the PAC will continue to use your contributed funds for those issues important to all audiologists, but we must keep our end of the pact through continued donations. Your contribution, regardless of how large or small, provides invaluable resources to move the Academy—the largest organization of, by, and for audiologists—forward in a positive direction.

In 2010, the Academy launched its *Push the PAC* campaign. This campaign is one to which I would strongly encourage you to contribute. It is as simple as the *push* of a button. I can’t emphasize enough how important your contribution is with respect to growing and promoting our profession. Members can contribute to the PAC by visiting the Academy’s Web site<sup>4</sup>, or by contacting Kate Thomas in our Capitol Hill office at 202-544-9336 or [kthomas@audiology.org](mailto:kthomas@audiology.org).

On behalf of the Academy and the PAC, I want to personally thank you for your continued support! 

*Jennifer Shinn, PhD, is a member of the Academy Board of Directors (July 1, 2012–June 30, 2015.) She is the chief of audiology and associate professor in the Department of Otolaryngology at the University of Kentucky.*

## Notes

1. [www.fec.gov/press/press2008/20080117paccount.shtml](http://www.fec.gov/press/press2008/20080117paccount.shtml)
2. [www.audiology.org/resources/audiologytoday/Documents/2012\\_05-06/AT%2024.3%20-%20LOW.pdf](http://www.audiology.org/resources/audiologytoday/Documents/2012_05-06/AT%2024.3%20-%20LOW.pdf)
3. [www.fec.gov](http://www.fec.gov)
4. [www.audiology.org/advocacy/pac/](http://www.audiology.org/advocacy/pac/)

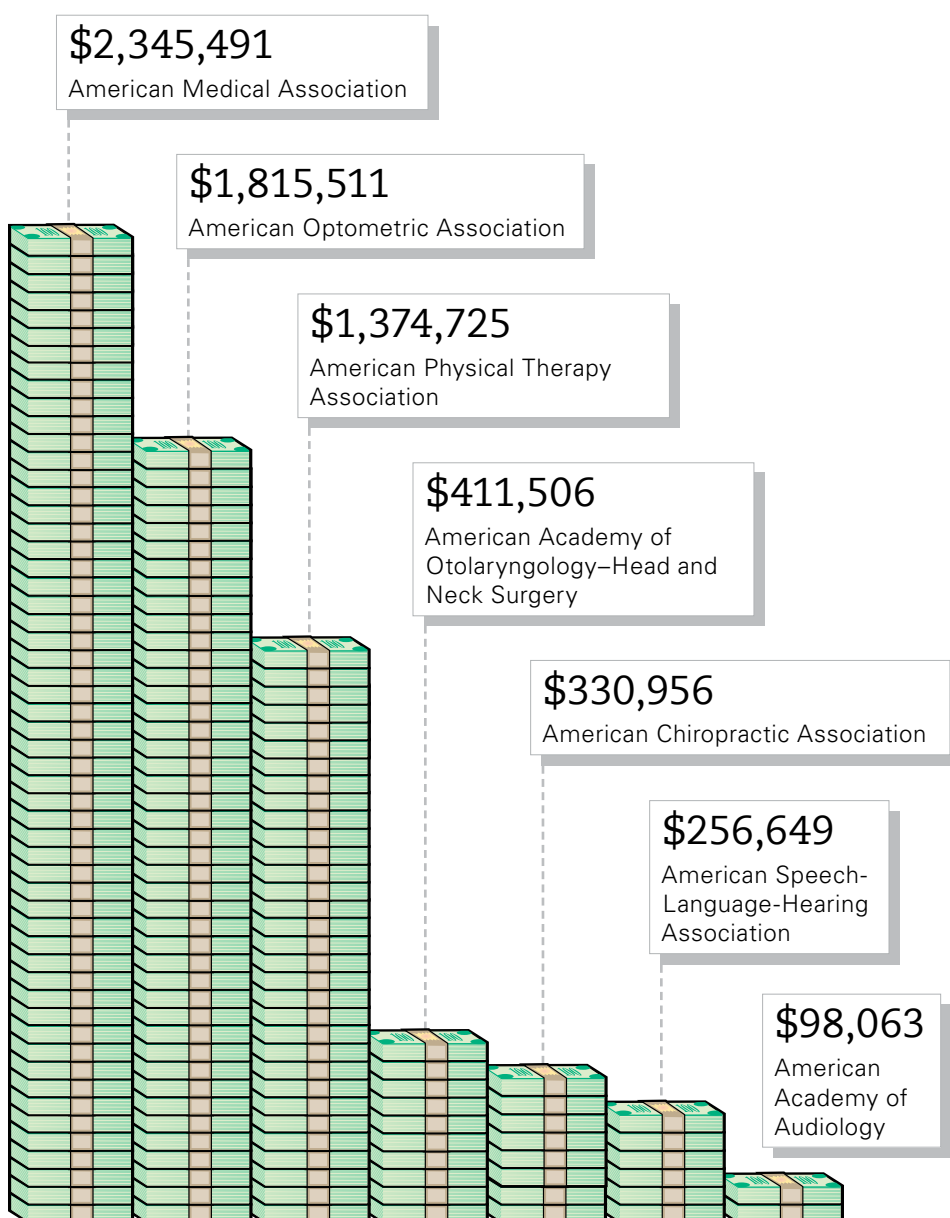


Figure 1.

Source: Center for Responsive Politics.



# Socialize Your Practice to Success: Facebook

By Kayce Bramble and Thomas J. Tedeschi

**W**ho's Afraid of Social Media? It's kind of funny, but social media scares a lot of people, not just us audiologists. It seems that everyone is using social media today, and if you wish to be progressive and stay on the forefront of marketing, you need to be actively involved with using it. Social media, as a marketing tool, is unfamiliar for many of us and that can be very intimidating. Fortunately, audiologists are in the habit of learning new things, ideas, and strategies on a daily basis, and social media should be no different. With a clear understanding of the definition, value, basic components, and best use of social media, audiologists can be very successful at socializing their practices successfully.

Socializing your practice doesn't have to be difficult or overly time consuming. It's really not necessary to reinvent the wheel. Today, there are numerous resources readily available that can provide assistance. You can do a Web search of even the most basic questions and get help. Your colleagues and other local clinics may have some applications already in place that can serve as a guide for how you would or would not want to use social media. If you feel that this venue will involve too much work, you

could hire a business consultant to plan and implement your social media marketing plan.

## What Is Social Media?

Social media differs from traditional marketing approaches because it has the potential for instant two-way communication. We cannot immediately express our opinions on the content of a billboard or newspaper; however, we can comment or communicate instantly with others via a blog or a posting on Facebook. Social media is not restricted to blogging or Facebook posts, it also includes Web and mobile technologies that are supported with interactive dialogue. Other forms of social media you may be familiar with are YouTube, Twitter, and Pinterest. But there are plenty of others you may not be familiar with. Social media is now considered the new "word of mouth."

## Why Is This Important to Audiologists?

Today we use the Internet to assist us in a number of ways:

- Learning more about products and services that we use in our offices
- Understanding more about competitors' products
- Observing and viewing our competition's Web presence

We also need to be cognizant of the fact that our prospective patients, as well as their family members, are using the Internet for the same information. We cannot ignore the Internet if we hope to stay competitive. An understanding of how to use the Web and the optimization of your Web presence is crucial if you want to be the audiologist individuals are directed to, and whose site they choose first. Your name and the name of your practice easily can be found in a Google search. You need to be smart and control the information that people will find about you and your business as much as possible.

There is a misperception that seniors do not use social media. In reality, many seniors find social networking exciting and they enjoy being part of the online community. Seniors today are creating their own blogs, and connecting with family and friends by joining Facebook, LinkedIn, and Twitter. We are seeing many retirement communities launching their own Facebook pages (Care Networks, 2012).

Social media has gained wide acceptance at a faster rate than any other medium in history. It took radio 38 years to reach 50 million listeners, while it took television 13 years to get 50 million viewers. Facebook, however, added 100 million users in nine months. Social media is only going to grow and get a stronger foothold in the way we communicate, and receive information and news (United Nations Cyberschoolbus, 2012).

Social media is an inexpensive form of marketing. Facebook is free, Twitter is free, and blogging is free, assuming you've got the time and the knowledge to use it. How to use it is the key! If you do not know how to effectively use this form of marketing, consider hiring a consultant to work with you. It is no different from hiring in-house or outsourced professionals to manage your marketing or your Web sites. It is extremely important to remember that social media marketing can be measured. There are a number of tools that are available that will measure the effectiveness of your social media marketing. A couple of free services that are available that track social media marketing are Google Analytics and SocialMention.com.

## Key Elements for Using Social Media

The following are just a few key elements to remember when using social media. First, you must interact with people—don't post and run. You must be vigilant in monitoring your site and responding in a very timely manner to comments and questions. Your site will not be very effective if you do not respond to inquiries and you will not know that there are inquiries unless you review your site often.

Second, go beyond just promoting your practice. Give your readers something interesting or relevant about your practice that they can comment on or talk about. Even better, give the readers content that they will want to share with others.

Third, the use of social media applications must clearly display expert content to truly be effective. The 2010 Trust Study ([www.edelman.com/trust/2010/docs/2010\\_trust\\_barometer\\_executive\\_summary.pdf](http://www.edelman.com/trust/2010/docs/2010_trust_barometer_executive_summary.pdf)) found that marketing efforts "must honestly convince people of their genuine intentions, knowledge, and expertise in a specific

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area or industry through providing valuable and accurate information on an ongoing basis.”

## Facebook Made Easy

A Facebook business page is easy to set up and maintain. All that is necessary is that you have a personal page on Facebook. Facebook has simple steps for creating the business page. You will want to customize at least a little bit. You'll want a cover photo, profile photo, and some custom tabs. If you don't feel comfortable with photo editing and design, maybe a friend, co-worker, or even a graphic designer can take over this task.

There are numerous resources to help fill an audiology Facebook page with valuable information. There are online services that will actually help do the work for you. Sites such as [www.audiology.org](http://www.audiology.org), Audiology Online, Healthy Hearing, and hearing aid manufacturer sites can provide a wealth of information that you can simply repost by clicking on the share button. Most importantly, when you share a post, also add your comments. Open up discussions, ask people if they agree or disagree, ask what their opinions are and share your own opinion. Remember it's about being social.


Having great content is useless without Facebook followers. You need people to read and share your information. Some easy steps you can take to grow your page followers include: adding a "Like" box to both your blog and Web site, include links to all of your media sites and on the sites themselves, include links on your business cards and in your email signature block. Another great idea is to place a sign in your waiting room that says "If you like us, Like us on Facebook" and include your link.

## Social Media Cautions

Facebook content comes with a word of caution. The AMA has a policy statement on social media that seems equally applicable to audiologists (American Medical Association Policy, 2012). Be aware of patient privacy and refrain from posting identifiable patient information online. Maintain privacy settings as much as possible when posting online. Also, check often to ensure that personal and professional content posted by others is both accurate and appropriate. When interacting with patients online, maintain the same boundaries you would keep in a clinical setting. It's best to separate personal from professional content online. Be aware that actions online can result in negative consequences that can affect your reputation with your patients and colleagues. Be smart and be careful.

## Conclusion

A social media presence is an essential part of a healthy audiology practice. Reaching out to prospective patients, building a knowledge base with them, and providing an educational and professional forum is an effective social media marketing strategy that can go a long way in forging lasting customer relations (The Healthcare Marketing Group, 2012).

If you think about it, this is what we do already in our daily practice. We meet new people, we get to know them, we listen to their communication problems, and then we offer solutions. 

*Kayce Bramble, AuD, is an audiologist with HearUSA in Delray Beach, FL, and Thomas J. Tedeschi, AuD, is an audiologist and vice president of Sonus Franchise Sales with Amplifon in Plymouth, MN.*

*Illustration by Johanna van der Sterre.*

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(2008). —Beth L.

Winning Trivia Bowl  
with Ken Henry, Tad  
Zelski, Elizabeth Hellmuth  
Marcinkus, Yell Inverso,  
Wendy Hanks, Michael  
Dougherty, and a few  
more... Go Mountain-EARS!  
—Anne D.

Meeting my now husband in  
Dallas (2009). —Zoe H.

## Trivia of the Month: In what city and state was the first AudiologyNOW! held?

- |                      |                    |
|----------------------|--------------------|
| A. New Orleans, LA   | D. Detroit, MI     |
| B. San Diego, CA     | E. Kiawah City, SC |
| C. Kiawah Island, SC | F. Denver, CO      |

The answer is C. Correct answer given by Erin Benear.

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# HEARING CONSERVATION *FOR* FIREFIGHTERS

BY SUSANNA E. MEYER

*Audiologists encounter firefighters in the hearing clinic when hearing loss negatively affects job performance and quality of life. Hearing conservation programs can eliminate these negative effects.*

**F**irefighters work under dangerous and often life-threatening circumstances (CDC, 2012). They are exposed to significant concentrations of hazardous material that have been implicated in the development of cardiovascular, respiratory, and neoplastic diseases (Brandt-Rauf et al, 1988; Demers et al, 1992).

These significant health hazards overshadow hearing conservation and the issue does not receive sufficient attention. Firefighters' work environments expose them routinely to loud noises from sources such as fire trucks in motion blasting with

loud sirens, industrial water pumps and saws (Hong et al, 2008), and protracted fire alarms.

This exposure to loud levels of noise may result in a noise-induced hearing loss (NIHL). This health risk is insidious and may be apparent only after the hearing loss has progressed and affected speech perception. Although some controversy exists, firefighters present with a greater degree of hearing loss than age-matched peers (Clark and Bohl, 2005; Ide, 2007; Kales et al, 2001). There is little doubt that the work environment puts them at risk for NIHL.

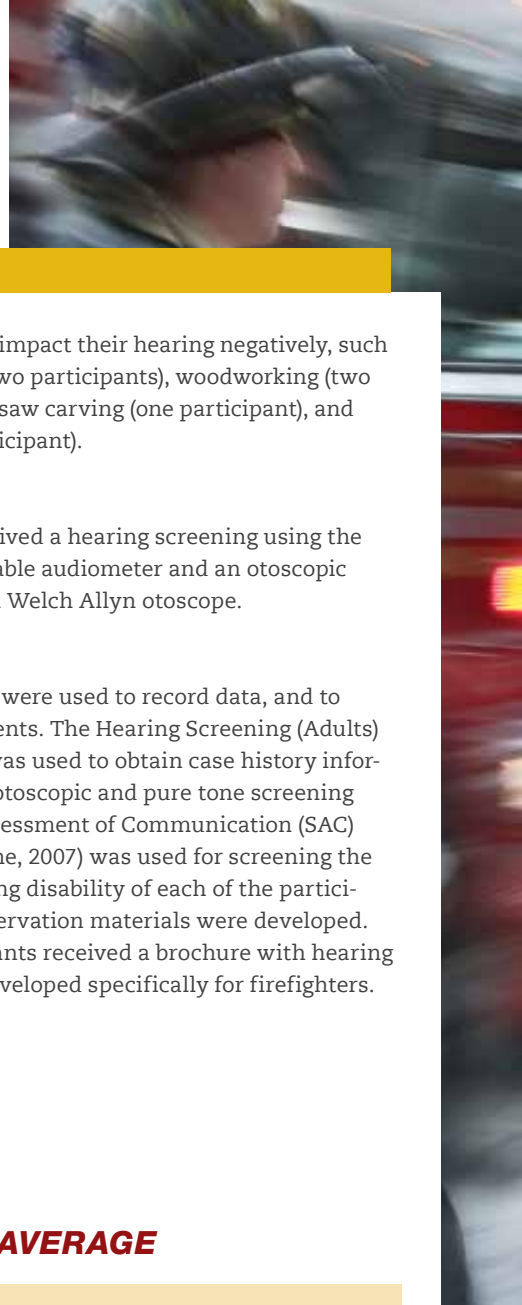


This hearing loss is irreversible, but preventable by using hearing protection or managing the noise and noise exposure. Unfortunately, audiologists see this population only after the hearing loss has become debilitating.

Firefighters acknowledge that good hearing is important in their jobs, but there is little evidence that hearing protection guidelines are followed (Hong et al, 2008). Unprotected exposure to loud noise results in a hearing impairment that may give rise to participation restrictions when the firefighter can no longer

correctly hear over the radio or telephone, or to psychosocial symptoms such as embarrassment, withdrawal from social situations, and even depression due to the hearing impairment.

The goal of this investigation was to determine the presence of hearing loss in a population of firefighters. The relationship between the degree of loss and years in employment also was investigated, as well as whether hearing protection was used. Finally,



the relationship between perceived hearing disability and hearing was determined.

## Study Design

This was a descriptive study in which the prevalence of hearing loss at specific frequencies was described. The number of years working as a firefighter, the use of hearing protection, and the individual's perceived hearing disability also were investigated.

## Participants

Firefighters were approached to volunteer for a hearing screening and hearing conservation session. Data from 25 volunteers are presented. The average participant age was 46 years, with an age range of 31 to 58 years. Participants worked as firefighters for an average of 21 years, in a range spanning 8 to 33 years. The group included firefighters working in various capacities such as tiller men, pipe men, ladder drivers, and fire truck drivers, as well as front and back seat passengers. Participants worked in various positions during their career as a firefighter, with varying noise exposures. Some participants participated in

activities that could impact their hearing negatively, such as target shooting (two participants), woodworking (two participants), chain-saw carving (one participant), and drumming (one participant).

## Instruments

All participants received a hearing screening using the Earscan ES-TM portable audiometer and an otoscopic examination using a Welch Allyn otoscope.

## Materials

Published materials were used to record data, and to obtain self-assessments. The Hearing Screening (Adults) form (ASHA, 1997) was used to obtain case history information, and record otoscopic and pure tone screening results. The Self-Assessment of Communication (SAC) (Schow and Nerbonne, 2007) was used for screening the self-perceived hearing disability of each of the participants. Hearing conservation materials were developed. Each of the participants received a brochure with hearing conservation tips developed specifically for firefighters.

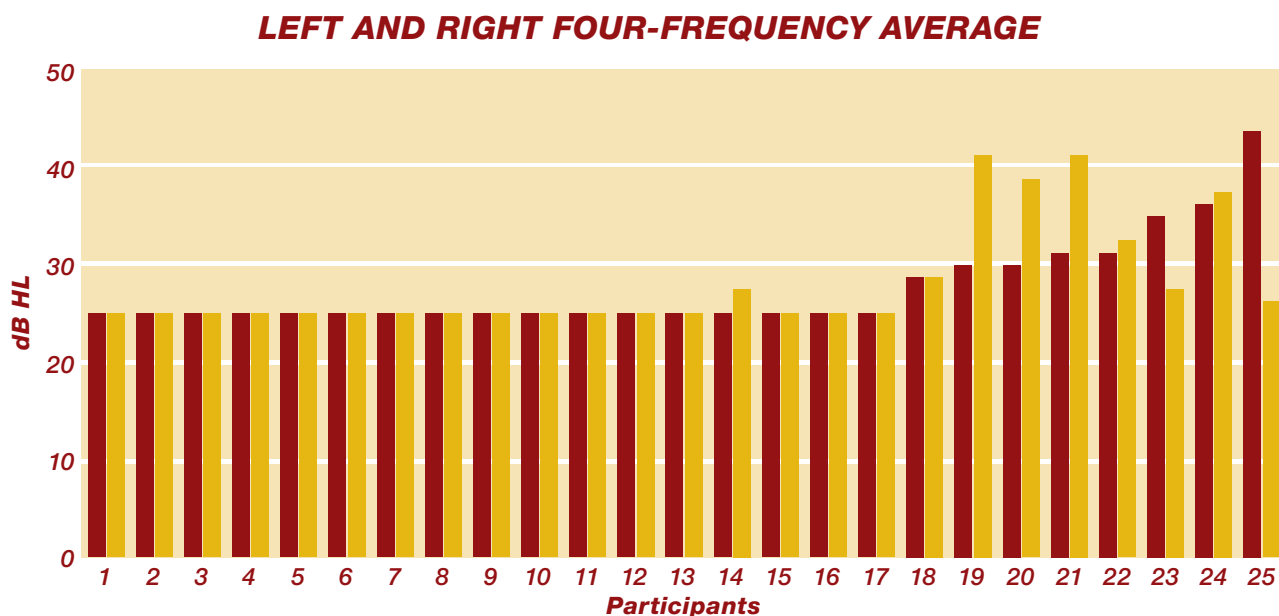


FIGURE 1. The average results of 1000, 2000, 3000, and 4000 Hz for the left and right ears are presented for each participant.

### Procedure

Each participant was asked to complete the SAC, biographical information, and work history. Ears were then inspected otoscopically. A pure-tone screening was performed at 25 dB HL 1000, 2000, 3000, and 4000 Hz, left and right ear. If there was no response at 25 dBHL, the first dB level where a response was obtained was recorded.

### Results

Results are presented according to the goals of the study.

#### The presence of hearing loss in this population of firefighters.

Nine out of the 25 participants (36 percent) failed the hearing screening in at least one ear. Only one participant presented with a symmetrical hearing loss; all the others had an asymmetrical hearing loss. The left ear was worse for six out of the nine individuals (67 percent).

#### The relationship between the degree of loss and years in service.

There was no correlation between years working as a firefighter and degree of hearing loss ( $r=0.13$ ). Participants with 30 or more years in the profession passed the hearing screening, while others with fewer years of service did not pass the hearing screening.

#### The use of hearing protection.

None of the firefighters used any form of hearing protection on a regular basis.

#### The perceived hearing disability and relationship with the hearing screening results.

The SAC showed a positive trend with the pure-tone average of the four screening frequencies ( $r=0.24$ ). Two of the eight individuals who passed the hearing screening showed a self-perceived hearing handicap on the SAC ( $SAC>18$ ). One of the individuals had a mild-to-moderate self-perceived hearing difficulty. In contrast, two of the individuals who failed the hearing screening reported no self-perceived hearing handicap.

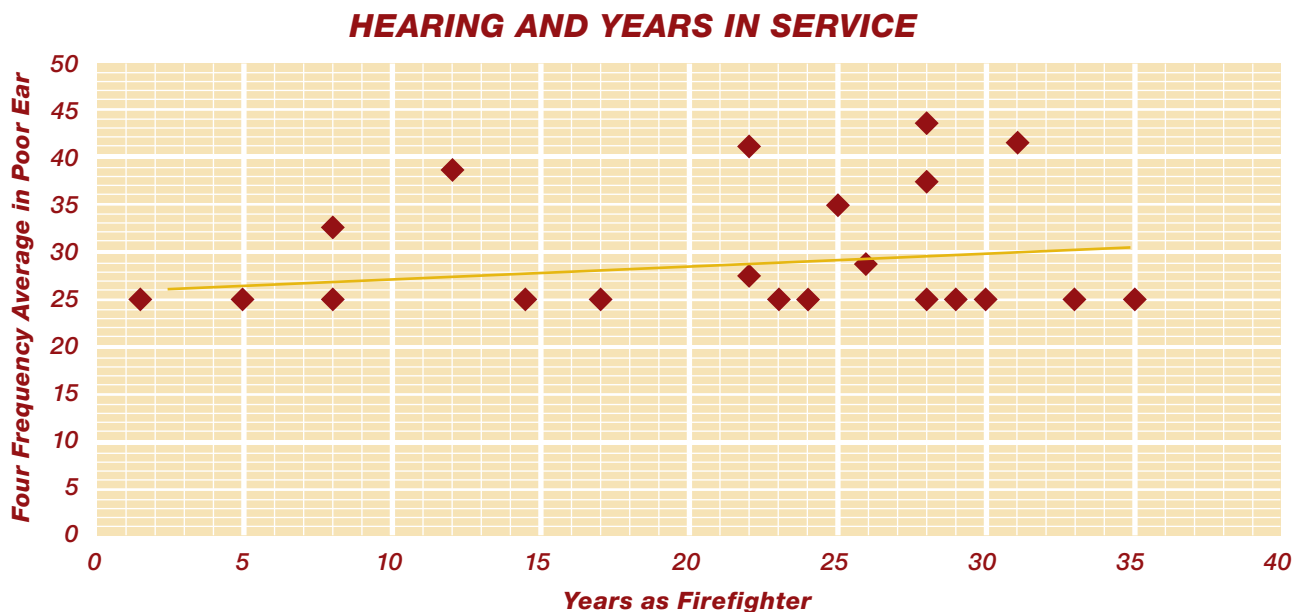


FIGURE 2. The average results of 1000, 2000, 3000, and 4000 Hz for the poorer ear (or right ear, if levels were the same) are plotted against the number of years as a firefighter.



## Discussion

There was a high prevalence (36 percent) of firefighters who failed the hearing screening. Prevalence of hearing loss for males in the United States in the decades 30–39, 40–49, and 50–59 years are 5.4 percent, 15 percent, and 29 percent respectively (Agrawal et al, 2008). This data confirms that the participants presented with a higher prevalence than the general population. It is possible that this small group represented firefighters who already suspected that they have hearing difficulties, as all participants were volunteers. The average age (49 years) also suggests the onset of presbycusis (Agrawal et al, 2008).

However, the asymmetrical nature of the hearing loss is not typical of presbycusis. The preponderance of an increased hearing loss in the left ear has been reported previously (Ide, 2007) and may be related to driving with windows down while sirens were on. The noise generated by sirens has been reported to be 120 dB (Elvex Corporation, 1997–2011). Improvements regarding siren placement, headphones, and sound insulation of the cabs all have been instituted after successful lawsuits against companies manufacturing sirens. The firehouse in this study replaced some of the trucks with the updated equipment, but also was using older trucks where these

modifications were absent. Firefighters admitted that they frequently drove with the windows down and did not use any ear protection.

Participants were not equally susceptible to NIHL. One participant worked as a firefighter for 30 years without any negative effect on hearing screening results, while another young participant showed a hearing loss within eight years. The only measure to determine susceptible individuals is regular hearing screenings; this procedure is not commonly employed in firehouses.

Firefighters reported that they did not use any form of hearing protection on a regular basis. They expressed concern that they may not be able to hear commands in person or over the radio while using ear protection. They also felt that they will not be able to hear in an unpredictable and dangerous firefighting situation and, finally, they were concerned that the ear protection may interfere with other safety equipment or melt in their ear canals. Hearing protection was not remembered when gearing up for an emergency or fire alarm inspection.

Some of these concerns are valid, but some opinions reflect the perception that hearing protection is not a priority. Hearing protection can be accomplished in most situations. For example, when inspecting fire alarms, the

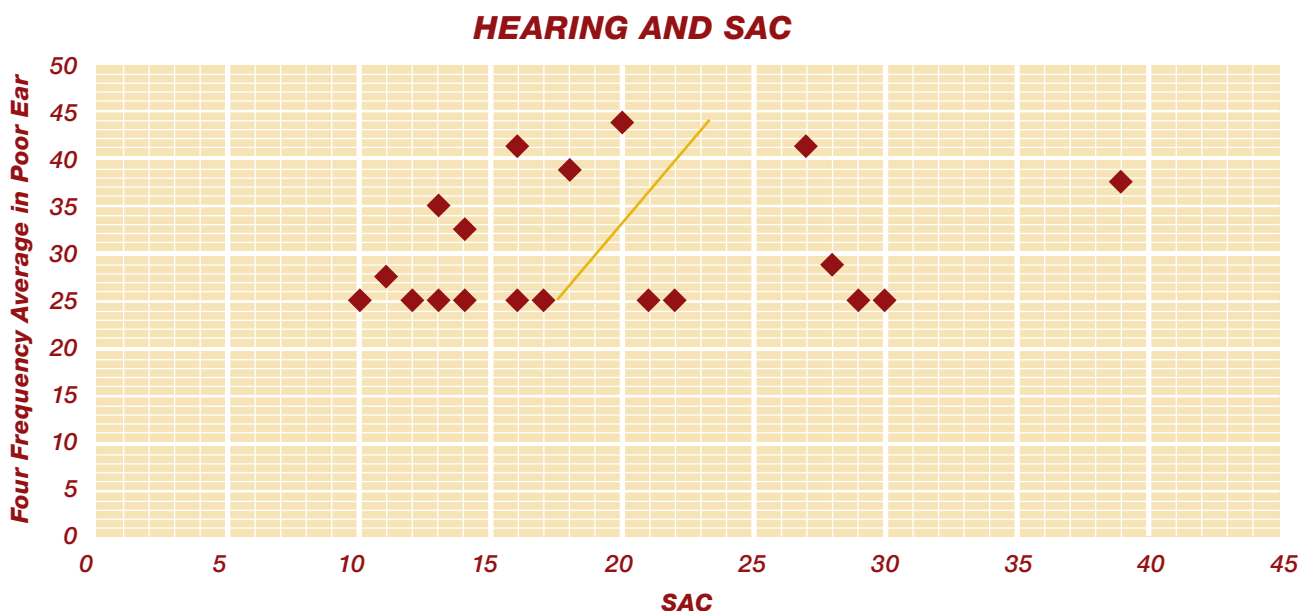


FIGURE 3. The SAC score is plotted against the average results of 1000, 2000, 3000, and 4000 Hz of the poor ear (or right ear, if levels were the same).

firefighter is exposed to ongoing sound levels from many alarms that may be present on multiple floors of a building. This is not a dangerous situation, and ear protection can be used while the inspection is performed. Effective radio communication can be accomplished by adapting the typical shoulder-level speaker to a combination custom-fit hearing protection and insert communication option. Simple adjustments, such as driving with rolled-up windows and only using the sirens sparingly, will reduce the noise exposure. Hearing conservation must become part of the firefighter culture so that these adjustments replace habitual routines. Firefighters should be educated so that they do not view hearing loss as unavoidable and as a small risk compared with other health hazards (Hong et al, 2008).

The use of the SAC in addition to the pure tone hearing screening provided useful information. Most of the participants with hearing loss reported a self-perceived hearing difficulty. The participants who passed the hearing screening but had a mild-to-moderate self-perceived

hearing difficulty were referred for a full hearing evaluation to investigate the possibility of central auditory involvement. Two participants who failed the hearing screening but reported no self-perceived hearing handicap had a mild high-frequency hearing loss with normal hearing through 2000 Hz. The relative good hearing through 2000 Hz explains their perception that they do not have difficulty communicating. Even if firefighters do not experience any concerns about their hearing, they should participate annually in hearing screening and conservation programs for compensation purposes. A baseline audiogram and follow-up results will improve the success of compensation claims.

Firefighters are a group of workers whose hearing conservation must receive more attention. These workers routinely are exposed to high levels of noise (Fire and Emergency Service, 1992) and awareness of hearing protection procedures must be raised. The National Institute for Occupational Safety and Health is working toward

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solutions for this group of workers by developing hearing protection devices for their specific needs.

Addressing firefighters' resistance to ear protection may facilitate acceptance and more consistent use by training them with hearing protection devices that enable good speech communication and audible warnings (Killion et al, 2011). The cost of these devices is partly to blame for their absence in firehouses. The cost and funding must be addressed. Hearing protection devices and conservation programs are good investments for all employers, protecting them from costly claims. Furthermore, there is evidence that hearing conservation programs result in positive changes in the firefighter population (Ewigman et al, 1990).

Audiologists encounter firefighters in the hearing clinic when hearing loss negatively affects job performance and quality of life. Hearing conservation programs can eliminate these negative effects. Audiologists' expertise and advocacy can make a difference in the hearing health of firefighters. These important service providers deserve effective hearing conservation programs. 

Susanna E. Meyer, PhD, is a professor with the Communication Sciences and Disorders Department, Worcester State University, Worcester, MA.

The contribution of Erin Flynn, BS, in data collection is gratefully acknowledged.

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# Inaugural SAA Conference

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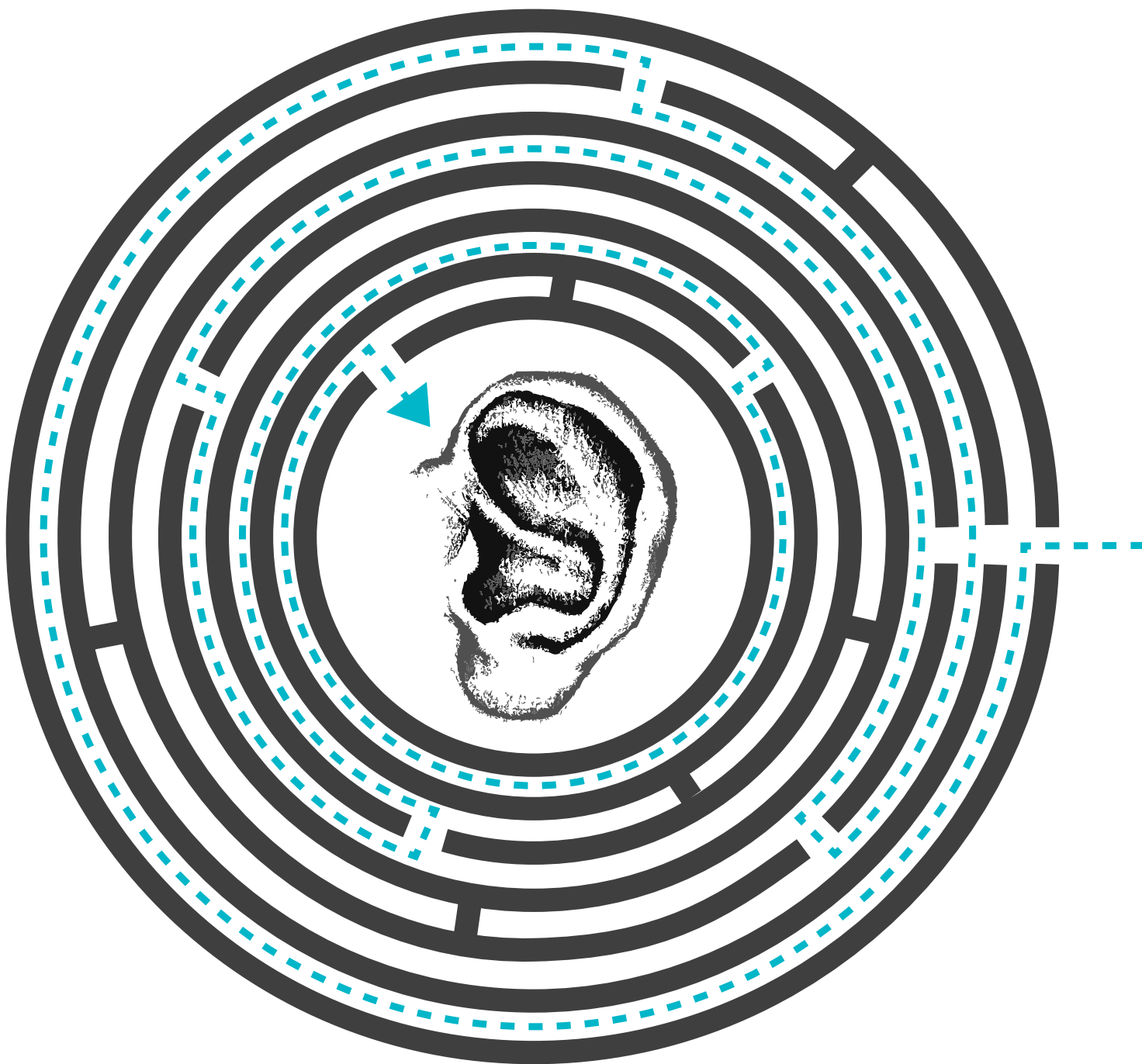
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# TRACING THE PATH TO A CAREER IN AUDIOLOGY

BY MARTHA W. WILSON AND MARSHA A. KLUESING

Most practicing and retired audiologists majored in communication disorders/sciences with the intent of becoming a speech-language pathologist, but made the decision to “switch” to audiology during their sophomore or junior year of college. Is this the path you followed to a career in audiology?

**HOW** many times have you heard an instructor, colleague, preceptor, or student say, “Well, I didn’t go to college to be an audiologist?”

How many practicing or retired audiologists started college with the intent of being educated and trained in a different professional field?

How many of us “fell into audiology” because our initial career choices were not successful or satisfying?

Although several surveys have investigated the reasons students choose audiology as a career (Academy of Dispensing Audiologists Future Audiologist Survey, 2010) and student perceptions of professionalism and audiology (Doyle and Freeman, 2002; Bennett and Steiger, 2010), the objective of this project was to investigate the path by which practicing and retired audiologists selected a career in audiology. We conducted this survey to investigate

“the how” professionals decided to become an audiologist, rather than “the why” behind their decision.

## Method

The initial version of the survey was pre-tested by one of the authors. Based on her input, the questionnaire was revised with modifications and additions for clarity. The revised questionnaire was pilot-tested by colleagues in the Auburn University Department of Communication Disorders. The final version was uploaded to SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)), an online data collection and management system with immediate tracking and analysis features.

Participant responses to the questionnaire were aggregated and analyzed automatically in real time using Beta analysis by SurveyMonkey. The online survey software permitted more than one answer to the survey questions. As a result, percentage totals may exceed 100 percent.

Potential respondents, who were practicing or retired audiologists, were randomly selected from 46 states and

NEARLY  
ONE-THIRD  
OF THE  
RESPONDENTS  
DECIDED  
TO PURSUE  
AUDIOLOGY  
DURING THE  
JUNIOR YEAR  
OF THEIR  
UNDERGRADUATE  
STUDIES.

**TABLE 1. When Did You Decide to Become an Audiologist?**

| Answer Options               | Response Percent | Response Count |
|------------------------------|------------------|----------------|
| In high school               | 5.9%             | 17             |
| Undergraduate-Freshman year  | 6.6%             | 19             |
| Undergraduate-Sophomore year | 23.0%            | 66             |
| Undergraduate-Junior year    | 32.1%            | 92             |
| Undergraduate-Senior year    | 22.0%            | 63             |
| Graduate school              | 11.8%            | 34             |
| Other (please specify)       |                  | 29             |
| Answered question            |                  | 287            |
| Skipped question             |                  | 27             |

the District of Columbia. Four states (Arkansas, Delaware, Idaho, and Michigan) were not represented.

Each potential respondent was sent an e-mail message, briefly describing the purpose and content of the electronic survey. The information letter for the research study, as required by the Auburn University Institutional Review Board, was included as an attachment with the e-mail. If the recipient was willing to participate in the survey, the individual clicked on the link to the survey in SurveyMonkey. Completion of the survey took less than 10 minutes.

Between January 10, 2012, and April 22, 2012, 1,564 e-mail messages were sent; 12 e-mails were not delivered due to “fatal errors,” and 19 “out of office” replies were received. There is no way to know if any of the 19 recipients who were out of the office completed the survey at a later date.

A total of 1,552 e-mail messages were delivered, and 314 audiologists completed the survey, yielding a return rate of 20 percent.

## Demographics and Response Rates

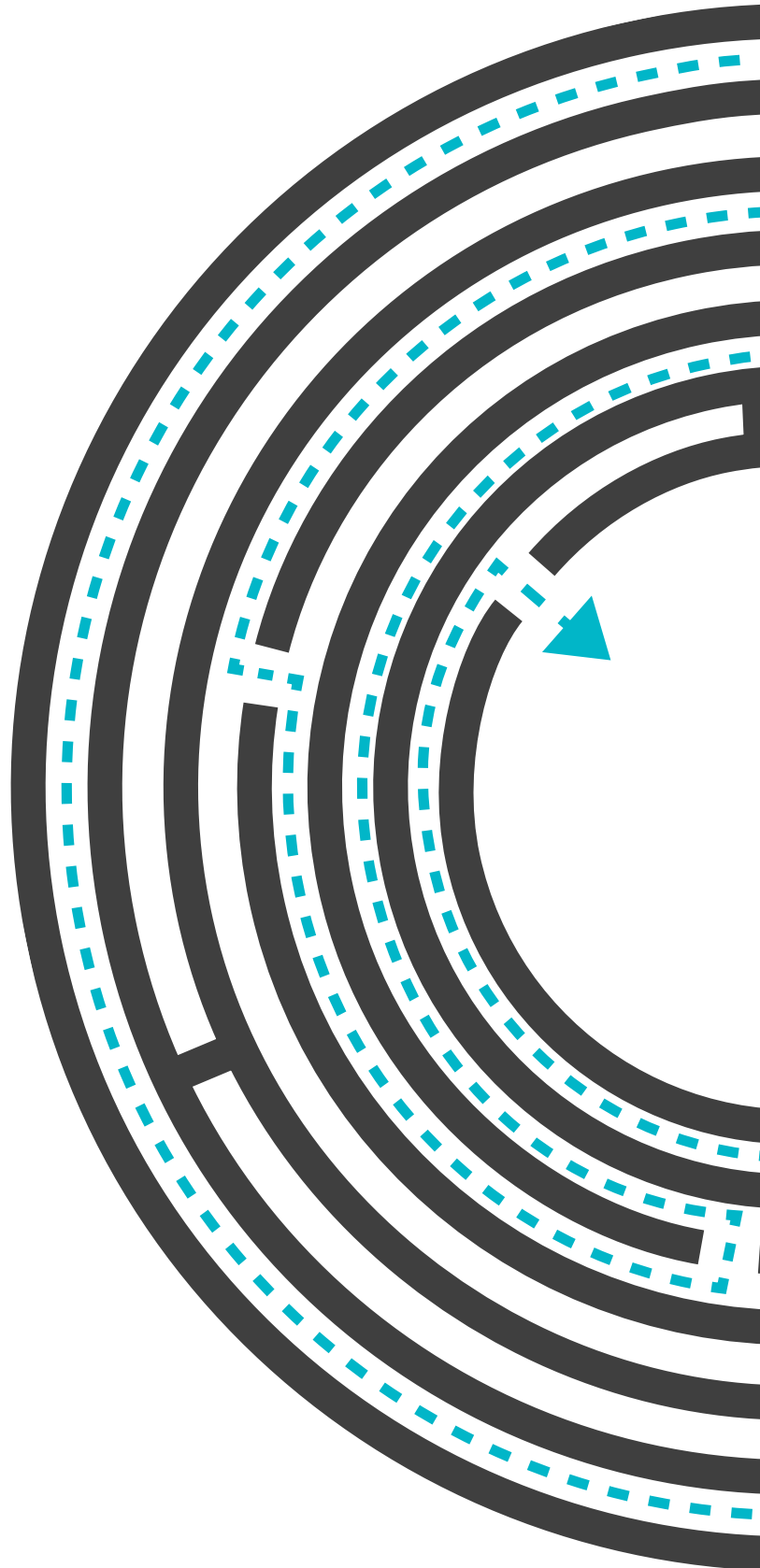
The year of birth for the respondents ranged from 1942 to 1986. The majority of the respondents had been practicing for more than 25 years.

The response rate for audiologists practicing less than a year was 5.2 percent; for those practicing 1 to 5 years, 18.1 percent; 6 to 10 years, 12.9 percent; 11 to 15 years, 9.1 percent; 16 to 20 years, 9.7 percent; and 21 to 25 years, 10.4 percent. For those practicing more than 25 years, the response rate was 35 percent.

There was a large difference in the response rate by gender, with female respondents making up 78.8 percent of the survey population and male respondents making up 21.2 percent. This gender count was not unexpected. The American Academy of Audiology 2004 *Compensation and Benefits Survey* showed that women represented 78 percent of the Academy’s membership. Similarly, 79.7 percent of the respondents to the Academy’s 2001 *Compensation and Benefits Survey* were female.

## Education

Nearly one-third of the respondents (32.1 percent) decided to pursue the field of audiology during the junior year of their undergraduate college studies (TABLE 1). The decision to pursue an audiology career was made with nearly the same frequency for undergraduate students in their sophomore (23 percent) and senior (22 percent) years. Student decisions for an audiology career also were made in graduate school (11.8 percent), as a



freshman undergraduate (6.6 percent), and in high school (5.9 percent).

The majority of the respondents (54 percent) said that an undergraduate teacher/counselor influenced their decision to become an audiologist (FIGURE 1). Other influences cited in the decision included friend/s (16.2 percent), mother/father (13.6 percent), other relatives (13.6 percent), “audiologist/s you knew personally” (13.1 percent), “you have a hearing loss” (4.0 percent), “audiologist/s you had heard or read about” (3.0 percent), and high school teacher/counselor (2.5 percent).

During their undergraduate studies, 82 percent of the respondents majored in communication disorders or communication sciences (TABLE 2). Other areas of study included psychology (8.6 percent), education (6.8 percent), science (4.7 percent), pre-med (2.5 percent), business (2.5 percent), engineering (0.7 percent), nursing (0.4 percent), and math (0.4 percent).

The majority of the respondents held the doctor of audiology (AuD) degree, earned from a distance learning program (42 percent) or from a residential program (29.5 percent). Other degrees held by respondents included a master’s degree (19.7 percent), a doctor of philosophy (PhD) degree (8.9 percent), or a doctor of education (EdD) degree (0.7 percent).

## Professional Practice

The respondents worked in a variety of settings: hospital/medical center (21.4 percent), otologist/physician’s office (20.4 percent), audiology private practice (owner) (19.4 percent), audiology/private practice (employee) 11.9 percent, college/university (7.1 percent), manufacturer/industry (5.8 percent), military/VA (5.8 percent), public school system (5.4 percent), government (2.0 percent), and other (1.7 percent).

## The Career Path

To gain a better understanding of the path individuals took to select a career in audiology, the SurveyMonkey “Skip Logic,” or conditional branching, feature was used to focus answers on some of the questions.

For Question 10 (“Before becoming an audiologist, did you consider another occupation or profession?”), if the respondent answered “yes” (which 93.5 percent did), the next question was: “What occupation or profession did you consider?”

More than half of the respondents (56.1 percent) indicated that they considered a career as a speech-language pathologist. Other occupations or professions considered were teacher (27.6 percent), physician (18.7 percent), psychologist (14.2 percent), nurse (6.1 percent), engineer (6.1 percent), pharmacist (4.5 percent), social worker (3.7

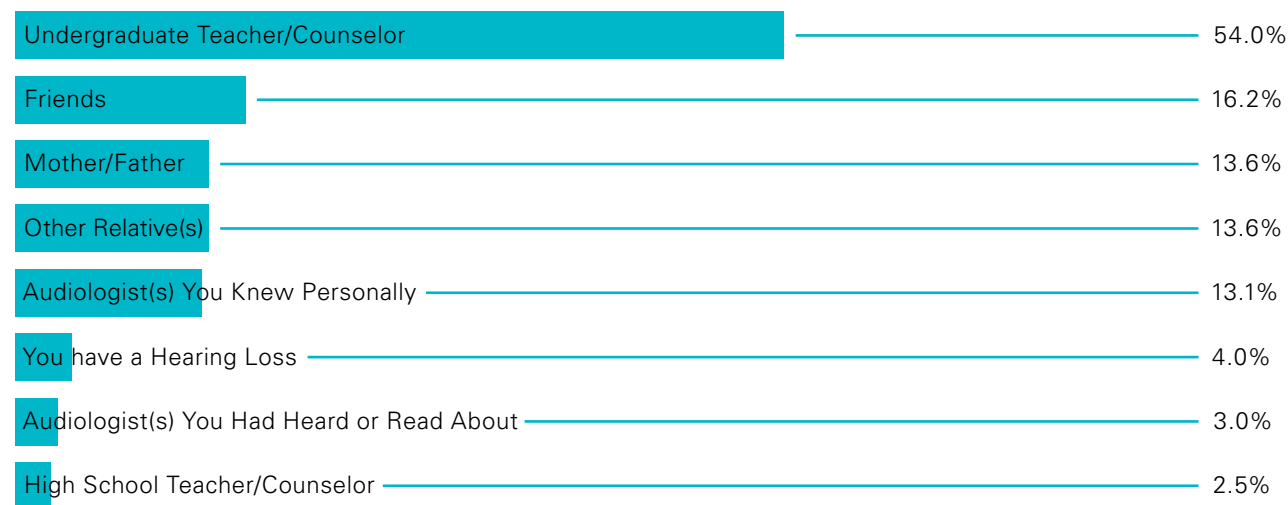


FIGURE 1. Which of the following influenced your decision to become an audiologist?



percent), lawyer (3.3 percent), optometrist/optician (2.4 percent), and dentist (2.0 percent).

In the case of Question 12, ("Before becoming an audiologist, were you employed in another occupation/profession?"), if the answer was "yes" (as in 23.9 percent of the responses), the next question was: "In what occupation/profession did you engage?"

The 74 responses to this question listed a wide variety of occupational fields and jobs, including allied health professions (speech-language pathologist, social worker, physical therapist, radiation technologist); education (teacher for the hearing impaired, deaf educator, teacher); occupations such as research, office work, retail/public relations/marketing, banking, and military service; and positions such as travel agent, clergy, auto mechanic, and musician/actress/ballerina.

**TABLE 2. What Was Your Undergraduate Major?**

| Answer Options                   | Response Percent | Response Count |
|----------------------------------|------------------|----------------|
| Communication disorders/sciences | 82.0%            | 228            |
| Psychology                       | 8.6%             | 24             |
| Education                        | 6.8%             | 19             |
| Science                          | 4.7%             | 13             |
| Business                         | 2.5%             | 7              |
| Pre-med                          | 2.5%             | 7              |
| Engineering                      | 0.7%             | 2              |
| Math                             | 0.4%             | 1              |
| Nursing                          | 0.4%             | 1              |
| Other (please specify)           |                  | 50             |
| Answered question                |                  | 278            |
| Skipped question                 |                  | 36             |

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## Before Becoming an Audiologist

As we suspected, nearly all of the practicing or retired audiologists (93.5 percent) considered another occupation or profession before becoming an audiologist. This statistic remained relatively unchanged when comparing “seasoned” audiologists, “mid-career” professionals, and “new” practitioners, although there was a trend toward a slight decrease in the response with more years of experience.

The largest group of respondents participating in the survey (35 percent) was made up of audiologists who had been practicing for more than 25 years. In this group, 91 percent had considered another occupation before becoming an audiologist. In the “mid-career” group, 93 percent

or investigating another career. Perhaps this is not a bad thing; after all, we eventually did select this profession.

Is this experience typical for other occupations, particularly those related to audiology, including work as a physician, nurse, educator, or psychologist? It might be interesting to investigate the career paths of other allied health practitioners, to determine if there are similar trends.

Most practicing and retired audiologists majored in communication disorders/sciences with the intent of becoming a speech-language pathologist, but made the decision to “switch” to audiology during their sophomore or junior year of college. Is this how you “fell into audiology?”

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THERE WAS LITTLE  
DIFFERENCE BY GENDER IN  
RESPONSE TO THE QUESTION  
ABOUT CONSIDERING  
ANOTHER CAREER.

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had considered another occupation and, in the group of “new” practitioners, 95 percent had contemplated pursuing another career path.

There was little difference by gender in response to the question about considering another career. Of the female participants, 93 percent had considered another profession; 94 percent of the male respondents indicated audiology was not their first career choice.

The trend continued, regardless of the respondents’ educational training: 96 percent of PhD audiologists, 94 percent of AuD (distance learning program) audiologists, and 94 percent of AuD (residential program) audiologists had contemplated a different occupation.

## Audiology: The Chosen Profession

What’s the bottom line when looking into this small window of our profession? Although it would be refreshing to learn that most of our colleagues aspired to a career as an audiologist while in high school, the reality is that almost all of us came to audiology at a later age, after considering

Would exposing potential applicants to our profession earlier, during their freshman undergraduate year, or during visits to campus, or even at career days in high school, increase the visibility and awareness of audiology? Perhaps we need to make more—and earlier—efforts to provide information about audiology careers to students majoring in science, math, pre-med, pre-nursing, psychology, and education. **AT**

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# HELPING AFRICA HEAR My Brush With “Kony 2012”

BY DAVID FABRY

David Fabry chose a career in audiology in an effort to make a difference in the world. This year, he worked with patients in Uganda and came back to the United States with a message about collaboration, thinking big, and working small.

**W**hy did I become an audiologist? Previously, I recounted the story of how I found audiology through pre-vet and experimental psychology, but two recent events reminded me of the catalyst that provided the initial spark to strive to make a difference.

The first reminder occurred when I heard former President Clinton comment in a speech early this year that, despite the existence of bias in the world today, “The important thing is you need a bias for action, a bias for cooperation,

(Top left): Several young patients pose for the camera during a break from the fitting process.

(Top middle left): Ugandan physician Dr. Ddamalina from Hope Medical Clinics.

(Top middle right): A young patient from APCPD Integrated Academy, one of the schools for deaf/hard-of-hearing near Kampala, Uganda.

(Top right): A newly-fit patient enjoys Lady Gaga played via a volunteer’s iPhone music collection.

(Bottom): Former President Clinton and David Fabry observe a young patient.





The challenge remains the provision of sustainable solutions for batteries, earmolds, and hearing-aid repairs, as well as continued, local follow-up to ensure that individuals are using their amplification effectively.



and a bias for thinking big, even if we have to act small.” He articulated perfectly what I always have tried (sometimes unsuccessfully) to achieve professionally.

The second reminder came shortly afterward, in March, 2012, when I had the opportunity to travel with the Starkey Hearing Foundation to Uganda. Serendipitously, President Clinton had a hand in that experience, too. He had challenged Bill Austin, Starkey’s CEO and founder, to “scale up” his efforts to provide hearing aids to those in need around the world from the one million devices fit in the previous 30 years. True to form, and with a 3:1 compression ratio, Starkey established a goal of fitting another million devices in the next decade.

While, no doubt, a Big, Hairly, Audacious Goal (BHAG), in the vernacular of James Collins and Jerry Porras in their 1994 book, *Built to Last: Successful Habits of Visionary Companies*, the idea of fitting one million devices in a decade represents only one of many challenges for those who are passionate about raising awareness of the importance of hearing as a global health issue. For me, it represents the “tip of the iceberg” as I continue the third phase of my professional career: collaboration, thinking big, and working small.

And there I was, in Kampala and Gulu, Uganda, fitting new patients and following those who had been seen the previous year, at the exact moment that the “Kony 2012” video detailing the atrocities committed in the region by the Lord’s Resistance Army (LRA), the African militant group led by Joseph Kony, went “viral” on YouTube.

Barbara Bush from Global Health Corps working with a young recipient.



## The Big Picture

According to a 2005 World Health Organization (WHO) report, nearly 650 million people worldwide have a hearing loss in excess of 25 dB HL, and 278 million have thresholds in excess of 40 dB HL. Hearing loss is the most prevalent chronic disability in the world, and 80 percent of the affected individuals live in low- and middle-income countries, with little or no access to audiologists (or any) hearing health-care professionals.

While we lament the 20 percent market penetration for hearing aids in the United States, that number has been estimated at only 2.5 percent in emerging countries (Swanepoel, 2010). The reality is that, in many emerging markets, food, shelter, clean water, and general health issues take precedence over hearing. In fact, as I write this, news is spreading of an Ebola outbreak in Western Uganda that has killed 14 people and threatens to kill many more. So what is the point of trying to provide treatment for hearing loss on a continent that faces so many more pressing issues?

For one thing, the treatment of hearing loss can and will make a difference. The “Big Five” causes of hearing loss in Africa are malaria, meningitis, measles, malnutrition, and middle-ear disease. Although these may occur at any age, the onset for each is typically post-lingual, rather than pre-lingual, meaning that the roots of speech and language were initiated prior to the hearing loss. If effective amplification and follow-up care can be provided, this may significantly improve the quality of life for these individuals. The challenge remains the provision of sustainable solutions for batteries, earmolds, and hearing-aid repairs, as well as continued, local follow-up to ensure that individuals are using their amplification effectively.

An additional concern relates to the awareness, public health policy, and cost burden related to malaria treatment. The World Health Organization estimates that malaria produces approximately 225 million new cases and 791,000 deaths each year. Malaria thrives in hot, tropical climates and disproportionately affects poor countries. Globally, 98 percent of malaria deaths occur in 35 countries—including 30 in sub-Saharan Africa. In Africa, a child dies every minute from the disease: malaria is the second-largest cause of death from infectious disease, after HIV/AIDS.

## Ending Ototoxic Treatment

Currently, the most common treatment for severe malaria is intravenous quinine, which typically is administered via constant rate infusion with up to three doses daily. While effective at preventing mortality in children, the treatment is highly ototoxic.

The superiority of quinine as a treatment has been challenged by artemisinin derivatives (e.g., artesunate), which often are easier to use—as they may be delivered intravenously, orally, or rectally—and do not include the complication of an increase in neurological damage (including hearing loss). In April, 2001, WHO recommended the use of artemisinin-based combination therapies (ACT) to treat simple malaria. In 2006, the organization advised that artesunate be employed as the primary choice for treatment of severe malaria in adults.

Additional evidence for the superiority of artesunate was provided by a large, multi-center, randomized trial (the African Quinine Artesunate Malaria Trial, or AQUAMAT)

### Chief of Audiology at Stanford University

The Stanford University School of Medicine, Department of Otolaryngology - Head & Neck Surgery, is recruiting a doctoral level audiologist as a faculty member and Chief of Audiology. Appointment will be at the Associate or Full Professor level in the Clinician Educator Line. Applicants will have demonstrated excellence in clinical care, teaching, scholarship, and management of a comprehensive audiology program. Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the university's research, teaching and clinical missions. Letters of inquiry, curriculum vitae and the names and addresses of five references should be sent to the following.

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that compared treatment with artesunate and quinine in children with severe malaria (Dondorp et al, 2010). A total of 5,425 African children were enrolled in the study, which found that artesunate substantially reduced mortality for children with severe malaria, when compared with quinine.

Despite compelling evidence supporting the superiority of artesunate over quinine for the treatment of severe malaria in adults and children, the conversion rates have been painfully slow. The issue, unfortunately, often boils down to cost: quinine treatment costs approximately \$1.30 per individual, compared to \$3.30 for artesunate.

According to a 2012 report from Doctors Without Borders, this translates to an additional cost of \$31.8 million in drug costs per year in Africa alone. Obviously, this is a huge difference, but when the total cost of treatment (e.g., intravenous versus oral or rectal delivery) is factored in, the cost gap closes.

The issue is more complicated than cost, however. There are compliance and regulatory issues, drug manufacturer issues (there is only one WHO-approved manufacturer of artesunate), and, perhaps the most significant issue, the existing standard of care.

Quinine has been used for centuries, and many physicians are reluctant to move away from the drug regimens they know. The data from the 2010 AQUAMAT trial revealed, however, that one more life was saved out of every 41 children with severe malaria treated with artesunate instead of quinine.

Furthermore, quinine administration requires skill, and the dosage must be carefully adjusted for body weight to prevent dangerous side effects in young children. The overall cost of treatment must include the societal cost of using medications that have known neurological pathologies—including hearing loss. In many African countries, deaf children are abandoned by their families, according to Sister Rosemary Nyirumbe, who was honored this year by the Starkey Foundation for her work with young women in Uganda who suffered at the hands of Joseph Kony and the LRA.

## The Challenge

So this is our collective challenge: how to value the importance of saving one more life out of 41, and also how to preserve hearing in children and adults by raising awareness globally for the importance of hearing preservation.

For many people, audition historically has been relegated to second place (after vision) in the sensory “food chain,” despite the fact that hearing serves as the primary mechanism through which we communicate with others.

Although many people take their hearing for granted, Helen Keller noted that, “Blindness separates us from things, but deafness separates us from people.”

Her words can help shift our focus beyond the audiometer to reach out to others in positions of influence. President Clinton’s words also challenge us to think outside of the Hi-Pro Box, and to bring change into the world.

This is where the concept of the BHAG comes in, as a long-term attainable goal that may be outside of a group’s comfort zone. As we challenge conventional wisdom by promoting alternate treatment methods—for malaria, oncology, or other diseases—that are not ototoxic, even at additional cost, we must provide evidence that there is a “payoff” to society.

Although audiologists are passionate advocates for the importance of hearing, this goal is probably unattainable in isolation. To change public policy in Africa (or anywhere else), lasting and meaningful collaboration is required among professionals, industry, politicians, celebrities, educators, and governmental and non-governmental humanitarian organizations. In turn, these partnerships will foster improved access to more African hospitals, schools, government services, and non-government organizations than is possible when we try to work alone. It truly does take a village to raise awareness.

## The Perception

Although the emphasis on treatment objectives is tremendously important for emerging markets, prevention and education are equally important for navigating the complexities associated with social change and attitudes regarding the importance of hearing. In addition, when preparing to assist individuals in other cultures, it is important to take into account how that assistance may be perceived.

While in Uganda, I had many productive discussions with some of the young people who assisted with the mission, including Ugandans who helped with spoken or manual interpretation. Many were upset with what they saw as a Western bias portrayed in the “Kony 2012” YouTube video—a point of view that the West represents Africa’s “savior.”

An alternate perspective was provided by some of the Global Health Corps Fellows who assisted with the mission, who applauded the efforts of the Invisible Children Project, the producer of the “Kony 2012” YouTube video, and the use of social media to raise awareness, money, and activism against Kony and the LRA. A third distinct group represented the “Afropolitan” point of view, characteristic of contemporary Africans who had lived



or travelled around the world. Their opinion reflected my own: although it is tempting to simplify these issues into an “East versus West” phenomenon, the reality is the situation is far more complex and requires deeper insights and understanding.

Perhaps most importantly, our conversations reminded me that the primary reason that we could engage in animated discussions and present our points of view was the use of a common spoken language—and the ability to hear that language spoken aloud.

## Moving Forward

I left Africa and returned home, energized to learn as much as I could about the complexities of hearing health care in Africa, using my two ears and one mouth in direct proportion.

Many are more knowledgeable on the topic than I am, but I have a renewed energy to assist in any way possible to do whatever I can. In addition to President Clinton’s words quoted at the start of this article, I am reminded of those of Helen Keller: “I am only one, but still I am one. I cannot do everything, but still I can do something; and because I cannot do everything, I will not refuse to do something that I can do.”

It’s why I became an audiologist. 🎧

*David Fabry, PhD, is the content editor for Audiology Today, a member of the American Academy of Audiology Foundation Board of Trustees, and managing director of Sales at Starkey Laboratories in Eden Prairie, MN.*

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# ADVERSE HERBAL & NUTRITIONAL/ DIETARY SUPPLEMENT SIDE EFFECTS

BY ROBERT M. DISOGRA



## AUDIOLOGISTS MUST CONTINUALLY ASK NEW QUESTIONS DURING THE CASE HISTORY REVIEW THAT INCLUDE THE USE OF FDA-APPROVED DRUGS, HERBAL MEDICINES, AND NUTRITIONAL SUPPLEMENTS WHOSE SIDE EFFECTS COULD IMPACT ON SUBJECTIVE AND OBJECTIVE DATA INTERPRETATION.

**H**istorically, when an audiologist reviewed a patient's drug history, the "big three" side effects to watch for included hearing loss, tinnitus, and vestibular problems. These side effects were considered for *prescription* drugs and not for *over-the-counter* (OTC) herbals, nutritional, and/or dietary supplements. Our profession has never pursued OTC medications/ herbals or nutritional supplements as possible players in the patient's

communication complaints or vestibular problems.

Doctoral-level education now includes either dedicated course work in pharmacology or includes pharmacology-related topics in other courses. As early as 1993, audiology literature had information for audiologists about the side effects of pharmaceuticals, patient management strategies (DiSogra, 1993, 2001), and herbal medicines (DiSogra, 2003, 2004). The lists of the drug/

## Reference Web Sites

1. **Nutritional Supplement Misuse Among the Elderly.** Ohio State University Extension Senior Series.  
<http://ohioline.osu.edu/ss-fact/0126.html>
2. **Nutrition and AIDS from AIDS.org**  
[www.aids.org/factSheets/490-Nutrition.html](http://www.aids.org/factSheets/490-Nutrition.html)
3. **FDA Press Release Web Site (endorsed by the author)**  
<http://vm.cfsan.fda.gov/~lrd/press.html>
4. **FDA Site for Nutritional Supplement Information (endorsed by the author)**  
<http://vm.cfsan.fda.gov/~dms/supplmnt.html>
5. **Northwestern University Supplements Fact Site**  
[www.feinberg.northwestern.edu/nutrition/fact-sheets.html](http://www.feinberg.northwestern.edu/nutrition/fact-sheets.html)
6. **National Nutritional Foods Association**  
[www.nnfa.org/news/media\\_kit/fact.html](http://www.nnfa.org/news/media_kit/fact.html)
7. **Official site for the Food and Nutrition Information Center**  
<http://www.nal.usda.gov/fnic/etext/000015.html>
8. **Federal Trade Commission: Dietary Supplements: An Advertising Guide for Industry**  
[www.ftc.gov/bcp/online/pubs/buspubs/dietsupp.htm](http://www.ftc.gov/bcp/online/pubs/buspubs/dietsupp.htm)
9. **Official site for the Dietary Supplement Education Alliance**  
[www.supplementinfo.org/](http://www.supplementinfo.org/)
10. **Report of the Commission on Dietary Labels, 1997**  
[www.health.gov/dietsupp/final.pdf](http://www.health.gov/dietsupp/final.pdf)

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herbals and their audiology-related side effects have been continually updated (DiSogra, 2008, 2010), along with information on where to get a drug's side effect information online (DiSogra, 2006, 2011).

The body of knowledge about herbals and nutritional supplements continues to grow. There are numerous books for professionals and consumers on the topic; however, safety and efficacy (in some circumstances) has yet to be proven in clinical studies.

## Complementary and Alternative Medicine (CAM)

According to the National Center for Complementary and Alternative Medicine (NCCAM), CAM is a group of diverse medical and health-care systems, practices, and products that generally are not considered part of conventional medicine.

Complementary medicine is used together with conventional medicine; alternative medicine is used in place of conventional medicine. Integrative medicine combines conventional and CAM treatments for which there is evidence of safety and effectiveness. While scientific evidence exists regarding some CAM therapies, key questions are yet to be answered for many through well-designed scientific studies—questions such as whether these therapies are safe and whether they work for the purposes for which they are used. NCCAM's mission is to explore CAM practices using rigorous scientific methods and build an evidence base for the safety and effectiveness of these practices (<http://nccam.nih.gov>).

## Evidence Basis

Opinions vary as to the effectiveness of CAM. Complementary medicine has a wide scope of topics including acupuncture, hypnosis, meditation, chiropractic manipulation, tai chi, yoga, botanical and herbal supplements, and many other undefined modalities such as copper bracelets, magnets, holy water, etc. For most modalities, the mechanism of action is unknown and the evidence of benefit is poor. Some modalities such as acupuncture, hypnosis, and tai chi may improve pain and other subjective complaints. It may seem that many of the beneficial effects of complementary medicine are placebo effects. Complementary treatment may be associated with side effects and should not be an alternative to conventional medicine. Complementary medicine can be used as an adjunct to conventional medicine and should be used in full agreement with, and under the supervision of, the attending physician. Patients should be informed



about the existing evidence and what to expect from complementary medicine. (Grossman, 2011)

## Costs

A 2007 study by the National Institutes of Health (NIH) (Nahin et al, 2009) reported that adults in the United States spent \$33.9 billion out of pocket on visits to CAM practitioners and purchases of CAM products, classes, and materials. Nearly two-thirds of the total out-of-pocket expenditures went to self-care purchases of CAM products, classes, and materials during the past 12 months (\$22.0 billion), compared with about one-third spent on practitioner visits (\$11.9 billion).

## Practitioner Visits for CAM

Nahin noted that, despite this emphasis on self-care therapies, 38.1 million adults made an estimated 354.2 million visits to practitioners of CAM. About three-quarters of both visits to CAM practitioners and total out-of-pocket costs spent on CAM practitioners were associated with manipulative and body-based therapies. A total of 44 percent of all out-of-pocket costs for CAM, or about \$14.8 billion, was spent on the purchase of non-vitamin, non-mineral, natural products (Nahin et al, 2009).

## Herb Definition and Usages

According to the Merriam-Webster dictionary, an herb is “a seed-producing annual, biennial, or perennial that does not develop persistent woody tissue but dies down at the end of a growing season” or “a plant or plant part valued for its medicinal, savory, or aromatic qualities.” The first known use of the word is traced to the 14th century, with roots in the Middle English word *herbe*, from Anglo-French, and from the Latin *herba*.

Herbs have a variety of uses including culinary, medicinal, and, in some cases, spiritual usage. In medicinal or spiritual use, any of the parts of the plant might be considered herbs, including leaves, roots, flowers, seeds, resin, root bark, inner bark (and cambium), berries, and, sometimes, the pericarp or other portions of the plant. Culinary use of the term herb typically distinguishes between herbs, from the leafy green parts of a plant (either fresh or dried), and spices, from other parts of the plant (usually dried), including seeds, berries, bark, root, and fruit.

The scientific/biochemical study of plants is known alternately as *phytomedicine*, *phytotherapy*, and *phytopharmacology*.

## Dietary Supplement Definition

The FDA traditionally considered dietary supplements to be composed only of essential nutrients, such as vitamins, minerals, and proteins. The Nutrition Labeling and Education Act of 1990 added herbs, or similar nutritional substances, to the term *dietary supplement*. According to the Dietary Supplements Health and Education Act of 1994 (DSHEA), the meaning of the term dietary supplements was extended beyond essential nutrients to include such substances as ginseng, garlic, fish oils, psyllium, enzymes, glandulars, and mixtures of these.

A dietary supplement is a product (other than tobacco) that is intended to supplement the diet that bears or contains one or more of the following dietary ingredients: a vitamin, a mineral, an herb or other botanical, an amino acid, a dietary substance for use by man to supplement the diet by increasing the total daily intake, or a concentrate, metabolite, constituent, extract, or combinations of these ingredients.



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It can be ingested in pill, capsule, tablet, or liquid form. It cannot be represented for use as a conventional food or as the sole item of a meal or diet.

### The Role of the FDA

For decades, the U.S. Food and Drug Administration (FDA) regulated herbal and dietary supplements and classified them as foods to ensure that they were safe and wholesome, and that their labeling was truthful and not misleading.

An important facet of ensuring safety was FDA evaluation of the safety of all new ingredients, including those used in dietary supplements, under the 1958 Food Additive Amendments to the Federal Food, Drug, and Cosmetic Act (FD&C Act).

However, with passage of the Dietary Supplements Health and Education Act of 1994 (DSHEA), Congress amended the FD&C Act to include several provisions that apply only to dietary supplements and dietary ingredients of dietary supplements. As a result of these provisions, dietary ingredients used in dietary supplements are no longer subject to the premarket safety evaluations required of other new food ingredients or for new uses of old food ingredients. They must, however, meet the requirements of other safety provisions.

The DSHEA, signed by President Bill Clinton on October 25, 1994, acknowledges that millions of consumers believe dietary supplements may help to augment daily diets and provide health benefits. The intent of Congress in enacting the DSHEA was to meet the concerns of consumers and manufacturers to help ensure that safe and appropriately labeled products remain available to those who want to use them. DSHEA went into effect in 1996.

The provisions of DSHEA define dietary supplements and dietary ingredients; establish a new framework for assuring safety; outline guidelines for literature displayed where supplements are sold; provide for use of claims and

nutritional support statements; require ingredient and nutrition labeling; and grant FDA the authority to establish good manufacturing practice (GMP) regulations.

The law also requires formation of an executive-level Commission on Dietary Supplement Labels and an Office of Dietary Supplements within the National Institutes of Health.

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IT CANNOT BE EMPHASIZED  
ENOUGH THAT IT IS IMPORTANT  
TO ESTABLISH A TIME LINE FROM  
THE TIME A SUPPLEMENT WAS FIRST  
TAKEN TO THE TIME THE REPORTED  
ADVERSE EFFECTS APPEARED.

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An excellent overview can be found at [www.fda.gov/food/dietarysupplements/consumerinformation/ucm191930.htm](http://www.fda.gov/food/dietarysupplements/consumerinformation/ucm191930.htm).

### Safety

The DSHEA amends the adulteration provisions of the FD&C Act. Under DSHEA, a dietary supplement is adulterated if it, or one of its ingredients, presents “a significant or unreasonable risk of illness or injury” when used as directed on the label, or under normal conditions of use (if there are no directions). It is possible that a dietary supplement that contains a new dietary ingredient (i.e., an ingredient not marketed for dietary supplement use in the United States prior to October 15, 1994) may be adulterated when there is inadequate information to provide reasonable assurance that the ingredient will not present a significant or unreasonable risk of illness or injury. The secretary of Health and Human Services (HHS) may declare that a dietary supplement or dietary ingredient poses an imminent hazard to public health or safety.

However, as with any other food, it is a manufacturer's responsibility to ensure that its products are safe and properly labeled prior to marketing.

### Available Literature

The DSHEA provides that retail outlets may make available "third-party" materials to help inform consumers about any health-related benefits of dietary supplements. These materials include articles, book chapters, scientific abstracts, or other third-party publications. These provisions stipulate that the information must not be false or misleading; cannot promote a specific supplement brand; must be displayed with other similar materials to present a balanced view; must be displayed separately from supplements; and may not have other information attached (product promotional literature, for example).

### Nutritional Supplement Support Statements

The DSHEA provides for the use of various types of statements on the label of dietary supplements, although claims may not be made about the use of a dietary supplement to diagnose, prevent, mitigate, treat, or cure a specific condition. For example, a product may not carry the claim "cures tinnitus" or "treats hearing loss."

Under DSHEA, firms can make statements about classical nutrient deficiency diseases—as long as these statements disclose the prevalence of the disease in the United States. In addition, manufacturers may describe the supplement's effects on "structure or function" of the body or the "well-being" achieved by consuming the dietary ingredient. To use these claims, manufacturers must have substantiation that the statements are truthful and not misleading, and the product label must bear the statement "This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease."

Unlike health claims, nutritional support statements need not be approved by the FDA before manufacturers market products bearing the statements. However, the agency must be notified no later than 30 days after a product that bears the claim is first marketed.

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## **Ingredient and Nutritional Information Labeling**

Like other foods, dietary supplement products must bear ingredient labeling. This information must include the name and quantity of each dietary ingredient or, for proprietary blends, the total quantity of all dietary ingredients (excluding inert ingredients) in the blend. The label must identify the product as a “dietary supplement” (e.g., “vitamin C dietary supplement”).

Labeling of products containing herbal and botanical ingredients must state the part of the plant from which the ingredient is derived. If a supplement is covered by specifications in an official compendium and is represented as conforming, it is misbranded if it does not conform to those specifications. Official compen-

The nutrition labeling must include the quantity per serving for each dietary ingredient (or proprietary blend) and may include the source of a dietary ingredient (i.e., “calcium from calcium gluconate”). If an ingredient is listed in the nutrition labeling, it need not appear in the statement of ingredients. Nutrition information must precede ingredient statements on the product label.

## **Good Manufacturing Practices**

DSHEA grants FDA the authority to establish good manufacturing practices (GMPs) regulations governing the preparation, packing, and holding of dietary supplements under conditions that ensure their safety. These regulations are to be modeled after current GMP regulations in effect for the rest of the food industry. FDA intends to

work with the supplement industry and other interested parties to develop GMPs and, in doing so, will seek public comment as to their scope.

## **Office of Dietary Supplements**

HHS now has an office within the National Institutes of Health (NIH) to explore the potential role of supplements to improve health care in the United States. The office promotes scientific study of supplements and their value in preventing chronic diseases; collects and compiles scientific research, including data from foreign sources and the NIH Office of Alternative Medicine (<http://nccam.nih.gov>); serves as a scientific adviser to HHS and FDA; and

compiles a database of scientific research on supplements and individual nutrients.

## **Dietary Supplement Reference Source**

Hendler (2008) reports that an estimated three out of four Americans are using nutritional supplements on a regular basis. Many supplements have specific benefits; however, the benefits of other supplements are speculative at best.

The publishers of the widely used *Physician's Desk Reference* (PDR) now publish a new reference work, the *PDR for Nutritional Supplements*. The editors state that this reference source was “urgently needed.” The text is an overview of the entire spectrum of current nutritional products,

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INTEREST AMONG AUDIOLOGISTS  
IS GROWING AS WE LOOK TO  
OTHER REFERENCE SOURCES FOR  
“NONTRADITIONAL” TREATMENTS  
THAT OUR PATIENTS CAN  
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SUPERVISION.

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dia include the U.S. Pharmacopeia, the Homeopathic Pharmacopeia of the United States, or the National Formulary. If not covered by a compendium, a dietary supplement must be the product identified on the label and have the strength it is represented as having.

Labels also must provide nutrition labeling. This labeling must first list dietary ingredients present in “significant amounts” for which FDA has established daily consumption recommendations, followed by dietary ingredients with no daily intake recommendations.

Note that dietary ingredients that are not present in significant amounts need not be listed.

from the most widely used vitamins to shark cartilage. Over 1,000 nutritional products are included in this text.

Each supplement has its trade name listed, along with a description of the nature of the substance, its precise chemical structure, its actions and pharmacology, the indications and usage of the supplement, a research summary (and literature review), as well as contraindications, precautions, adverse reactions, and interactions. The 575-page book can be ordered through any online book service.

## Dietary Supplements and the Audiologist

Interest among audiologists is growing as we look to other reference sources for “nontraditional” treatments that our patients can pursue without physician supervision.

Initially, audiologists were trained to focus on FDA-approved drugs and their auditory-vestibular side effects with the first “audiology-related” reference source appearing in 1993 (DiSogra, 1993).

As the AuD movement picked up speed in the middle to latter part of the 1990s (and with a growing interest in pharmacology as a course of study in distance learning programs), the 1993 reference list was updated (DiSogra, 2001). The updated reference now lists more than 1,500 drugs (up from 750) and 315 side effects (up from 83) that an audiologist certainly would be interested in knowing, especially when there is conflicting test data between behavioral and subjective tests.

Additional information on the growing use of herbal medicines as an adjunct to conventional therapy or as an alternative to traditional medicine resulted in a companion reference list (with side effects) on herbal medicines (DiSogra, 2003).

As with both previously published references, the *Dietary Supplements Reference* is arranged the same way. The reader can reference the supplement in question and

then note the reference number(s) associated with the side effects list.

The information from these lists is intended to be used as a guide for both you and your patients. Specific questions about efficacy and safety should be addressed to the FDA ([www.fda.gov/medwatch](http://www.fda.gov/medwatch) or 800-FDA-1088), the supplement’s manufacturer (most have Web sites), a pharmacist, and/or the primary-care physician.

*It cannot be emphasized enough that it is important to establish a time line from the time a supplement was first taken to the time the reported adverse effects appeared.* Because supplements are purchased over-the-counter (and by mail order and Internet purchases), time lines may be more difficult to establish, since most retail stores do not (and are not required to) keep track of a patient’s supplements/herbal purchases. However, contacting the patient’s pharmacy to obtain exact start dates is the easiest approach.

### ALSO OF INTEREST



Side Effects Reference List: A comprehensive reference list of side effects for herbal medicines and nutritional supplements is published on the Academy’s Web site.

Visit [www.audiology.org](http://www.audiology.org) and search keywords “herbal supplement side effects” or use the QR code to view the list on your mobile device.

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## Side Effects Reference List

A comprehensive reference list of side effects for herbal medicines and nutritional supplements is published on the Academy's Web site ([www.audiology.org](http://www.audiology.org)), search keywords "herbal supplement side effects." It is the author's intent that you reference this list when taking your case histories. You will note that there are many supplements and herbals that impact the vestibular system, which could influence your data collection and interpretation. Cognitive and vascular side effects also are listed.

## Conclusion

Audiologists must continually ask new questions during the case history review that include the use of FDA-approved drugs, herbal medicines, and nutritional supplements whose side effects could impact on subjective and objective data interpretation. 

Robert M. DiSogra, AuD, is the owner and director of Audiology Associates of Freehold, PC, in Freehold, NJ. He developed and taught the Pharmacology/Ototoxicity DL class at Salus University for five years and is currently an adjunct lecturer at St. John's University in NY.

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# A Narrative Psychological Framework for Audiologic Care

BY MICHAEL A. HARVEY

The Narrative Therapy approach is based on the notion that people assign meaning to their lives by organizing key events into stories from which they limit or expand their repertoire of behaviors. This approach can help patients discover hopeful, preferred, and previously unrecognized possibilities—to re-author their stories and their lives, and find their own sense of personal power and hopefulness.

It is wishful thinking to expect patients to follow our good advice—a lament well-known to health-care practitioners. Estimates of medical non-adherence hover around 50 percent; it has been identified as a major public health problem that imposes an annual financial burden of approximately \$100 billion upon U.S. health-care systems (Denekens et al, 2001).

The MarkeTrak VIII report illustrated the situation with regard to hearing loss: “the hearing loss population grew at the rate of 160 percent of U.S. population growth, to 34.25 million persons...less than 1 in 10 people with mild hearing loss use amplification and only 4 in 10 people with moderate-to-severe hearing loss use amplification (Kochkin, 2009).







- **A common patient psychological dynamic:**

People tell me I need help, but I disagree.

Therefore, I will ask for help, but not accept it.

The doctor explains how treatment will help.

This makes me angry, but I cannot show it because that will make the doctor talk more.

So I'll nod my head and plan my escape.

- **A common health-care provider psychological dynamic:**

It's clear that the patient needs help.

If I explain this thoroughly enough and convey my expertise, then the patient will trust me and accept my help.

I know I'm succeeding at this because the patient is nodding in agreement.

There are countless covert psychological landmines that impede successful treatment outcomes, even during brief patient visits. Some landmines are beyond the scope of audiologic practice and are more appropriately addressed by a mental health professional. However, others benefit by (or warrant) direct intervention by the audiologist. Unfortunately, separating intervention opportunities that promote successful audiologic care from those likely only to “open up a can of worms” is easier said than done. This article addresses that task from the perspective of a clinical psychologist.

## Narrative Therapy

“Narrative Therapy” was developed in the 1980s by Michael White of Australia and David Epston of New Zealand for use in psychotherapy contexts. These techniques are effective in many health-care contexts, including audiologic treatment.

The Narrative Therapy approach is based on the notion that people assign meaning to their lives by organizing key events into stories from which they limit or expand their repertoire of certain behaviors. In particular, individuals with hearing loss often are besieged by problem-saturated narratives from which they learn that seeking assistance will prove futile: e.g., “People tell me I need help, but I know it won't work.”

A narrative approach effectively counters a self-fulfilling belief by helping patients discover hopeful, preferred, and previously unrecognized possibilities—to re-author their stories and their lives, instead of feeling helpless and inadequate in an office while they politely nod their head and plan their escape.

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## Likability

Although this is not a technique (per se) and is not specific to narrative therapy, likability bears mention. This critical variable often succumbs to the pressure of back-to-back appointments. Opening chit-chat is essential, particularly for initial office visits. As an analogy, it is well-known that the first few minutes of a job interview are critically important with regard to establishing likability—a key factor in terms of new hires. It's the same for health-care professionals. People prefer to engage with people they like (Cialdini, 2008). An audiologist can have impressive credentials and expertise but, without “likability,” treatment goes nowhere.

In my psychotherapy practice, I routinely ask questions such as, “Did you have any trouble finding my office?” or “Is it still hot outside?” People often naturally transition from greetings and pleasantries into their problem(s) without being asked. If they don't, I might ask a general question such as, “What brought you here?” During the initial appointment, I often inquire about aspects of a patient's life other than the presenting problem—their interests, their living situation, etc.

These so-called greeting rituals must be done authentically. One example of non-authenticity is a meeting I had with a highly respected physician who shook my hand, while holding a pencil in the same hand! He wasn't likable and I didn't go back to him.

### Collaboration and Transparency

"Let's collaborate."

Who would disagree with that? Collaboration sounds simple, but can be very difficult to put into practice. Too often, doctors explain a problem and the way treatment will help—thinking they're collaborating—while patients nod politely and plan their escape.

The Narrative Therapy approach fosters collaboration by differentiating between "local knowledge" and "expert knowledge." The term "local knowledge" is borrowed from anthropology and refers to an individual's personal view of self and the world. "Expert knowledge" is what (we) professionals gain from our training.

It is important to ask questions that create a space for the patient's local knowledge and personal power, rather than space for a sense of helplessness. This must be done in a way that does not put expert knowledge and scientific classification first.

Consider the example of an audiologist who said to a 69-year-old female patient who had requested hearing aids: "I can help you hear better [acknowledging his own expert knowledge], but would you help me understand how, when, and why you'll use hearing aids [acknowledging her local knowledge]?" The audiologist wisely did not assume the patient wanted hearing aids because she had requested them.

She responded: "I'll use the hearing aids when my know-it-all son comes over so he'll get off my back. I'm not interested in hearing much since my husband died."

"So, right now, hearing aids may help your son feel better, but not you?"

"You got that right, doc."

"It sounds like what's taking center stage for you right now is being without your husband, right?"

She nodded.

The audiologist continued: "So, in the couple of minutes that we have (not adequate I know), would you give me a glimpse of what life is like for you without him?"

After a few minutes of silence, as she held back tears, he offered: "Do you think it would be useful for you and me to include another person on our team, a therapist, who could talk with you about grieving, loss, etc.?" Another head nod.

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Because the audiologist was likable and collaborated with the patient in setting goals, and because he did not overly assert his expert knowledge, the patient briefly talked about her depression and a mental health referral was made. Three months later, the patient was fitted with hearing aids.

With collaboration comes transparency. We are open with our patients when we explain what we are doing and why, and assure them that their feedback is welcome and necessary. We demonstrate transparency by asking patients to evaluate and comment on certain aspects of our work.

Some possible questions:

- “Is what we’re talking about relevant or helpful for you? How is it useful?”
- “I was wondering if you would be more interested in discussing \_\_\_\_\_?”
- “Do you think it would be better for us to focus on \_\_\_\_\_?”

As psychologist Carol Gilligan said (Wylie 2002):

[When I interview someone] I begin by asking a question and then I listen—and the way of listening is key. How do you listen when you want to discover another person’s inner world, as opposed to figuring out where someone falls on your map of the world?... I strive to work from a position of not knowing...defined as something I’m genuinely curious about, so in that sense it’s a real question, something I don’t know the answer to.

## Provide an Emotionally Safe Environment

Although your primary objective is to evaluate, diagnose, and treat a patient’s hearing loss, your influence extends beyond those objectives. The act of acknowledging, validating, and soothing a patient’s anxiety helps to forge a positive clinical alliance (facilitating a positive audiologic outcome), and also may lead to an emotionally transformative experience for the patient (Harvey 2000).

One middle-aged male patient, for example, described a sudden improvement with self-esteem and outlook on life (well beyond the benefits of amplification) as a result

of sharing personal traumatic emotions such as fear, sadness, and loneliness with his audiologist.

“Somehow,” he said, “talking about that with my audiologist was better therapy than with my shrink! I knew my shrink would understand, but having my audiologist understand how I felt—that was special!”

If a patient cries, remember that you are providing a safe environment and all you need to do at that point is just be there.

Consider the recollection of a mother of a deaf child: “During one appointment with my hearing doctor, something she said made me break down in tears. I was so ashamed of myself. She sat there, offered me Kleenex and I could tell she wasn’t angry or looking down on me. She understood! And you know what? She helped me feel better about myself! I’m entitled to cry sometimes!”

Another example is a 41-year old woman who finally decided to get hearing aids (Harvey, 2003). When the audiologist asked her “Why now?” her response was short and to the point.

“I want to be sure to understand everything my dad’s oncologist says,” she said. “I don’t think he’s doing well. We’ve never been close, but I want to try to change that.”

“It’s never too late.” Dr. Smith replied.

Jill nodded her head, and they got to work on testing her hearing. Nothing in the audiologist’s training taught him to say those simple, comforting words of wisdom. But, for Jill, “It’s never too late” echoed in her mind as she made regular visits to her dying father.

## Convey Understanding

Openly strive to understand the unique meaning an individual attributes to hearing loss. An empathic connection is important. Clearly convey that you are invested in making the effort to try, as much as possible, to put yourself in the patient’s position and to learn about their emotional experiences associated with their hearing loss.

The “try to, as much as possible” direction includes three constraints. First, we can never totally empathize with another’s experience, no matter the degree of apparent similarity, even if both individuals have a hearing loss. The second constraint is the importance of maintaining professional boundaries. The third constraint is the limited appointment time.

Using “bounded” open-ended questions (open-ended questions that include some limiting factors), you can elicit a limited narrative of the patient’s emotional world without “opening up a can of worms” and practicing psychotherapy. Some possible questions to consider:

- “In about a minute or two, can you at least give me a snapshot of how you’re feeling?”
- “We only have a few minutes, but would you at least give me a quick sense of what’s going on?”
- “Can you tell me a short story that would illustrate what you expect to happen between you and your husband (or wife), with and without hearing aids?”
- “Would you at least briefly give me an idea of how your hearing loss influences different areas of your life: e.g., its effects on your relationships with others, on your feelings, thoughts, and story about who you are as a person?”

## Elicit Stories

There is a tremendous effect when you invite people to tell the story of their experience. Although some information can be obtained via forms, such as the COSI (Client-Oriented Scale of Improvement), it is important for rapport-building to elicit information face-to-face. The more specific the story is, the better.

It is more poignant for a patient to report that “I was visiting my family in Syracuse and I couldn’t understand what my dear Uncle John was saying” than to report that “I suspected my hearing loss a couple of years ago.”

Sample story-eliciting questions:

- “In the limited time we have together, please tell me about when you or your spouse first suspected you had a hearing loss.”
- “What were you thinking and feeling when you couldn’t understand the conversations at that restaurant?”
- “Would you tell me a personal story about when, where, and with whom you’re most- and least-bothered by hearing loss?”

“How did you” questions are particularly powerful interventions, in that they imply that individuals have their own personal power. As an example, Holly Elliot, a social worker with a hearing loss, said: “Shifting gears is a process by which we choose change. Now that may seem crazy because we sure didn’t ‘choose’ hearing loss. But we can choose how we manage it.”

Sample “How did you” questions:

- “How did you put anxiety, fear, shame, and denial in its place and get the gumption to come to my office to do something about your hearing?”
- “How did you arrive at the feeling that you don’t care what other people think about your hearing aids? How did you arrive at this different way of perceiving this situation: putting your needs first?”

## Facilitate Conversational Pivotal Junctures

Pivotal junctures in conversations typically occupy only a number of seconds. They are junctures during conversations when people have “aha moments”; epiphanies when something shifts and they suddenly “get it.” It is during these junctures that one’s readiness and potential for change are maximized.



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"It's not that my audiologist hadn't explained many times what hearing aids could do for me," John began. "It's just that, for some reason, this time, it clicked!"

A number of complicated phenomena happen during those micro spans of time. In aha moments, people experience what, in Narrative Therapy, is termed katharsis and transport. Katharsis is spelled with a "k" to distinguish it from catharsis, an emotional discharge or abreaction. Katharsis refers to a phenomenon that one experiences in response to being emotionally moved or psychologically transported by powerful life events; to events that strike a chord for us, that we are drawn to, that fire our curiosity (White, 2007).

For example, after an audiologist explained an audiogram to a patient, the patient paused, gazed to the right, and said, "You know, I never thought of it that way. Wow! This is making sense!" Then he nodded his head and looked upward.

According to neurolinguistic programming (NLP), the telltale sign that an individual is processing new information is lateral eye movement—when an individual looks to the side or upward (Bandler and Grinder 1976).

In this pivotal juncture, the patient was psychologically transported to a new emotional place and state, in which he could arrive at an aha, kathartic, moment.

We can create a context in which pivotal moments for change are more likely to occur—and then help to sustain them when they do. Some ways to do this include using a slower conversational pace and lingering in the present moment.

### Use a slower conversational pace.

Showing respect for silence is an important factor. Note that the patient in the previous example first paused, and that the audiologist took care not to interrupt him, waiting for his verbalization. Patients are able to produce pivotal junctures partially due to our efforts to provide space through a slower conversational pace, and to, at times, refrain from interrupting silence. It is important to respect silence; to allow the patient to have a free moment (during the conversation) to process and formulate questions or responses. This practice may not come naturally, given the inherent time pressure of back-to-back appointments.

For many of our older patients, the ability to process rapid speech is diminished. It is important to speak slowly with simple words (not medico-legal jargon), and to present these words clearly with excellent visual cues. Of course, these are not new concepts for audiologists, but these ideas

are worth underscoring—for the effective transfer of information and to help the creation of pivotal junctures.

### Linger in the present moment.

Once the pivotal moment occurs, the longer you can stay with the present moment and explore it, the more pathways to change emerge. The objective here is to authenticate patients' "aha" epiphanies and to increase their "stick-ability" (Duvall and Young, 2009). It is particularly important to acknowledge and reflect back patients' experience, to express curiosity about what they experienced during those pivotal moments. This process often opens up a discussion of what was realized during the moment, and what difference the realization made to the individual's view of the situation.

One patient, for example, remarked, "You know, I never thought of it that way. Wow! This is making sense!"

The audiologist responded: "Something just clicked for you. Catch me up, will you? You just went somewhere and realized some important things."

### Narrative Therapy at Work

As one audiologist put it, "When I started my career, when a patient came in with a question or observation, my first reaction was to 'fix' the problem by manipulating the acoustic characteristics of the hearing aid. It took a while for me to realize the hearing aid isn't always the problem. If we ask a few questions first and get the whole picture, we're usually much more helpful."

When I ask patients how their audiologist appointment went, they respond with variations of "he was very nice," or "she seemed rushed," or "he was curt," or "she really listened." As the saying goes, "They may not remember what you said or did, but they'll remember how you made them feel."

This article offers some conversational prompts that can help you converse with patients effectively, so that they will remember how you made them feel and, therefore, will be more able to collaborate with you and their treatment. **AT**

*Michael A. Harvey, PhD, ABPP, is a clinical psychologist and a member of the consultant faculty at Salus University.*

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"Creating Successful Professional-Patient Relationships," *Audiology Today* (Sept/Oct 2009) by Douglas Beck and Michael Harvey.

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# Ringling Is Not Music to My Ears!

By Jill Meltzer

**WELCOME BACK** to an ongoing article series that challenges the audiologist to identify a diagnosis for a case study based on a listing and explanation of the nonaudiology and audiology test battery. It is important to recognize that a hearing loss or a vestibular issue may be a manifestation of a systemic illness. Being part of the diagnostic and treatment “team” is a crucial role of the audiologist. Securing the definitive diagnosis is rewarding for the audiologist and enhances patient hearing and balance health care, and often, quality of life.

—Paul Pessis, Investigator-in-Chief

**CSI Reference Guide:** Visit [www.audiology.org](http://www.audiology.org) and search keywords “CSI Reference Guide.”

## Case History

A 52-year-old male presented for evaluation of severe intractable tinnitus. He described it as a loud, constant, high-pitched, whirring sound. The tinnitus was perceived in both ears and in the head. He reported decreased hearing, but the tinnitus was the dominant complaint. He also had some imbalance and lightheadedness, especially when leaning forward or bending over. The imbalance generally lasted a few seconds; there was no associated nausea. The tinnitus was having a significant negative impact on his sense of well-being, his ability to sleep, to eat, and to concentrate. He had unintentional and undesired weight loss.

He reported that work had become difficult because of his impaired ability to concentrate; the tinnitus made it difficult to hear clearly. He recently had been treated for cancer of the tonsils with radiation therapy and chemotherapy. Treatment ended approximately two months prior to this evaluation. It is unclear if the hearing loss developed suddenly or occurred over time. He didn't remember any hearing difficulty before the onset of the tinnitus or the cancer treatment.

## Past Medical History

The patient was diagnosed with Type 2 diabetes when he was 10 years old. This turned out to be an incorrect

diagnosis; his diabetes was Type 1. He has been insulin-dependent since the age of 20. Bilateral neuropathy in both feet is present. His tonsil cancer necessitated treatment with chemotherapy. Cisplatin was administered at monthly intervals for a three-month period. He received concurrent radiation therapy (RT). An audiogram was not obtained prior to the implementation of this treatment. He has a history of depression. Current medications include Zyprexa (depression), Mirtazapine (depression), and Humulin (diabetes).

## Physical Examination

The physical examination revealed normal auditory canals. The tympanic membranes were translucent and the middle ears were clear. There was no otorrhea. The rest of the head and neck exam was unremarkable. The head and face had normal contour and symmetry. No masses or lesions were observed. His gaze appeared conjugate in all positions and there was no nystagmus.

## Findings

The audiogram indicated normal auditory thresholds for the frequency range of 250 Hz through 1000 Hz. A sloping moderate loss was present from 1500 Hz through 8000 Hz. The right ear thresholds were poorer than the left from 1500 Hz through 8000 Hz. (FIGURE 1). Tympanograms were indicative of normal middle ear

pressure and function. Ipsilateral and contralateral acoustic reflexes were detected in both ears at 85dB to 95dB. No acoustic reflex decay was noted at 1000 Hz. These findings were consistent with hearing testing performed at another facility. Two months later, the patient returned suspicious of a decrease in hearing. An audiogram was performed and results were unchanged from the previous tests. He returned once again, six months later, concerned that his hearing had deteriorated. The repeat audiogram confirmed that the thresholds were unchanged.

### Additional Testing

Distortion-product otoacoustic emissions (DPOAEs) were absent bilaterally. To address his complaint of imbalance, videonystagmography (VNG) testing was performed. No spontaneous, gaze, or positional nystagmus was noted. Dix-Hallpike maneuvers failed to evoke vertiginous symptoms or nystagmus. The accuracies, latencies, and velocities of horizontal saccade testing were normal and symmetric. Optical tracking and optokinetic tracking also were balanced. Bithermal,

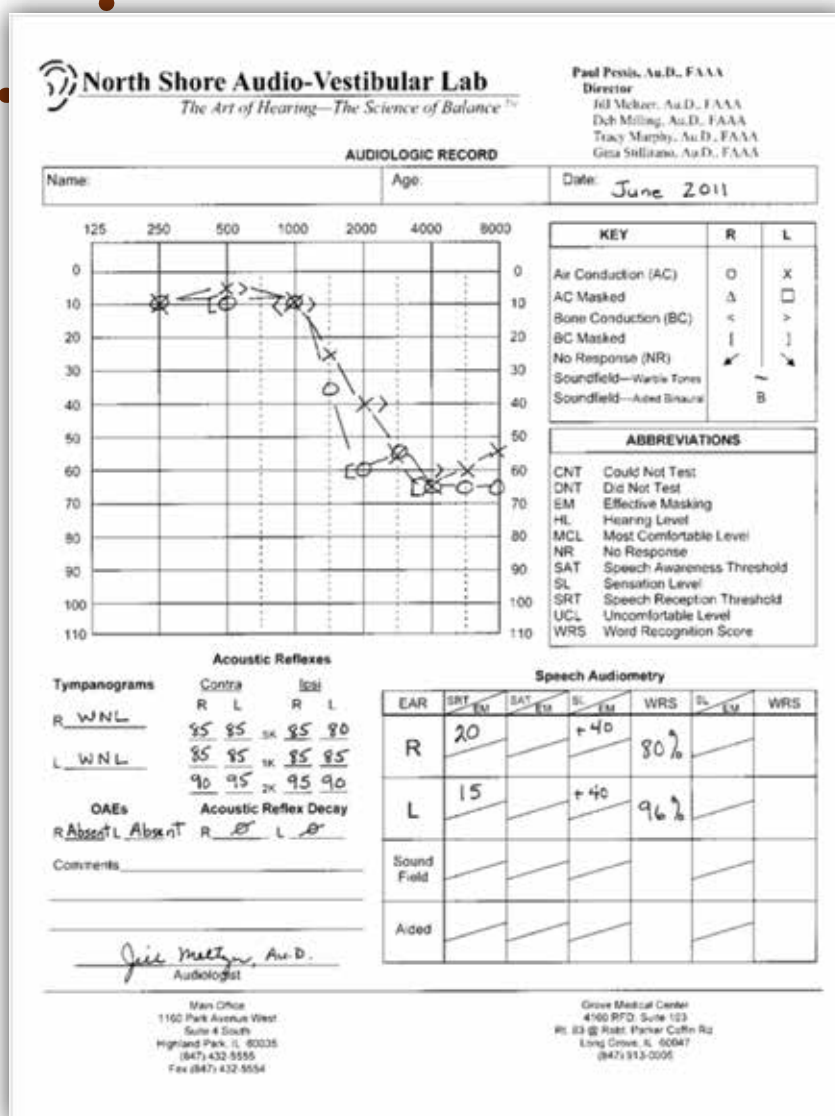


FIGURE 1. Audiogram of a 52-year-old male presenting for evaluation of severe intractable tinnitus.



binaural air caloric irrigations produced normal responses.

### Tinnitus Assessment

Several tinnitus questionnaires were administered, including the Tinnitus Handicap Inventory (THI) and the Tinnitus Reaction Questionnaire (TRQ). Also documented was the percentage of time the patient was aware of the tinnitus and the

percentage of time he was disturbed or annoyed by the tinnitus. He initially reported that he was aware of the tinnitus 100 percent of his waking hours and, whenever he was aware of it, it was problematic.

### Radiographic Studies

Magnetic resonance imaging (MRI) of the brain and the internal auditory canals (IACs), with and without gadolinium, was performed. Report findings were essentially normal.

### Consider the Facts

- Severe tinnitus is the primary complaint
- Bilateral sloping sensory hearing loss, right ear worse than the left
- Normal immittance measures
- Absent DPOAEs
- Normal VNG
- Normal MRI

### Differential Diagnosis

- Tinnitus secondary to hearing loss
- Tinnitus secondary to ototoxicity
- Idiopathic tinnitus and hearing loss
- Hearing loss and tinnitus secondary to radiation therapy
- Hearing loss and tinnitus secondary to ototoxicity
- Hearing loss secondary to tinnitus

### And the Diagnosis Is...

Idiopathic tinnitus and hearing loss. The etiology cannot be stated with certainty, although it seems likely that Cisplatin, a known ototoxic agent, was a factor.

### Management

What the patient is told, and the substance of counseling, can have a tremendous impact on the patient's reaction to tinnitus. The clinician needs to be knowledgeable, empathetic, sympathetic, yet hopeful. Imparting an understanding of the significant negative impact the tinnitus can have on everyday activities and patient well-being is imperative. Any cognitive distortions should be corrected or clarified. For example, some patients may have the impression that the hearing loss is caused by the tinnitus, not considering that the tinnitus occurred because of the hearing loss. In these cases, the perception is, if the tinnitus could just be "turned off," the hearing would improve.

Possible topics for counseling include:

- Hearing loss and the need for amplification
- Hearing aids may, or may not, impact the tinnitus
- The possibility that there is no cure for tinnitus
- Methods for treating tinnitus
- Trying not to focus on the tinnitus
- The tinnitus always may be present to some degree
- Incidence of tinnitus
- What others have found helpful for tinnitus management
- Over-the-counter "medications" purported to treat tinnitus

### Treatment and Results

Following the diagnostic work-up, a significant amount of time was spent

counseling and reviewing the test findings with the patient and his wife. Educating the patient and family about the possible etiologies, natural course, treatment options, and long-term management are helpful in allaying fears that a more sinister disease process is present. An overview of the anatomy and physiology of the auditory system was presented, highlighting the role that some non-auditory structures, such as the limbic system, play in the perception and intrusiveness of tinnitus.

The natural process of habituation to certain stimuli was discussed in detail. Tinnitus can be one such stimulus. A person can choose to focus on, or ignore, any number of sensations. Allowing the tinnitus

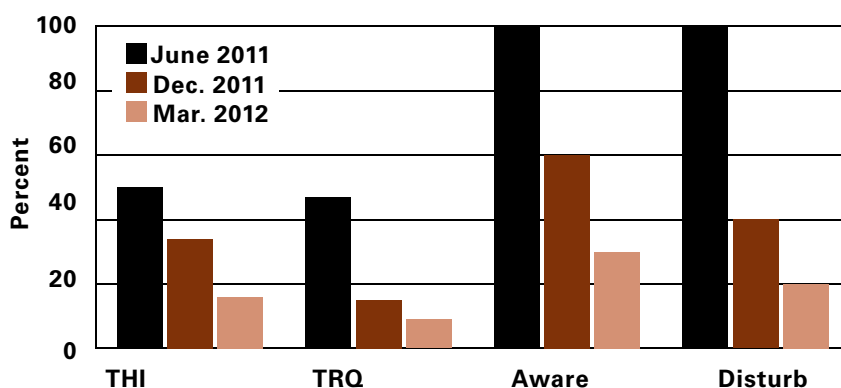


FIGURE 2. Percentage scores for the Tinnitus Handicap Inventory (THI) and Tinnitus Reaction Questionnaire (TRQ), as well as percentage rankings of Awareness of Tinnitus and Disturbance by Tinnitus.



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to “fade into the background” is a form of habituation. A significant component of counseling tinnitus patients involves teaching patients to understand their bodies, their triggers, and how to function with a chronic condition.

Two receiver-in-the-canal (RIC), non-occluding, hearing aids were programmed and demonstrated. The patient became joyfully tearful, said that he could hear his own voice again, and that he finally sounded “normal.” He was sent home wearing the devices for a two-week trial. He was counseled to try to keep music or other pleasant sounds in his environment as distractions to avoid focusing on the tinnitus. He also was given reading material about tinnitus, sound enrichment, habituation, and sleep. Another set of hearing aids with specific tinnitus applications (combination devices) was ordered. After his two-week trial period with the RIC hearing aids, he reported improved hearing, but they did not significantly reduce his tinnitus. Consequently, the combination devices were dispensed on a trial basis. When he returned for his follow-up visit, he reported that he preferred the choices of programs and the tinnitus features (with special value noted in quiet environments where tinnitus awareness is more noticeable).

### Discussion

The patient’s quality of life has improved dramatically. There has been a reduction in the percentage of time he is aware of, and/or disturbed by, the tinnitus. Scores on the THI and TRQ progressively decreased, indicating reduced tinnitus distress (FIGURE 2). Why? He still has the same hearing loss and he still has tinnitus. So, what has changed? The change is the patient’s REACTION to

his tinnitus! The audiologist played a global role in securing a positive patient outcome. The audiologist: performed the diagnostics, provided amplification as a tinnitus combination device, and counseled the patient extensively about tinnitus.

In short, it is rewarding to be a diagnostic detective. “Case” closed until the next issue of AT. 

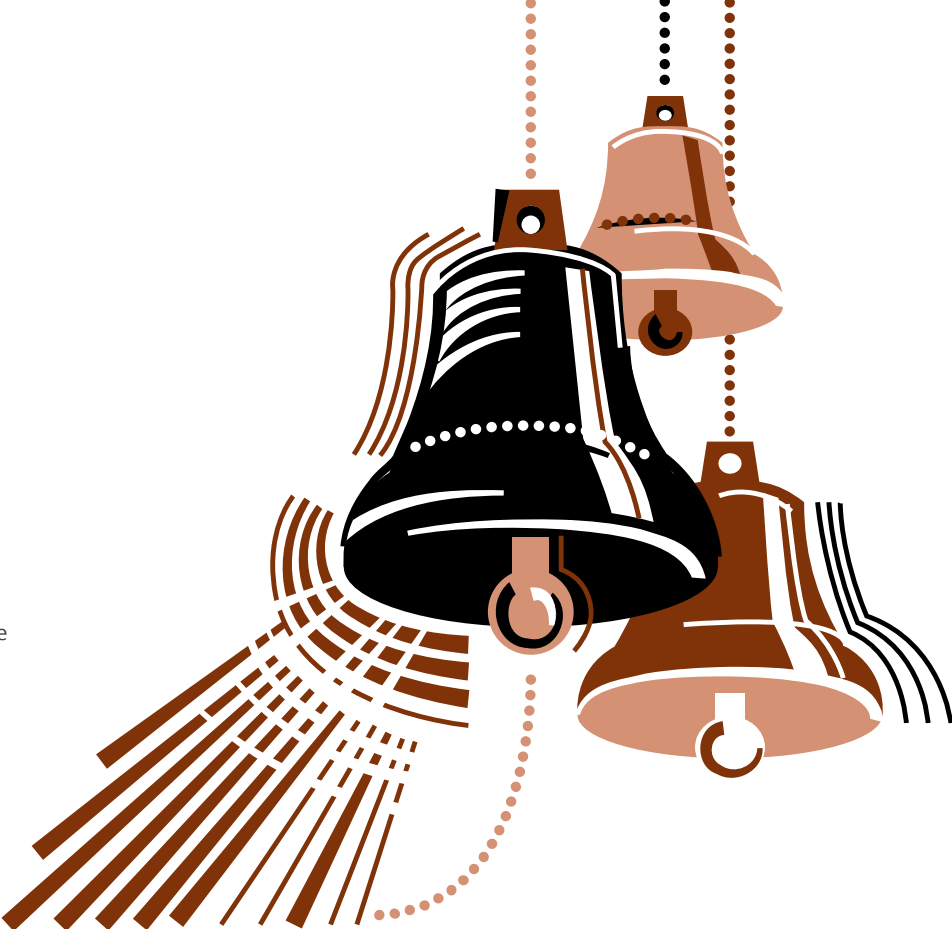
*Jill Meltzer, AuD, is an audiologist at North Shore Audio-Vestibular Lab in Highland Park, IL.*

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### ALSO OF INTEREST



In the News: Tinnitus Perspectives 2012

Visit [www.audiology.org](http://www.audiology.org) and search keyword “tinnitus” or use the QR code and view the article on your mobile device.

# PQRS, A Clinician's Perspective

By Tracy Murphy

**P**QRS is not a common “household” term, but all audiologists should be familiar with this national reporting initiative. Coding and reimbursement issues continue to be at the forefront of our profession, so listen up—this is important!

## So, What Is PQRS?

The Physician Quality Reporting System (PQRS), formerly known as Physician Quality Reporting Initiative (PQRI), is a Medicare reporting system for eligible health-care professionals that promotes reporting of quality information for covered services that are provided to original Medicare Part B fee-for-service beneficiaries (including Railroad Retirement Board and Medicare Secondary Payer). The goal of PQRS is to encourage efficient and high-quality patient care in a movement toward a pay-for-performance reimbursement system. The Centers for Medicare and Medicaid Services

(CMS) has implemented a program comprised of incentive payments and payment reductions to encourage participation in the PQRS program. Though participation for audiologists is optional through December 31, 2012, reporting of quality measures is required beginning in 2013, in order to avoid payment penalties in the future. For example, those professionals who do not meet satisfactory reporting requirements for 2013 will face a 1.5 percent reduction in payment for all Medicare claims filed in 2015. The incentive that can be earned for participating in 2013 and 2014 is a 0.5 percent increase for Medicare payments (note that payment is received the following year).

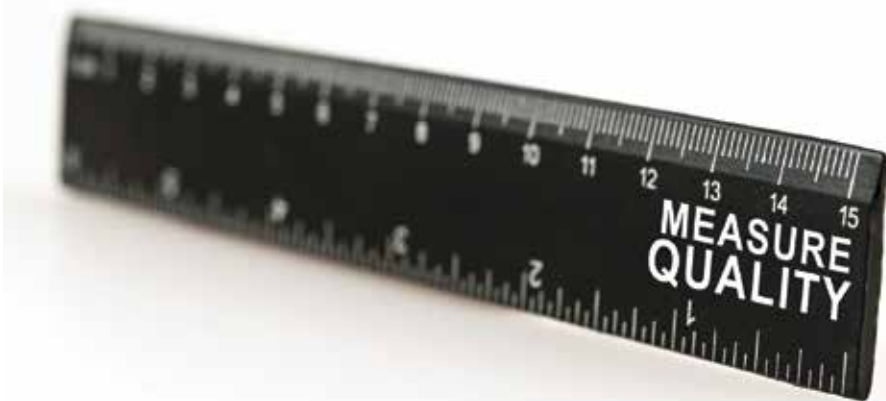
Generally speaking, PQRS works in the following way. The 2012 reporting period has more than 200 Quality Data Codes (QDC) that eligible professionals can report using corresponding CPT II/G codes. These

codes can be reported to CMS in one of three ways:

1. Reporting through qualified electronic health record (EHR),
2. registry reporting, and
3. claims-based reporting.

Claims-based reporting is the most common and cost-effective method of reporting currently used by audiologists. Claims-based reporting requires the addition of CPT II/G code(s) on the HCFA 1500 form for appropriate quality measures that apply to the services provided. For 2012, audiologists must choose a minimum of three individual quality measures and report on those measures for at least 50 percent of eligible encounters during the given reporting period. Individual audiologists do not need to pre-register or sign up to begin participating in PQRS, they simply need to begin to properly report applicable measures under the program.

Reporting specifications for each quality measure contain criteria that detail the patient demographic, the particular procedure performed (CPT and HCPCS code), and possibly an associated diagnostic outcome (ICD-9). In some cases, audiologists may find that the services they provide may preclude them from reporting on three eligible quality





measures. In such cases, CMS will use a validation process instead of the three-measure requirement to determine if the provider has met the criteria for satisfactory reporting. Note that reporting requirements are likely to change each reporting year. Guidelines for 2013 reporting will be finalized in November 2012.

Learning about PQRS can be overwhelming, and if you aren't already reporting, you're probably thinking, "Where do I start?" Comprehensive resources for PQRS reporting can be found on the Academy Web site.

The Academy has a Web page dedicated to PQRS ([www.audiology.org/practice/PQRI/Pages/default.aspx](http://www.audiology.org/practice/PQRI/Pages/default.aspx)), where audiologists will find up-to-date information on reporting measures that are potentially applicable for audiologists, as well as worksheets, guides, and other information that will provide audiologists with up-to-date information and offer step-by-step instructions for reporting quality measures. For the official, most current guidance, visit the CMS PQRS Web page ([www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html)).

Researching the most appropriate measures for your particular practice is critical. It will also be important to work closely with your billing staff as you research available measures and make choices. Consider reporting

on eligible measures that apply to services you provide most often, or those that are integral to the way you practice. When choosing measures for our office in 2012, we made the following choices<sup>1</sup>:

### **Measure #190 Referral for Otologic Evaluation for Patients with a History of Sudden or Rapidly Progressive Hearing Loss**

The specification for this measure includes reporting on all patients who may exhibit a sudden or rapidly progressing hearing loss and were referred to a physician (preferably a physician with training in disorders of the ear) for an otologic evaluation. This measure was a clear choice for our practice because referral for a sudden or rapidly progressing hearing loss is a best practice, and a logical and important standard of care to promote.

### **Measure #130 Documentation of Current Medications in the Medical Record**


Part of the thorough case history includes medications that contribute to the demise of the auditory system, such as ototoxic agents, those that exacerbate tinnitus, and medications that can affect the function of the vestibular system, to name a few. Medication history gives the audiologist insight into the general health of the patient and aids in the diagnostic process.

### **Measure #124 Health Information Technology (HIT): Adoption/Use of Electronic Health Records (EHR)**

There is a very good possibility that this measure will be retired for 2013, and it should be noted that this

measure has very specific guidelines regarding use of an EHR. The current CMS specifications for qualified EHR may be beyond the scope of many audiology practices. Currently, audiologists are not required to possess a comprehensive EHR system. This measure, however, affords audiologists who are practicing in a setting such as mine, where a comprehensive EHR system is already in place, the opportunity to report this measure under PQRS.

It is important to stay on top of current measures and their reporting guidelines. As you approach the beginning of the new reporting period on January 1, 2013, check the CMS and Academy Web sites for the measures that are available and appropriate for your practice. Think outside the box—as you can see, the measures you report don't have to be specific to audiology procedures.

Use the callout box links to learn about PQRS and how to begin reporting. Specific examples of how to report, including the codes to use, can be found on the Academy's PQRS Web page. Good luck! 

*Tracy Murphy, AuD, is an audiologist at North Shore Audio-Vestibular Lab in Highland Park, IL. She is currently a member of the Coding and Reimbursement Committee for the American Academy of Audiology.*

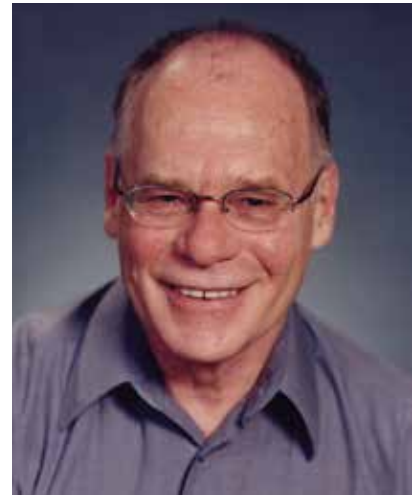
#### **Note**

1. Each year the eligible measures may change so all of these measures may not be available for 2013.

Academy PQRS Web page:  
[www.audiology.org/practice/PQRI/Pages/default.aspx](http://www.audiology.org/practice/PQRI/Pages/default.aspx)

CMS PQRS Web page:  
[www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html)

# 2013 Marion Downs Lecture to Feature World-Renowned Expert in Pediatric Hearing-Aid Fitting



**T**he American Academy of Audiology Foundation is pleased to announce that Richard C. Seewald, PhD, will present the 2013 Marion Downs Lecture in Pediatric Audiology. Dr. Seewald's presentation, "A Retrospective on the Development of a Science-Based Approach to Pediatric Hearing-Aid Fitting—What a Difference 40 Years Can Make!" will be offered on Friday, April 5, at AudiologyNOW! in Anaheim, CA. The lecture also will be available to audiologists, at no charge, on eAudiology, in both live and on-demand Web formats.

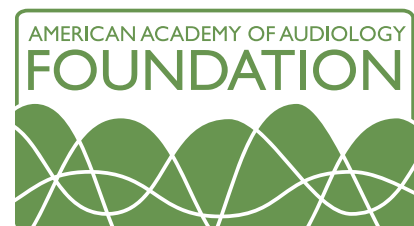
Dr. Seewald is a distinguished university professor emeritus and research associate at the National Centre for Audiology, and in the School of Communication Sciences and Disorders, Faculty of Health Sciences at the University of Western Ontario. He is known internationally for his work in developing the Desired Sensation Level (DSL) Method for pediatric hearing-instrument fitting. The first part of his presentation will discuss the motivation for, and evolutionary process in, developing the DSL Method for pediatric hearing-aid fitting.

This method originally was developed to provide clinicians with a systematic, science-based approach to pediatric hearing-instrument fitting that ensures audibility of amplified speech. The DSL Method accounts for factors that are uniquely associated with the provision of amplification to infants and young children who have hearing loss. Attendees will hear Dr. Seewald summarize protocols that have been developed in the Child Amplification Laboratory (National Centre for Audiology at the University of Western Ontario) for innovative assessment, electroacoustic selection, and verification related to fitting amplification to infants. In addition, he will illustrate research findings that support the application of these clinical protocols. The second part of the presentation will provide a summary status report on pediatric hearing-aid fitting, based on the results of several recent studies that examined relationships among several hearing-aid fitting variables and outcomes in children who use amplification.

Richard Danielson, PhD, chair of the Foundation Board, expressed his enthusiasm about Dr. Seewald's

featured session at the Anaheim conference. "As one of audiology's most eminent experts in pediatric hearing amplification, Dr. Seewald is a perfect selection to be this year's Marion Downs Lecturer," Danielson said. "His presentation will chronicle the development of current evidence-based hearing-aid fitting protocols used for children, as well as encapsulate recent research findings that offer a valuable prospective look ahead."

For the past 35 years, Dr. Seewald's work has focused on issues that pertain to the selection and fitting of amplification and early aural habilitation for infants and young children who have hearing loss. Dr. Seewald has given invited lectures in Europe, Canada, the United States, Australia, Argentina, New Zealand, China, and Brazil. He is the editor (along with Dr. Anne Marie Tharpe) of



*The Comprehensive Handbook of Pediatric Audiology*, published in 2010.

Dr. Seewald has received numerous awards for his work with children, including an appointment as the Canada Research Chair in Childhood Hearing; the Honors of the Canadian Speech, Language and Hearing Association, and the Canadian Academy of Audiology; an Honorary Doctorate of Laws from Dalhousie University in Halifax, Nova Scotia; and the prestigious International Award in Hearing from the American Academy of Audiology; he received this honor for his pioneering work in the field of pediatric audiology.

The annual Marion Downs Lecture in Pediatric Audiology is supported by the AAA Foundation, with a grant from The Oticon Foundation. The AAA Foundation is honored to feature Dr. Seewald's presentation at AudiologyNOW! in 2013, and is pleased that he will join a growing list of distinguished Marion Downs speakers. Since 2005, eight presentations have been given on a variety of subjects in pediatric audiology, including genetics, implantation, speech optimization, and vestibular disorders.

"We are pleased that The Oticon Foundation will again fund the

Marion Downs Lecture Series to provide hearing care professionals with timely access to the latest developments in pediatric audiology," said Oticon, Inc. President Peer Lauritsen. "Through educational opportunities such as this, we seek to better equip pediatric practitioners to deliver child-friendly hearing care that will empower children with hearing loss to communicate freely, interact naturally and participate actively in life."

For more information on the 2013 Marion Downs Lecture in Pediatric Audiology, visit [www.audiologyfoundation.org](http://www.audiologyfoundation.org).

## AAA Foundation Announces New Board Trustees

The Foundation warmly welcomes Karen Glay, Gene McHugh, and Angela Shoup, who joined the American Academy of Audiology Foundation Board for three-year terms beginning October 1, 2012. In addition, Therese Walden commenced a one-year term on July 1, 2012, as AAAF liaison to the Academy Board. We are pleased to introduce you to this talented group of individuals who bring a commitment to philanthropy, and their unique perspectives, experiences, and leadership to the AAAF.

**Karen Glay, AuD**, is a private practice audiologist in Lake Barrington, Illinois, and owner of Suburban Hearing Services since 1989. Her practice focuses on diagnostics and dispensing for both adult and pediatric patients. She received her BS in communication disorders from Marquette University, an MA in audiology from Northern Illinois University, and her AuD from the George S. Osborne College of

Audiology at Salus University. She is a founding member and past president of the Illinois Academy of Audiology, and she remains active on several committees. She has also served as chair of the Academy's State Leaders Network (State Leaders Subcommittee) and as a member of the Academy's Government Relations Committee.

**Eugene (Gene) McHugh, EdD**, has been in solo private practice and has been the owner of Colorado Springs Audiology, providing audiology, hearing-aid dispensing, and industrial audiology services since 1985. His practice is located in a professional building he owns and shares with his wife, Dr. Mary Purinsh, a dentist. He received his MA in audiology in 1976 from the University of Northern Colorado (UNC) and EdD in special education with emphasis in audiology from UNC in 1985. Between degrees, he worked for Siemens (1976–1980) and Westone Labs (1980–1982). He was a charter board

member of the Colorado Academy of Audiology, and has participated in a variety of committee positions at the state level. He enjoys singing and musical arranging with various groups, from classical to rock and roll, including the American Academy of Audiology Chorus.

**Angela Shoup, PhD**, is an associate professor in the Department of Otolaryngology—Head and Neck Surgery at the University of Texas Southwestern Medical Center, where she also serves as director of the Division of Communicative and Vestibular Disorders. Dr. Shoup received her PhD in human development and communication disorders from the University of Texas at Dallas in 1994. She has published articles and textbook chapters on audiological procedures and implantable hearing aids. She has been an invited speaker, and presented research findings at national and international meetings. She served

as president of the Texas Academy of Audiology and chair of the Ethical Practices Committee for the American Academy of Audiology. Her research interests include implementation of universal newborn hearing screening programs, developmental issues in audition, auditory electrophysiology, diagnostic assessment for auditory and vestibular disorders, hearing aids, and cochlear implants. Dr. Shoup and her husband, Brett, have one daughter, Zodie.

**Therese C. Walden, AuD**, is a research audiologist at the Audiology and Speech Center, Walter Reed National Military Medical Center, Bethesda, Maryland. She is the immediate past

president of the American Academy of Audiology and also served as a member-at-large for the board in 2005–2008. She has served as a member of the Academy's Government Relations Committee; the Ethical Practices Committee (Board); and several AudiologyNOW! Program Committees, serving as the 20th Anniversary Chair in 2008. She also served as a member of the Board of Governors for the American Board of Audiology. She earned her BS (1983) in communication sciences and disorders and her MS (1984) in audiology from Towson State University, and her AuD through Central Michigan University (2001). Her clinical/research interests are in the areas

of adult and geriatric diagnostics, amplification, evidence-based practice, and treatment efficacy.

While we welcome new faces, we also say goodbye to familiar ones. The Foundation expresses its utmost appreciation to Judith Blumsack, PhD; Pamela Keenan, AuD; and Patricia Kricos, PhD, who finished their board service in 2012. We thank them for their dedicated service to the Foundation and audiology philanthropy.

If you have an interest in serving on the Foundation Board of Trustees, please contact Kathleen Devlin Culver at [kculver@audiology.org](mailto:kculver@audiology.org).

## Seven Outstanding Students Awarded AAAF Scholarships

**A**fter receiving a record number of applications, the Foundation's Educational Grants Review Committee awarded the following individuals academic scholarships based on exceptional resumes, personal statements, and letters of recommendation. Congratulations!

### Empowering People Scholarships (\$5,000)

Awarded to students who show exceptional promise as clinical audiologists

- Hilary Davis, Vanderbilt University
- Diana Guercio, University of Florida
- Star Lange-Richey, University of Akron
- Caitlin Sapp, University of Iowa
- Sarah Weber, Idaho State University

### Roger Ruth Memorial Scholarship (\$1,000)

Awarded to a student who demonstrates outstanding clinical skills and who shows promise in clinical research and service to the hearing health community

- Nicole Corbin, Arizona State University

### Sadanand Singh Memorial Scholarship (\$1,000)

Awarded to a minority or international student who shows exceptional promise in audiology research

- Alexandra Parbery-Clark, Northwestern University

## Auction 4 Audiology: Anaheim Preview Opens November 26

**W**ant to get in on some auction action before the large-scale Auction 4 Audiology held during AudiologyNOW! 2013? You're in luck! This mini-auction is focused on the best that Anaheim has to offer. From November 26 to December 10, score big on dining and entertainment you can use while at AudiologyNOW! Why wait until next spring to plan your free time when you can find great bargains now? Or grab a great holiday gift for your Anaheim-area family, friends, and colleagues. Best of all, proceeds benefit the American Academy of Audiology Foundation! To see all the items up for bid, visit [www.biddingforgood.com/auction4audiology](http://www.biddingforgood.com/auction4audiology). 🎉



# SAA Partnerships with the American Academy of Audiology A4 Affiliates

By Ally Costlow, Rud Nast, Jacob Valla, and Cory Workman

**T**he American Academy of Audiology (AAA) was established in 1988 as an independent, national organization, run by and for audiologists. Since that time, the field of audiology has moved toward an increased level of autonomy.

The AAA has entered upon memoranda of understanding (MOUs) with four of the Academy's affiliates: The AAA Foundation (AAAF), the Student Academy of Audiology (SAA), the American Board of Audiology (ABA), and the Accreditation Commission for Audiology Education (ACAE). These partnerships, known as the "A4," are instrumental in promoting autonomy for audiology.

The student affiliate of the AAA, the SAA, was established as "a direct connection between students and their future professional home and discipline" to serve as a collective voice for students. The SAA aims to cultivate healthy working relationships with the A4 to foster growth for our field as a whole.

Both AAA and SAA initiatives are supported by the philanthropic branch of the AAA, the AAA Foundation (AAAF), which provides

resources for the breadth and depth of interests of audiologists, "in research, education, and public awareness in audiology and hearing science." The SAA Fundraising Committee works closely with the Foundation to provide opportunities for students to volunteer their time and resources.

## Fundraising and Awards

In 2012, student fundraising events, such as Cheers for Ears, will enable the Foundation and the SAA to offer more scholarships and grants than ever before. Last year, four SAA chapters (Auburn University, University of Pittsburgh, University of Washington, and Utah State University) were awarded Special Olympics Health Hearing (SOHH) chapter grants to travel to their state Special Olympics events.

Looking forward, the SAA and AAAF will award the SAA Individual Student Scholarship, as well as chapter grants for the development and implementation of educational, public outreach, humanitarian, and other noteworthy programs beginning in 2013. To learn more about these opportunities, visit <http://www.audiologyfoundation.org/education/education.html>.

## Standardization and Accreditation

SAA will partner with the Accreditation Commission for

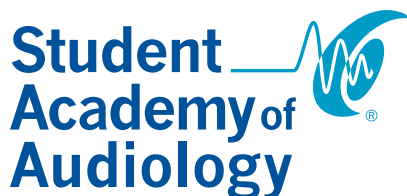
Audiology Education (ACAE), which recently earned recognition from the Council for Higher Education Accreditation. The primary goal of the ACAE is to provide standardization of AuD program requirements while maintaining a rigorous accreditation process that ensures graduates of accredited programs are prepared for the highest caliber clinical practice, at the same time addressing the diverse and emerging needs of audiology students and professionals. To apply for accreditation, an AuD program must demonstrate criteria such as legal authorization to confer the AuD degree, and having an appointed program director in place.

Four audiology programs have earned accreditation: Washington University in St. Louis, the University of North Carolina at Chapel Hill, Central Michigan University, and Nova Southeastern University.

This year, the SAA will team up with the ACAE to create an interactive network for students to learn more about the accreditation process for audiology education. One way for students to learn more about this partnership and the accreditation process is to "Like" the new ACAE Facebook page.

## Specialty Certifications

Beyond graduate-level training, the SAA will work with the American Board of Audiology (ABA), which promotes universally accepted




professional and ethical practice standards for audiologists. As early as 2000, the ABA discussed creating specialty certifications, with the goal of promoting better patient outcomes. Currently, the ABA offers certification in cochlear implants and pediatric audiology. Pediatric certification covers a spectrum of topics including pertinent laws and regulation, child development, and communication technology. Cochlear implant certification requires expertise in areas ranging from the Deaf culture to auditory neuroscience.

In 2012 at AudiologyNOW!, 252 SAA members met with 92 ABA-certified audiologists to learn about the merits of ABA certification at the ABA Meet and Greet luncheon. The ABA plans to host another Meet and Greet at the 2013 AudiologyNOW! in Anaheim, CA.

## Professional Development

SAA's interdisciplinary work with A4 partners will be a key factor in promoting the best interests of students and the profession as a whole. SAA will work with the A4 affiliates to create a seamless transition for SAA members in their path to becoming audiologists.

The SAA will work with the ACAE to strengthen AuD programs to better serve current students, future audiologists, and the populations that we serve. SAA's work with the ABA will help guide students and new

audiologists in navigating their early career to create a solid foundation for long-term success. Certification will more exactly define our scope of practice, as well as emphasize the variety of patients, needs, and interests that audiologists may be qualified to serve. SAA's work with the Foundation will help connect students with resources to support research, education, and public awareness of audiology and promote the value of audiology philanthropy. Overall, the SAA hopes to cultivate mutually beneficial relationships with each of the A4 affiliates to strengthen the foundation of a healthy future for audiology. 

*Ally Costlow is a member of the SAA Board of Directors and a third-year AuD student at the University of Maryland; Rud Nast is vice president of the SAA Board of Directors and a second-year AuD student at the University of Florida; Jacob Valla is a member of the SAA Board of Directors and a third-year AuD student at University of Buffalo; and Cory Workman is a member of the SAA Board of Directors and a third-year AuD student at Idaho State University.*

## New Members of the Student Academy of Audiology

Jennifer Baqar  
Michael Blackburn  
Maggie Clements  
Chelsea Cole  
Starla Filippelli  
Stephanie Fischer  
Emily Fustos  
Stephanie Habura  
Ryan Hill  
Jourdan Holder  
Chris Jeffries  
Brent Joe  
Janelle Kelley  
Diana Kloiber  
Mallory McCart  
Efoe Nyatepe-Coo  
Erika Ortiz  
Jaclyn Paisley  
Wyatt Rasmussen  
Lydia Rogers  
Alex St. Pierre  
Laura Steinmetz  
Courtney Tyrrell  
Mitch Wangsgard

## ALSO OF INTEREST



Learn more about the Student Academy of Audiology online... chapter updates, advisors corner, and the latest activities and events.

Visit [www.studentacademyofaudiology.org](http://www.studentacademyofaudiology.org) or use the QR code and view the updates on your mobile device.

# Yes, Virginia, There Is Such a Thing as a Pediatric Audiologist

By Torryn P. Brazell

**DEAR ABA,**

**I am a pediatric audiologist and 38 years old. A few of my colleagues say there is no such a thing as a “pediatric audiologist.” Please tell me the truth. Are there pediatric audiologists?**

**Sincerely,  
Virginia**

---

**DEAR VIRGINIA,**

**Your skeptical colleagues are wrong. There are pediatric audiologists. They exist as certainly as tympanometry and pink hearing aids and Mr. Potato Head exist.**

**Kids are not small adults. Alas! how dreary the world would be if there were no pediatric audiologists.**

**Sincerely,  
The ABA**

\* With apologies to newsman Francis Pharcellus Church, who answered eight-year-old Virginia O'Hanlon's letter to the editor asking if there really was a Santa Clause, New York Sun, September 21, 1897.

## The Commitment of ABA Pediatric Audiologists

Over the past 18 months, the ABA certified 44 pediatric audiologists in California, Colorado, Florida, Illinois, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, South Carolina, and Puerto Rico. Sixteen of these audiologists dedicated a weekend in September to their profession by participating in the ABA Inaugural Eastern Pediatric Audiology Specialty Certification (PASC) Conclave. The conclave was an intensive two-day meeting of certified pediatric audiology thought leaders who completed in-depth work on future PASC examinations.

The conclave was facilitated by Human Resources Research Organization (HumRRO), a company that supports a number of certification and licensure programs and serves as the ABA's primary testing contractor in the design, development, implementation, and maintenance of the PASC examination. Once the pediatric audiology subject matter experts (SMEs) were trained in standards-setting, they wrote new pediatric audiology examination questions, reviewed questions that had been beta-tested on previous exams, explored fine points of exam answers, and used the modified-Angoff technique, a statistical method, to score each exam question. In their spare time, they completed a literature review of PASC study materials.



Here are some comments from attendees who participated in the conclave:

“This has been an amazing process. Before the conclave, I had no idea how much thought, effort, and analysis goes into formulating every question on the PASC exam.”

“The PASC is a tangible recognition of our qualification pediatric audiologists and I’m very proud to have attained this certification. My hope is that pediatric audiologists embrace the PASC and continue to look at it as affirmation of higher knowledge.”  
—Barb Morris, AuD, Bay State Health

“Attending the conclave was challenging and interesting, and it reassured me of the validity of the whole pediatric audiology certification process.”  
—Virginia Corley, PhD, Sumter Hearing Associates

Participating in this PASC conclave really affirmed my commitment to the field of pediatric audiology. Most importantly, it provided a venue for thought leaders to bring their respective-setting experience to create a refined and more sensitive PASC evaluation as we strive to change the current paradigm of pediatric audiology.”  
—Arlene Balestra-Marko, AuD, Hear 2 Learn

“Having the PASC certification is helping distinguish my facility as a resource in our community for pediatric patients.”  
—Amy Catanzaro, MA, Clarke Schools for the Deaf

“Rigorous...mentally stimulating...challenging old beliefs and habits. Lots of fun, lots of brainpower at the conclave. All for a very important, relevant, and meaningful goal—the PASC.”  
—Alison Grimes, AuD, UCLA Medical Center

“The conclave was a great learning experience. I think I learned as much from interacting with other PASC certificants as I did in preparing for the exam initially.”

“Having PASC has provided opportunities to challenge my knowledge, has offered me an opportunity to learn, and apply this knowledge to new skills development.”  
—Gail Whitelaw, PhD, The Ohio State University

“PASC is for both pediatric and educational audiologists. The PASC test development follows a rigorous psychometric process that makes every effort to ensure it distinguishes those audiologists who have special expertise from those who do not.”  
—Cheryl Johnson, EdD, The ADEvantage/University of Colorado, Boulder

“Kids are not small adults. With the PASC, parents know I have been evaluated by my peers and shown to have special knowledge in pediatric management in audiology.”  
—Darcia Dierking, AuD, Ann & Robert H. Lurie Children’s Hospital of Chicago

*Torryn P. Brazell, CMP, CAE, is the managing director of the American Board of Audiology.*





# Education— Excellence Can't Wait!

By Doris Gordon

**E**ducation is the lifeblood of a profession and, at its highest level, must reflect the best scholarship and practice of that profession. Audiology, now at a doctoral level, must embrace the rigors of excellence and strive regularly to maintain and improve upon them. Thomas Friedman, the New York Times journalist, recently discussed the value and importance of education in numerous op-ed articles. In one, "Average is Over, Part II," (*New York Times*, August 8, 2012), he writes about an interesting trend among CEOs—that "for more and more jobs, the average is over." He points out that, because of our access to people around the globe, there is "cheaper and easier access to above-average software, automation, robotics, cheap labor, and cheap genius." Thus, doing a job in an average way will no longer be sufficient.

The lesson here is that the job of the future, yes, the audiology job, "requires more and better education to get it, hold it, and advance in it."

We are all aware of the scientific advancements that have been made in universities and the research and development

departments of recognized hearing industries. This compels us to realize that audiologists must be educated at a continually evolving level, just to keep pace. If commitment to—and excellence in—all audiology programs existed, the competent graduate would readily be able to dialogue meaningfully with scientists about what the consumer needs. This intellectual and practical professional relationship would be a powerful means of enhancing the profession's reputation within the public's mind.

The Accreditation Commission for Audiology Education (ACAE) is committed to ensuring that excellence is achieved in the academic setting through its rigorous requirement of compliance with its educational standards. The ACAE also seeks to begin regular conversations on the subject, and started the ball rolling at AudiologyNOW! in Boston this past spring. Four program directors participated in a panel presentation titled, "Excellence in Education." Jerry Church, Central Michigan University, Mt. Pleasant, MI; Erica Friedland, Nova Southeastern University, Ft. Lauderdale, FL; Martha Mundy, University of North Carolina, Chapel Hill, NC; and Maureen Valente, Washington University, St. Louis, MO. Each presenter responded to questions about excellence in audiology programs. Lisa Hunter, chair of ACAE, moderated the panel and

Sarah Neumann, chair of the 2012 SAA Education Committee, posed the questions.

Below are results from the presentation for your review. ACAE will be holding more forums/presentations/seminars on this subject, and looks forward to engaging in the near future with the many stakeholders concerned about excellence.

## Question #1—Excellence in Education

What is "excellence in education," and what is your vision of excellence for future generations?

### Overall Response

To pursue life-long learning, and to master the highest level of didactic and clinical performance in audiology.

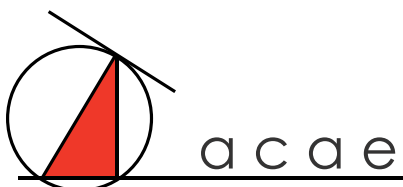
## Question #2—Didactic Teaching

What are the best quality indicators for effective didactic coursework, and what are the barriers?

### Overall Response

Quality Indicators

- Dynamic curriculum
- Responsiveness to new science and technology
- Advancing theory to practice
- Assuming responsibility for excellence in education



## Barriers

- Spoon-feeding and cookbook curriculum

### Question #3—Clinical Learning

Are students prepared to problem-solve the variety of clinical situations they encounter in their clinical careers?

#### Overall Response

Only if clinical preparation in a variety of settings:

- Demands effective preceptors who demonstrate/teach master skills
- Uses more simulated experiences
- Uses problem-solving methods in teaching
- Is presented in conjunction with didactic teaching

### Question #4—Student Preparation and Diversity

What are some ideas for ensuring a balanced, diverse, and well-prepared applicant pool?

#### Overall Response

- Recruit students from diverse backgrounds
- Enlist Academy assistance to recruit balanced, diverse, and well-prepared applicant pool
- Look for students with background in science

### Question #5—Research and Evidence-based Knowledge

What is an appropriate goal for research requirements? Participation in research projects, or capstone projects? Knowledge to evaluate research?

#### Overall Response

- Know fundamentals of research, enabling one to read literature, and critically evaluate concepts related to evidence-based practice
- Require capstone project or, if applicable, dissertation

### Question #6—Leadership

What is the role of leadership in AuD student development, and how can that be fostered?

#### Overall Response

There are several roles:

- Create effective opportunities for leadership in classes or via student organizations (such as Student Academy of Audiology)
- Leadership with a lowercase “l” can provide students with many effective opportunities

### Question #7—Challenges and Solutions

What are the greatest challenges to developing AuD programs that have high standards and facilitate quality programs?

#### Overall Response

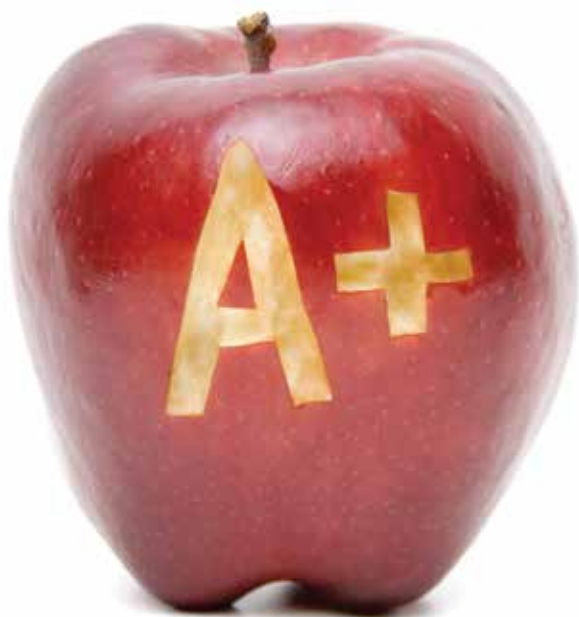
- Tendency to rest on one's laurels
- Lack of initiative and commitment to developing true doctoral-level programs (not modified master's degrees)

### Question #8—Challenges and Solutions

What can students do to improve the quality of AuD programs? To what degree is variation among programs acceptable?

#### Overall Response

- Students should be integral to the evaluation and program-planning at universities
- Variation is important as long as competencies are achieved <sup>AT</sup>



*Doris Gordon is the executive director of the Accreditation Commission for Audiology Education (ACAE).*

# Lame Duck Session Presents Opportunities for Legislative Success

By Melissa Sinden

**T**he time period in which Congress returns to session following the November elections is referred to as a “lame duck” session. The term, which was originally applied to bankrupt businessmen in 18th century Britain, denotes the time post-election that the current Congress meets before the term of the newly elected Congress begins. These few weeks afford one final opportunity for Congress to debate matters of importance and address any programs that may be expiring.

## Medicare Reimbursement

One example of an expiring initiative is the short-term fix passed by Congress to avert cuts to the Medicare Physician Fee Schedule. For the past few years, legislation has been approved that temporarily averts cuts to the fee schedule that occur as a result of the Sustainable Growth Rate (SGR). The SGR was enacted by the Balanced Budget Act of 1997 as a means to contain costs within the Medicare system. The formula, however, is antiquated and flawed in its nature, and, without congressional intervention, typically results in unsustainable cuts to Medicare reimbursement. Last year, Congress froze the Medicare Physician Fee Schedule at its current levels through December 31, 2012. If Congress does not again extend the fix, or develop a more permanent

solution to the SGR, all Medicare providers will face a greater than 27 percent decrease in reimbursement for Medicare services across the board, beginning January 1, 2013.

Visit the Academy’s Legislative Action Center (<http://capwiz.com/audiology/home/>) to send an editable form letter to your representatives asking Congress to avert cuts to Medicare reimbursement.

## Direct Access to Audiology Services

Other initiatives that members of Congress could choose to address will be determined in part by issues important to their constituents. For that reason, it is critical for lawmakers to hear from audiologists in the coming weeks. Even if you have already contacted your member of Congress this session, take a moment to visit the Academy’s Legislative Action Center (<http://capwiz.com/audiology/home/>), and send an editable form letter to your senators and representative asking them to support direct access, and describe how it would impact you and your patients. Ask your colleagues, friends, family, and patients to do the same (a consumer-focused letter is available at [www.howsyourhearing.org](http://www.howsyourhearing.org)). As Congress examines all of the pending legislative initiatives that remain for this session, it will be those that are the most important to the greatest number of their

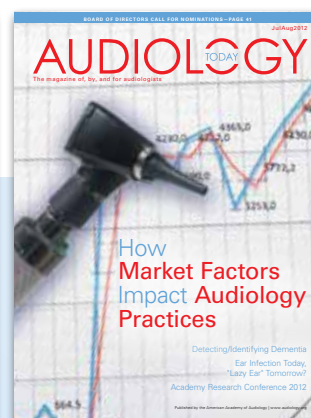
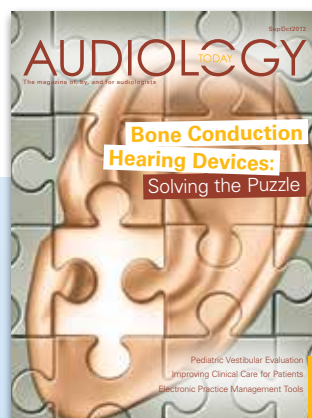
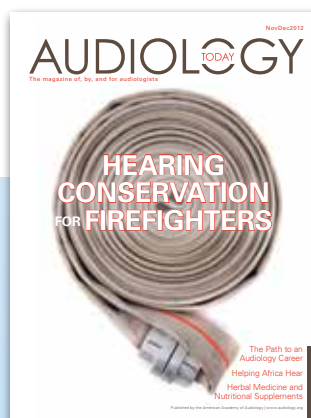
constituents that they will choose to address. They need to hear from you to make that determination.

The Student Academy of Audiology (SAA) will be conducting another Advocacy Challenge among the SAA chapters during the months of November and December. Various point levels will be awarded for contacts made through the Academy’s Legislative Action Center, for meeting with congressional offices, and for making contributions to the PAC. The winning chapter will be announced at the Student Advocacy Summit at AudiologyNOW! 2013. Consider following the SAA’s lead by challenging your colleagues to identify five people and ask them to contact their members of Congress about direct access. Also, consider contributing to the American Academy of Audiology, Inc. Political Action Committee (PAC). PAC dollars are used to support candidates who serve as champions for audiology on Capitol Hill. Every contribution can make a difference, as Jennifer Shinn, PhD, notes in her “Make a Pact with the PAC” article on pages 12–13.

The upcoming weeks are certain to be busy ones in our nation’s capital and you can influence the legislative agenda to help ensure the voice of audiology is heard! 🗣️

*Melissa Sinden is the senior director of government relations for the American Academy of Audiology.*

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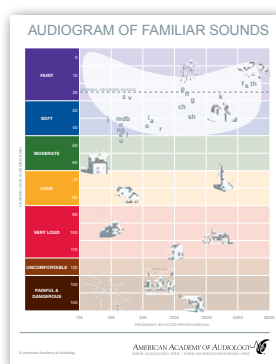


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# JFLAC 2012: Continuing a Legacy of Action

“JFLAC 2012 was an amazing opportunity to grow and learn as an audiologist faculty member. I am so thankful for the Academy's time and great efforts to put this wonderful conference together. I will certainly be doing more for my profession from this point forward because this conference was truly an 'eye opener' for me.”

The James Jerger Future Leaders of Audiology Conference (JFLAC) 2012 took place from September 13–15 at the Reston, VA, office of the American Academy of Audiology. Eighteen mid-career audiologists were selected as attendees by the JFLAC committee, using a competitive peer-review process that included five essays on contemporary issues and two letters of reference.

On Thursday, September 13, the program started off with a “meet and greet” luncheon attended by “JFLACers,” Academy leadership, senior staff, and program supporters. After a warm welcome from Therese Walden, JFLAC program co-chair, Siemens Hearing Instruments (JFLAC Platinum Underwriter), and The Oticon Foundation (JFLAC Silver

Underwriter) were recognized for their generous contributions to the AAA Foundation that funded the conference.

Following the luncheon, Academy President Deb Carlson initiated a video call Q&A with the Academy's first president and founder, Dr. James Jerger. The Academy's Executive Director, Cheryl Kreider Carey, then introduced the attendees to the operational side of the Academy with an overview of the responsibilities and duties of the respective departments at the Academy's national office.

After a brief tour of the headquarters, JFLAC co-chair, Carmen Brewer, introduced the JFLACers to their leadership project during a working dinner. The leadership project experience started before the

conference; attendees were assigned to groups to research contemporary audiology-related topics/issues and were tasked to develop discussion points and solutions for those issues. The leadership project culminated on September 15, Saturday afternoon, with a presentation by each group to the four “shark tank”

## JFLAC Class of 2012

Amy L. Ariss, AuD  
 Eric J. Branda, AuD  
 Jennifer R. Briggs, AuD  
 Melanie A. Duldulao, AuD  
 Cheryl A. Edwards, AuD  
 Jason A. Galster, PhD  
 Stephen A. Hallenbeck, AuD  
 Lisa A. Hansel, AuD  
 A. Nichole Kingham, AuD  
 Gregory R. Mannarelli, AuD  
 Bre Lynn Myers, AuD  
 Amanda J. Ortmann, PhD  
 Patricia Ramirez, AuD  
 Erin C. Schafer, PhD  
 Christopher Spankovich, AuD, PhD  
 Alicia D.D. Spoor, AuD  
 Tina M. Stody, PhD  
 Jennifer L. Tunnell, AuD






panel members: JFLAC co-chairs Therese Walden and Carmen Brewer; Academy Executive Director Cheryl Kreider Carey; and Deputy Executive Director Ed Sullivan.

On the second day of the conference, Past Presidents Brad Stach and Gail Whitelaw shared perspectives on the history of the Academy (Stach) and leadership theories (Whitelaw). Dr. Walden then discussed contemporary issues that affect the Academy and the profession of audiology. At the following working lunch, the Academy's A4—composed of the Academy's Foundation (AAAF), the American Board of Audiology (ABA), the Student Academy of Audiology (SAA), and the Accreditation Commission on Audiology Education (ACAE)—provided an overview and update of their respective organizations.

Dr. Joe Thomas, (program faculty, Leadership Education and Development Program – LEAD, United States Naval Academy), provided historical insights on ethics in leadership. The attendees

wrapped up the day with a trip to the Academy's Capitol Hill Office (CHO) in Washington, DC, which is located just a few blocks from the United States Senate. At the CHO, the Academy's Senior Director of Government Relations, Melissa Sinden, and John Williams (Academy lobbyist with The Federal Group) provided a session on advocacy and lobbying. Comments from the attendees indicated that this session provided new and important information in this area, and also provided some myth-busting with regard to advocacy and lobbying practices.

On Saturday, Jeffrey Cufau (Idea Architects) was invited back for his third JFLAC experience; he facilitated conversations on the topics of time management and the DiSC profile (attendees completed this prior to coming to the meeting). During a second working lunch, Carey and Sullivan provided an overview of association governance and the working relationship among the Academy's volunteer leadership, the members of the Academy, and the professional association management staff.

At the closing banquet on Saturday evening, each JFLAC attendee was presented with a Certificate of Appreciation, and JFLACers expressed their commitment to make gifts to both the Academy PAC and the AAA Foundation. In addition, each attendee completed a volunteer application for a future appointment to an Academy committee or working group. The next JFLAC will occur in 2014! 

**“JFLAC was an inspiring experience. It's been a privilege to work with the Academy's established leadership while also meeting this talented group of young leaders. I look forward to our future collaborations and supporting the Academy through leadership and hours worked.”**

## New Members of the American Academy of Audiology

Jayna Adams, AuD

Marlene Bagatto, PhD

Jennifer Crespo, MA

Nancy Datino, AuD

Diana Daugherty, AuD

Ashly George

Megan Herman, AuD

Lauren Huffman, AuD

Wen Jiang, MS

Sarosh Kapadia, PhD

Rebecca Kelly, PhD

Dana Leggieri, AuD

Tricia Nechodom, AuD

Joy Nilsson, AuD

Tina Penman, AuD

Margaret Pichora-Fuller, PhD

Britiany Pierson, AuD

Laura Bradley Pratesi, AuD

Vernon Shaw, MA





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Resume search included with job posting.

Contact Sarah Sebastian at ssebastian@audiology.org for more information.

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# ARC13 BINAURAL HEARING

A central graphic featuring a pink brain silhouette filled with several interlocking gears of different sizes. The brain is enclosed within a blue circular outline. Surrounding the brain are several yellow gears of various sizes. Green wavy lines, resembling sound waves, cross the foreground. A blue line extends from the bottom of the brain's outline, ending in a dotted line.

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The new micon chip is a revolution in audiological engineering. With twice\* the processing power, frequency resolution of 48-channels and bandwidth of up to 12KHz, micon delivers the most comprehensive combination of the industry's leading features:

- Optimized directionality
- New frequency compression capability
- More effective digital noise reduction
- Faster feedback cancellation
- 6 adjustable environments in one program
- More precise frequency shaping

The result is impressive clarity and sound comfort.

micon combines the best industry features so wearers may simply forget they are wearing hearing instruments.



Use your  
mobile device's  
QR reader to  
learn more.



**Life sounds brilliant.**

\*compared to Siemens previous technology. Copyright © 2012 Siemens Hearing Instruments, Inc. All rights reserved. 9/12 SHI/13649-12