ALSO IN THIS ISSUE:

Revisiting the Perennial Question: What is the “Best” Hearing Aid?

Successful Aging and Our Hearing

Cutting the Phone Cord for the Hearing Loss Community

A Worldwide View of the Hearing Loss Community

HLAA Convention 2009

Mark Ross, Ph.D.
Audiologist and Recipient of HLAA's Lifetime Achievement Award
Oticon RITE Power

Receiver-In-The-Ear micro BTE instruments have been taking the hearing care industry by storm. Now Oticon has introduced a range of high powered RITE instruments for people with larger hearing losses. Not only do these devices look a lot more attractive, you will hear more clearly with them in nearly every listening situation. Some models even connect wirelessly with cell phones, landline phones and MP3 players — turning your hearing aids into cordless binaural headsets. Speak to your hearing care professional about trialing one of the new RITE Power micro BTEs.

Oticon • Epoq • Oticon • Vigo
COVER STORY
8 Revisiting the Perennial Question: What is the "Best" Hearing Aid? By Mark Ross
You asked and you asked. Here it is.

FINDING HELP
10 The Hearing Healthcare Team
Learn who the important players are when it comes to your hearing.

LIFESTYLE
12 Successful Aging and Our Hearing By John K. Niparko and Courtney Carver
Aging is now assuming a greater priority on the American healthcare agenda, and for good reason. Given our changing demographics, an agenda that promotes successful aging will be essential to our nation’s future.

PHONES
24 Cutting the Phone Cord for the Hearing Loss Community By Michael Snyder
Great news! Digital cordless telephones that comply with a new standard to reduce noises when used by people with T-Coil-equipped aids or cochlear implants are now available in retail stores nationwide.

INTERNATIONAL
28 "Nothing About Us, Without Us": A Worldwide View of the Hearing Loss Community By Marcia B. Dugan
Here’s a report of what is happening on the international scene.

ADVOCACY
32 Thirty Years of Working for You By Lise Hamlin
Hearing Loss Association of America has worked at the national level for legislation and regulations that has positively impacted on people with hearing loss.

INTROSPECTION
42 A Day in the Life By Marilyn Devine
Marilyn Devine offers a poetic approach to hearing.

DEPARTMENTS
6 From the Executive Director’s Desk By Brenda Battat
7 Instant Messages
22 HLAA Corporate Member Guest Column By Andy Bopp
34 2008 Walk4Hearing Sponsors
36 HLAA Convention 2009 in Nashville
38 Hearing Loss Association of America Chapters

COVER: Mark Ross, Ph.D. Photograph by Cindy Dyer.
Hearing Loss Association of America

FOUNDER
Howard E. “Rocky” Stone (1925-2004)
In 1979, Rocky Stone founded the organization as Self Help for Hard of Hearing People (SHHH).
The thinking behind the self-help philosophy for SHHH was to enhance each of us as human beings. Hearing loss was an important but secondary consideration. Once we accept responsibility for ourselves, we have to learn to love ourselves, and then, each other. — Rocky Stone

For advertising information, contact Christopher Sutton at csutton@hearingloss.org.

BOARD OF TRUSTEES
Michael Stone, D.C.
President
Jeannette Kanter, NY
Vice President
Deb Charlea Baker, VT
Secretary
Peter Fackler, NY
Treasurer
Brenda Battat, ex-officio
Francis Beecher, FL
Kathy Borzell, FL
Paul Lurie, IL
Vic Matsui, VA
Richard Melia, VA
Steve Noroian, CA
Anne T. Pope, NY
Tommie Wells, TX

CORPORATE ADVISORY BOARD
James Cross, M.D.
Head of National Medical Policy & Operations
Aetna
Cathy Jones
President
Phonak

Anne Pope
Hearing Loss Association of America Past President
Liason to Board of Trustees
George Schindler
President, CGI Federal
Donna Sorkin
Vice President of Consumer Affairs
Cochlear Americas
Michelle Talutto
Global Channels & Advocacy
Groups Program Manager
IBM
Patricia Trautwein
Director of Auditory Training & Education
Advanced Bionics

Paul Hammerschlag, M.D.
New York University Medical Center
John W. House, M.D.
House Ear Institute/Clinic
Michael D. Seidman, M.D.
Henry Ford Hospital

Mental Health/Rehabilitation Advisor
Samuel Trychin, Ph.D.

AUDIOLGY ADVISORS
Jane R. Madell, Ph.D.
New York Eye & Ear Infirmary
Jennifer Yeagle
The Listening Center
Johns Hopkins

LEGAL ADVISOR
Henry Fader
Pepper Hamilton LLP

TECHNICAL ADVISORS
Judith Harkins, Ph.D.
Gallaudet University
Mead Killion, Ph.D.
Etimotic Research
Harry Levitt, Ph.D.
RERC, Gallaudet University

EDUCATION/CHILDREN’S ISSUES ADVISORS
Carol Flexer, Ph.D.
University of Akron
Julia Davis, Ph.D.
University of Minnesota

PARENTS’ ISSUES ADVISOR
John Flanders, Esq.

HEARING ASSISTIVE TECHNOLOGY ADVISOR
Ron Vickery

CAPTIONING (CART) ADVISOR
Deanna Baker

ECO BOX

Hearing Loss Magazine text and cover pages are printed using SFI certified Anthem Matte paper using soy ink.
• SFI certified products come from North American forests managed to rigorous environmental standards.
• SFI standards conserve biodiversity and protect soil and water quality, as well as wildlife habitats.
• SFI forests are audited by independent experts to ensure proper adherence to the SFI Standard.
• SFI participants also plant more than 650 million trees each year to keep these forests thriving.

Hearing Loss Magazine is published bimonthly by the Hearing Loss Association of America
7910 Woodmont Avenue, Suite 1200
Bethesda, MD 20814
301/657-2248 Voice
301/657-2249 TTY
301/913-9413 Fax
www.hearingloss.org
info@hearingloss.org

The Hearing Loss Association of America is the nation’s foremost membership and advocacy organization for people with hearing loss. Hearing Loss Association of America opens the world of communication to people with hearing loss through information, education, support and advocacy. The national support network includes the Washington, D.C., area office, 14 state organizations, and 200 local chapters. Our clear, straightforward message has changed the lives of thousands of people: Hearing loss is a daily challenge you can overcome. You do not have to face hearing loss alone.

Executive Director
Brenda Battat
Deputy Executive Director
Editor-in-Chief
Barbara Kelley
Director of Development & Education
Christopher T. Sutton
Director of Member Services & Chapter Development
Toni Barrient
Director of Public Policy & State Development
Lise Hamlin
Director of Events & Operations
Nancy Macklin
National Walk 4 Hearing Manager
Ronnie Adler
Web Designer
Susan Parras
Financial Services Coordinator & Controller
Sean Smith
Assistant Controller
Rachel Trask
Program Assistants
Barbara Miller
Colleen Reeping
Connie Savage
Rachel Trask

Academy Curriculum Consultant
Scott J. Bally, Ph.D.

Hearing Loss Association of America Volunteers
Billie Ahrens
Hollace Goodman
Manell Brice
Meyer Gordon
H.M. Dyer
Joan Kleinrock
David Gayle

Graphic design by Cindy Dyer/Dyer Design
www.cindydyer.com/DyerDesignGallery
www.cindydyer.wordpress.com
DO MORE WITH VERIZON

Products that Enable. Connections that Empower.

Whether it’s Internet/phone service, teletypewriters, phone bills in large print or Braille, amplified phones or any number of other services, we have the tools to make your communication needs more efficient. Including ways to help you save by bundling Verizon products.

- Communicate all you want with unlimited local and long distance calling from your home to anywhere with Verizon Freedom Value™.
- Download photos, audio books and large files in a flash with Verizon High Speed Internet.

It’s time to do more.

Contact us today.

1.888.319.7614 V/TTY

verizon.com/disabilities

Service availability varies. ©2008 Verizon.
Happy New Year! It’s 2009 and the Hearing Loss Association of America enters its 30th year. Founded in 1979 by Howard E. “Rocky” Stone as Self Help for Hard of Hearing People (SHHH), the organization was born in a basement office with five volunteers and has grown to a national organization with 14 state organizations, 200 chapters nationwide, and a national office just outside Washington, D.C.

Over the past 30 years HLAA has served hundreds of thousands of people with hearing loss and their families, giving them the tools to self advocate and live and work successfully with hearing loss. We are a known leader in advocating for better communication access.

A New Year is a Time to Reflect
Highlights of some of our past achievements include:
• advocated successfully for the establishment of the National Institute of Deafness and Other Communication Disorders (NIDCD), the thirteenth institute of the National Institutes of Health that researches hearing and balance disorders;
• chaired the 1981 White House Conference on Aging where ALDs were first showcased in the United States;
• represented people with hearing loss on the U.S. Access Board that wrote the guidelines for communication access in the landmark Americans with Disabilities Act;
• advocated successfully for FCC ruling requiring wireless and cordless phones to be hearing aid compatible.

It’s Also a Time to Look to the Future
We have to steer the organization in a rapidly changing mobile world of social networking, the You Tube generation, instant messaging, video communication, and fourth generation wireless technologies. Not to mention the explosion of people with hearing loss reaching epidemic proportions, baby boomers coming of age realizing they don’t hear so well, and the aging of America.

The question becomes how to reach all these people with hearing loss who could benefit from the services that HLAA and other consumer organizations offer—such as the Alexander Graham Bell Association for the Deaf and Hard of Hearing, the National Association of the Deaf, the Association of Late-Deafened Adults, and Telecommunications for the Deaf and Hard of Hearing Inc., among others. Most people with hearing loss do not belong to or even know about our organizations. I would estimate that our collective members are less than 700 out of every million people with hearing loss. Where are the other 999,300 people? Or to put it very generously, we can count one person out of every 1,000 as members of national organizations that are consumer- and hearing-loss related.

How can we reach the millions of people with hearing loss and make them aware of all the support and technology available to help them cope? We need the concerted efforts of all the key stakeholders to get hearing loss into the national consciousness, and we need the public to take hearing more seriously as a health condition that needs no less attention than diabetes and high blood pressure. Let’s all commit this New Year to spreading awareness and making sure that everyone who needs support, needs technology, needs education, and needs self advocacy, and knows where and how to satisfy those needs.

We will celebrate HLAA’s 30th anniversary in Nashville, June 18-21, 2009 at our national convention. I would like to invite each of you to the birthday celebration—please bring your family and friends, and be sure to tell your hearing health professional about it. To register for the convention, please visit our website at www.hearingloss.org. I look forward to seeing you there.
Instant Messages

From left: Jeffrey Greiner, CEO of Advanced Bionics; Debbie Allen; and Plácido Domingo. Behind Greiner is Claude Mann.

Plácido Domingo’s Hear the World Foundation Accepts Cochlear Implants
Valencia, CA, November 13, 2008—The Alfred E. Mann Foundation announced the donation of two cochlear implants valued at $50,000 from Advanced Bionics Corporation during the recent Alfred Mann Foundation Gala at Vibiana in downtown Los Angeles. Plácido accepted the cochlear implants on behalf of Hear the World Foundation. In addition, donated surgeries to be performed by John Niparko of Johns Hopkins University Hospital and follow up audiology and medical services make up a package that is priceless to the recipients and valued at more than $100,000.

“Plácido Domingo is helping raise awareness for a problem that plagues one in 10 people. We are honored to collaborate with him, with the Hear the World Foundation and with Advanced Bionics to transform lives,” said David Hankin, CEO of the Alfred E. Mann Foundation.

The Valencia-based Alfred Mann Foundation is a medical research foundation dedicated to bringing advanced medical technologies to the public to provide significant improvements to the health, security, and quality of life for people suffering from debilitating medical conditions. For information, visit www.aemf.org.

Canadian Hard of Hearing Association Names New Executive Director
Ottawa, October 14, 2008—Saralle “Snookie” Lomow was appointed as executive director of CHHA. The Canadian Hard of Hearing Association (CHHA) is a consumer-based organization formed by and for hard of hearing Canadians. CHHA works cooperatively with HLAA, professionals, service providers, and government bodies. For more information go to www.chha.ca.

House Ear Institute Launches Online Hearing Conservation Workshop
Los Angeles, CA, October 3, 2008—House Ear Institute has created an innovative interactive online hearing conservation workshop. Designed for the general audio consumer and the audio professional, the workshop takes 30 minutes to complete and is available anytime at the institute’s website at www.hei.org.

“We recognize that audio professionals’ hearing is critical to their ability to do their job,” said Marilee Potthoff, director of marketing and communications at the House Ear Institute. “The interactive workshop is a unique tool that allows people the flexibility to learn about their hearing health whenever and wherever in the world they choose.”

One in ten people has a hearing loss, and approximately three in ten have hearing loss from an overexposure to noise. Noise-induced hearing loss is usually painless, progressive and always permanent but can also be 100 percent preventable.

For additional information on hearing conservation, visit House Ear Institute’s Sound Partners® program at www.hei.org or its new site for teens and young adults at www.earbud.org, where visitors can even request a free pair of earplugs. HNI

Would You Come to This Woman’s Party?
When? Friday, June 19, 2009
Where? Nashville, Opryland Hotel
Why? Nancy Macklin, HLAA Director of Events, and volunteers from across the country are planning a 30th Birthday Celebration to mark HLAA’s 30th birthday.

For more information, e-mail Nancy at nmacklin@hearingloss.org, or register at www.hearingloss.org.
Here's what you've been waiting for. You've asked again and again: "What is the Best Hearing Aid?" We all want a Consumer Reports-type comparison. Here is the word from a world-renowned audiologist. You can bank on Mark Ross' answer.

By Mark Ross
This is a question that I’ve been asked ever since I became an audiologist. When faced with two or more devices that ostensibly do the same thing, it is reasonable for somebody to wonder if one would produce better results than the others.

If this comparison is made with other kinds of devices, and we see from the many examples in Consumer Reports that indeed it does, why then shouldn’t this same logic apply to hearing aids? Well, as a matter of fact, in the early days of audiology, it did. In those days, the common practice (the “Carhart method”) was to compare a person’s performance with three or four pre-selected aids and recommend the one for which the person obtained the highest speech discrimination scores. The one that achieved this status was considered “best” for that particular person.

The method had the kind of face validity that appealed to clients and professionals alike and it was practiced until well into the 1980s. However, we should recall that at this time hearing aids were generally simple amplification devices, certainly compared to what is available nowadays. In such instances, one could directly compare the performance of hearing aids, since relatively few electroacoustic variables were involved.

Even though the procedure seemed to make sense, in the way it was practiced the actual results proved to be unreliable and too time-consuming. In its time, the Carhart method generated literally hundreds of research articles, in a constant search to perfect it, until it finally died a natural death at about the same time digital hearing aids (and some advanced analog ones as well) were being introduced.

The Essential Point
In considering the question of the “best” hearing aid, we need to focus on the essential point: it is not the name monogrammed on the hearing aid case that is important, but the composition of the amplified sounds delivered into the ears of a hearing aid user.

Manufacturers spend a lot of money with their marketing appeals to develop brand recognition and loyalty, and they do this for understandable economic reasons. But we should keep in mind that all hearing aids serve the same purpose; they all respond to input acoustic signals and deliver amplified output sounds into the ear canal. It is what the device does between these two stages, and how well it accommodates a person’s unique communication needs that should be the essential question, not the brand name of the hearing aid.

The major dimensions of amplification can be adjusted in most, if not all, modern digital hearing aids; every major manufacturer makes hearing aids that can be programmed to meet “prescribed” amplification targets. Right now, several such prescriptions are generally recognized as optimal, at least during the initial selection process. By virtue of meeting these prescriptions, it can be assumed that all of these aids would be functioning in similar fashion.

Where differences will occur is the skill with which the audiologist responds to a user’s listening experiences in determining desirable modifications of the basic prescription and in their ability and willingness to accomplish this goal. In addition, the existence of numerous special features included in modern hearing aids complicates still further attempts to find just the “right” one for a person.

Major Common Features
Though they may be labeled differently, all the leading manufacturers make available in some fashion all of the major special features that have been developed in recent years (e.g., directional microphones, compression amplification, feedback management, noise reduction circuits, multi-band amplification, multiple memories, etc.). I say “in some fashion” because these features may be implemented and labeled somewhat differently by the various manufacturers. While all may express the same basic intention in describing a specific feature (e.g., to improve speech-to-noise ratio, reduce acoustic squeal, or control background sounds), they often go about it differently and accomplish their goals with different degrees of effectiveness. But, and this is the central point, it is difficult to ascribe consistent and significant superior listening performance to the totality of the features of any one manufacturer’s hearing aids compared to another’s.

For example, the evidence may indicate that a particular feature in one brand may be more effective than another’s (e.g., noise reduction or directionality index), but less effective with a different feature (e.g., feedback suppression).

Which aid would be the best overall (and here I am referring to improvements in speech perception, the reason people acquire hearing aids in the first place)?

Would the superiority of one feature in a hearing aid offset the somewhat poorer performance of a different one? We don’t know. To complicate matters still more, in considering any specific feature, the reality is that newer ones are being introduced each year, while existing ones may be upgraded or somehow modified.

Automation
More and more it seems the question of the best hearing aid (or amplification pattern) is being defined by the inclusion of the various features that are included in an aid. From what I can see, however, the advantages generally ascribed to these new features mainly refer to improved “automaticity,” where the aid makes decisions regarding specific settings continued on page 10
What is the "Best" Hearing Aid? continued from page 9

(volume control, noise settings, etc.) and not necessarily in speech perception abilities.

But, even given that a particular hearing aid, incorporating certain features, is preferred objectively and subjectively by some individual, this does not mean that the same positive result will be obtained by another person. This is an important caveat and one that generally applies, in spite of all the glowing testimonials offered in support of a specific product, and no matter how heartfelt and how applicable the testimony may be for a particular person.

About all we can say that people with hearing losses have in common is that they all have some sort of hearing loss. I don’t intend to be facetious, but sometimes we seem to overlook this basic fact. In reality, it is not just a question of someone falling into the generic category of “hearing loss,” but the type, nature, and severity of the auditory disorder displayed by that specific person. This will have major implications in determining what kind of hearing aid the individual should use and how well he or she does with it.

We’re all somewhat familiar with the basic dimensions of a hearing loss, as visualized in an audiogram. From this chart, we can see how much of a hearing loss a person has across the frequency (pitch) range. The pattern displayed by an audiogram can vary considerably between people, with probable significant behavioral implications for the larger variations. Generally, for example, a person with a severe high-frequency hearing loss will not function in the aided condition as well as someone with a moderate flat hearing loss (equal hearing loss at the different frequencies).

In other words, the same hearing aid will not result in equal performance for these two people. This occurs because the upper limit of possible performance is set by the nature of the auditory disorder and not by the hearing aids; because people differ in the severity and nature of their hearing loss, so will their aided performance.

Individual Results Differ
As crucial as it is, however, the information provided by an audiogram offers us only the most superficial information about other aspects of an auditory disorder. Two people with exactly the same audiogram may, and often do, demonstrate completely different listening performance in other auditory tasks, such as their loudness discomfort thresholds and speech comprehension in noise.

For example, one such person may find the limits of acceptable loudness to be 80 dB, while the other person with a similar audiogram finds that sounds of 100 dB are easily tolerable. These different tolerance limits will certainly affect how a hearing aid is fitted and how successfully a person performs with it. Such individuals may also differ in how well they understand speech in the presence of noise, though there may be little difference in their speech perception scores in a quiet environment.

In other words, auditory disorders and their observable consequences encompass more than what is displayed on the audiogram. These would include, among a number of psychoacoustic factors, the ability to detect small time differences within and between speech sounds (temporal resolution) as well as their ability to separate out the individual components in a complex sound (frequency resolution).

Individual differences in these and other psychoacoustic dimensions help explain why hearing aid users with the same audiogram and the same hearing aid may perform differently.

Is There a Best Hearing Aid?
But the question still remains; given the nature of some specific individual’s auditory disorder, is there a best hearing aid (or amplification pattern) for that particular person?
Certainly, we know from the experiences gained by consumers and professionals over the years, people do perform better, or worse, with one amplification system over another. But is the hearing aid a particular person is now wearing, or contemplating purchasing, the absolute best for that person?

I don’t know and furthermore I don’t think the question is answerable at this time for this reason: we have no way now of determining what a person’s potential speech perception capabilities are to which we can compare his or her actual performance.

How do we know when we’ve reached the best possible performance? There is no equation that can predict the highest score a person is capable of. Further, given the awesome flexibility now incorporated in modern hearing aids is it possible that the consumer would do somewhat better if one or more of the hearing aid’s electroacoustic dimensions were varied in some fashion? I’d say the possibility exists, but there is no way at present that we can be certain.

Mark’s Advice

It seems to me that rather than focus on the best hearing aid, potential hearing aid purchasers could more fruitfully spend their time and energy looking for the right audiologist or hearing aid specialist, one who is competent, caring, and conscientious. This is the person whose job it is to select the best possible amplification system for a hearing aid user, one who can maneuver between the myriad possibilities now offered by modern hearing aids.

Such a person will not only keep up with new hearing aid developments, but will also consider and respond to the totality of a client’s communication problems. The hearing aids recommended by these professionals should ensure that their client’s performance falls into the best possible “zone” of performance, one consistent with the person’s hearing loss, the audiologist’s personal experiences and the research evidence. The inclusion of any special (and expensive) feature will have to be judged by the likelihood of a positive cost/benefit ratio for the hearing aid user. This, too, is part of the audiologist’s responsibilities.

So now how do we find this professional paragon? I don’t have a specific answer to that question either; I wish I did. The experiences of other hearing aid users are one major source, as are the recommendations from other professionals (otologists, etc.).

A good place to start would be looking at the professional members of HLAA. You can find one by looking on the “Finding Your Hearing Healthcare Professional” box on the opening page of the HLAA website (www.hearingloss.org). Obviously, I can’t vouch for the technical proficiency of any of the audiologists on the list, but I can say that their membership in HLAA suggests a consumer orientation that would put them on my personal short list. Someone, in other words, who functions more like a professional and less like a salesperson. One who recognizes that the implications of a hearing loss can be pervasive and profound and that the search for the best hearing aid should ideally be viewed as just one step, albeit a crucial one, in the effective overall management of a hearing loss.

Mark Ross, Ph.D., could easily be called “The Father of Audiology.” Or as he says in reply to that, “Maybe the grandfather.” Mark’s writings in Hearing Loss Magazine have been a key element of this publication. He writes under the auspices of a grant awarded from the Department of Education to review ongoing developments in hearing aids and other hearing assistive technologies, with a particular emphasis on reviewing clinical research studies for the benefit of consumers. He also updates consumers on the research being conducted by the RERC researchers. Hearing Loss Magazine is fortunate to be a recipient of his writings from this grant. HLAA is also part of the grant as a lead facilitator on technology training across the country for consumers with hearing loss.

A staunch proponent of amplification and aural rehabilitation, Mark has received numerous industry awards for his work. Most recently, he received a Lifetime Achievement Award from the Hearing Loss Association of America for his work as both an audiologist and as a consumer who understands deeply the issues of people who wear hearing aids. Mark has worn hearing aids since the 1950s and received a cochlear implant last year.

Mark Ross, Ph.D., is an audiologist and associate at the Rehabilitation Engineering Research Center (RERC) at Gallaudet University. He was awarded the HLAA Lifetime Achievement Award in June 2008. He and his wife, Helen, live in Storrs, Connecticut. To find more Dr. Ross articles on technology for consumers, go to www.hearingresearch.org.

This article was developed under a grant from the Department of Education, NIDDR grant number H133EO80006. However, the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.
Baby boomers will soon face the challenges of aging, but not in the same way their parents did. Modern medicine keeps people alive longer than in years past. Where does hearing loss fall into the considerations how people age?

Successful Aging and Our Hearing

By John K. Niparko, M.D., and Courtney L. Carver
Our society is growing older, and at a pace that continues to accelerate. The number of people over the age of 65 will double in the next 15 years—an immense population of Americans who will face the challenges of aging.

The concern is not only that more of us soon will be facing the realities of aging, but also that the challenges themselves now play out longer than in past generations. This change is due, of course, to longer life expectancy. Organ systems critical to sustaining life—the heart, lungs, kidney, liver and even the brain—can be supported by medications or artificial means for years, and even replaced if needed.

As a result, modern medicine can enable us to live well beyond what used to be considered an average lifespan. The challenges of aging are therefore likely to last a much longer time, making it necessary to find new strategies to counter threats to our quality of life.

Aging is now assuming a greater priority on the American healthcare agenda, and for good reason. Given our changing demographics, an agenda that promotes successful aging will be essential to our nation’s future.

The importance of a mission to support older adults relates not just to the monetary costs involved. Seniors do have nearly universal dependence on the health care system, so those costs are substantial. But there is something more basic at stake. We believe the way we, as a nation, care for our seniors reflects our system of values.

A recent CBS Sunday Morning program addressed the issues from a perspective of the looming threats of the high costs of caring for the elderly. The central issue was posed: “How could the best thing that ever happened to us, a near doubling of the American average lifespan over the last century, be the worst thing that ever happened to us?”

The Research Behind Successful Aging

Researchers have analyzed the dynamics of the aging process to help understand the challenges a senior must confront. Relevant research reports on the topic of successful aging have measured those aspects of living into the senior years that are essential to the perception of quality of life.

The aspects of daily life that are important to a sense of well being are known to everyone: health, mobility, ability to think clearly, psychological and emotional health, and the ability to communicate with other people.

First, we need to understand what age researchers consider to be “successful aging.” Success is most clearly reflected in independence. Independent living in older age is equated with developing and maintaining primary control of your life. There is a distinction between usual aging, in which extrinsic (outside oneself) factors heighten the effects of aging, and successful aging in which extrinsic factors play a neutral or positive role.

To develop and maintain control in life, we need to:

• avoid disease and thus compress disability in the latest stages of life possible,
• maintain high physical and cognitive function, and
• stay engaged in social and productive activities.

Growing evidence suggests that a hearing loss can affect every one of these dimensions.

As we researched this topic further, we’ve been impressed with how effective communication can have a positive impact on every other life domain. We shouldn’t be surprised. Though our ability to communicate with one another may seem like a lifestyle option, an abundance of information shows that good communication is important, if not essential, in supporting general health as well as our quality of life.

We know that at a basic biological level, our brain needs constant renewal of all kinds of stimuli through sensory experience. Conversely, we know that sensory deprivation is devastating. When our senses are not stimulated for prolonged periods, our personalities disintegrate.

An Unfortunate Collision: Hearing Loss and Aging

In terms of the prevalence of chronic (long-term) disorders, severe hearing loss that prevents an individual from understanding routine speech is the third most common condition affecting elderly people. Moderate hearing loss affects 30 percent of those aged 65 to 74 years and 50 percent of those between 75 and 80. Only high blood pressure and rheumatoid arthritis affect more seniors.

In this article we want to share some of our views on the hearing loss that now affects millions of seniors, and will affect many more millions to come. Our views come from our personal perspectives as hearing-care professionals, and in the physician’s case (co-author of this article), a perspective gained from a mother with progressive hearing loss.

We will also review research on aging and the prevalence of hearing loss in seniors. Because it is such a common disability, it is impossible to ignore the impact that hearing loss has on society as well as on individuals. Finally, we will examine the role played by hearing aids and cochlear implants for those who seek to take action in addressing their hearing loss.

continued on page 14
New World, New Communications
The new millennium has brought smarter and faster devices which carry more information and transmit it with increasing speed. Today, our lives are about expectations—expectations of something new about to happen, expectations that are constantly fed by a relentless flow of incoming information.

One result of the communications revolution is the rise of new expectations for how we communicate. Our cultural norms are changing in a way that leaves less room for those who don’t use the new communication technologies. Most important, if we can’t keep up with the modern pace of communication, we risk isolation. The inability of some to multi-task in their communications is a source of frustration. This can lead to the assumption that those who really matter are those who are connected.

In modern American society our schedules and expectations leave less time and space for those who don’t participate. One result is something the New York Times termed a bipolarization of society—a growing isolation of those who do not participate from those who do. With our population aging at an accelerated rate, we are entering a period in which our culture marginalizes non-participants.

An important question for seniors, then, is how to maintain vital connections in a highly dynamic communication environment. For many, this challenge is even more difficult because of hearing loss. The common condition of hearing loss, known as age-related hearing loss, requires seniors to maintain their ability to communicate in a world filled with noise and echoes, and with acquaintances who too often mumble. It’s a world that moves swiftly and rarely looks back.

Hearing and Listening
Communication relies on our ability to organize the complex information of the auditory world. During effective listening, we sense the power (loudness) of an environmental or voiced sound, sort out the pitches contained in speech components, and track changes in the power and pitch of sounds over time.

To process sound information our hearing pathway, from the ear to the brain, is continually breaking down sounds into their components, feeding the brain with a supply of signals that reveal the identity of speech sounds. In doing so, our brain addresses the immense task of comprehending what the ear has sensed. And while our ears hear and our brain listens, we naturally keep tabs on what sounds arrived previously, where we are as we listen, what’s being said and who is saying it.

Memory and ongoing thinking (cognition) thus play an important role. In fact, the wide spectrum of sounds in our environment and in our speech requires our brains to untangle and organize this information from a background of distractions in order to make sense of the complex soundscape in which we live.

This remarkable system of analysis of sound requires sounds to be captured first by our outer, middle and inner ears. Unfortunately, our ears are under siege from a variety of factors, and the sensitivity and refinement with which the ear operates is subject to age-related declines. Studies indicate that the decline in hearing sensitivity begins to accelerate beyond the age of 20 in men, and above age 50 in women. Loss in hearing sensitivity is more than twice as fast for men than women.

The hearing loss that accompanies aging can reflect any of several potential problems along the hearing pathway. As soundwaves strike the ear drum, hair cells within the inner ear detect incoming sounds when they are jiggled by the waves of energy. Toxic substances, trauma, infections, overactivity of the immune system, and errors in the genetic code can affect the hair cells’ function. Hair cell injury produces sensorineural hearing loss and is by far the most common cause of all hearing impairments. One of eight people with a hearing loss has a sensorineural hearing loss (SNHL). More than 75 percent of people over the age of 75 years have a significant SNHL.

Damage to our hair cells is one part of the aging process. It produces SNHL. Damaged hair cells are less able to detect specific sounds. As a result, the ear has a reduced ability...
to decipher codes of information in speech and other complex sounds.

**What Do People with Sensorineural Hearing Loss Notice?**

The first and most obvious change is reduced sensitivity to soft sounds. The higher pitches are most affected, reflecting the fact that hair cells in the outer turn of the cochlear spiral are usually the first to be impaired. In fact, the rate of hearing loss affecting the higher pitches is generally twice that of the lowest pitches of the speech sounds.

One important consequence of age-related hearing loss is difficulty in understanding the higher-frequency sounds of speech—generally in the class of consonant sounds (vowel sounds in the lower registers). Sounds that carry the acoustic cues for consonant information are critical to understanding spoken words. Speech sounds in the higher pitch range are pivotal for understanding about 75 percent of all words. Given how complex hair cells are, it’s not surprising that there are other consequences as well.

Sensorineural hearing loss also involves:

- **our ears failing to sort out tones.** In fact, sounds are distorted as the sensation of pitch (whether a sound is high or low) is “smeared.” Such smearing prevents us from separating streams of sound that are heard. It becomes more difficult to sort out speech signals from background noise.

- **unusual growth in how we perceive a sound becoming louder.** All sounds contain varying levels of loudness. Even in the simplest of sounds there are loudness cues that help us in recognizing a particular sound. Malfunction of hair cells within the cochlea distorts perceptions of changes in loudness. The sound needs to be louder to hear it, but increasing levels of loudness produce discomfort. This problem, known as recruitment, requires that hearing aids be adjusted in a strategic way to prevent uncomfortable listening.

- **sounds that occur spontaneously.** Tinnitus is the phantom sounds that occur when the brain loses its supply of signals normally provided by the ear. Usually this produces a ringing or humming sound in the ear and occurs when a sensorineural hearing loss is present.

In addition to age effects on the inner ear, other factors can challenge effective hearing and listening for seniors. The characteristics of a talker, particularly the rate of speaking, can affect how well speech is recognized. Normal conversation occurs at a rate of about 250 words per minute. In experiments using faster speech presentations, elderly listeners’ recognition of speech signals decline. This effect does not occur with young listeners. These challenges can be greater when trying to understand someone discussing an unfamiliar topic (i.e., with reduced “context”) when compared with attempts to recognize common, everyday sentences.

**Elderly Listeners Experience Further Inordinate Difficulty in Common Settings**

Elderly listeners experience difficulties understanding others because of impairments with the mechanics of transmitting the vibrational energy contained by sound. However, the environments in which we listen to others—acoustics—also play an important role. One of the most important factors of age-related hearing loss relates to echoes.

A senior listener is likely to experience deficits in understanding speech when reverberation (echoes) and background noise are present. These factors are commonly encountered in restaurants, meetings and other large room environments which corrupt listening conditions.

Reverberation has a smoothing effect on the waves of a speech signal, thus removing some of the distinctive properties of a sound’s signature that are key in differentiating words. Large rooms with high ceilings and hard walls accentuate reverberation. This is a problem in age-related SNHL because of the inability to filter sounds and suppress environmental echoes.

A wealth of research now indicates that elderly listeners perform more poorly than younger counterparts (with comparable hearing) in reverberant conditions. Thus, the greatest difficulties in understanding others encountered by seniors are experienced not just as a result of the inability to hear, but also because of an inability to sort out the critical speech sounds from the echoes.
Speech is also harder to understand in the presence of a background of complex noise (e.g., room ventilation systems, music or multiple talkers). Competition from noise is an even greater problem when the listener is surrounded by the noise or when background noise and a speaker’s voice come from the same direction.

Unfortunately, the acoustics of listening environments mean that the greatest impact of age-related hearing loss occurs in difficult listening environments. Such listening environments are important in understanding family and social environments, where there is often a dynamic interplay of spoken communications—as when people assemble for social gatherings, formal meetings, formal dining and for worship.

The psychological implications of challenges in communicating in group settings are obvious. While hearing aids, assistive listening devices, and cochlear implants attempt to provide “smart” processing to reduce competing noise and echoes, advances in sound processing have only partially solved the problems encountered. As a result, elderly listeners continue to experience an inordinate amount of difficulty in understanding speech in environments with challenging acoustical conditions.

There is clear evidence that hearing loss is associated with added and extended disabilities. The psychological and social consequences of SNHL, especially if the hearing loss is severe-to-profound, interferes with attention, perception and communication. Thus, psychological impairment might reasonably be expected to associate with hearing loss; in fact, such impairment is four times greater in populations of people with hearing loss when compared with the general population (Thomas, 1981).

Two-thirds of those with hearing loss report severe social and emotional handicaps on standard tests of psychosocial functioning (Mulrow et al., 1990), and patterns of onset of depression appear to correlate with the progression of SNHL (Kalayam et al., 2004). Furthermore, if communication and social networks are basic to constructs of general health including physiologic (Rodriguez et al., 2007) and immune (Cohen et al., 1997) function, the consequences of SNHL may impact general health status.

The Options for Managing a Hearing Loss

The most common treatment for age-related SNHL is the use of amplification. The goal is to enhance the power of selected pitches and to provide that enhancement in a way that provides for comfortable listening. Contemporary hearing aids also compress overly loud signals, and attempt to reduce background noise through filtering systems that adapt to the listening environment and through directional microphones. Substantial improvements in speech recognition are achievable in quiet, ideal listening. Benefits in speech understanding in noise are less consistent, though significant benefits are still reported.

Hearing aids may provide additional benefit by masking tinnitus, and by supplying improved perception of environmental and speech sounds, thus allowing the individual to better adapt to the tinnitus.

However, keep in mind that hearing aids cannot cure hearing loss. What hearing aids can do is lessen the barriers to verbal communication, allowing the listener to access more of the key information to effective listening of everyday communications.

Cochlear Implants

When a hearing loss is profound (beyond treatable with hearing aids), the hearing loss carries substantial, measurable effects on multiple domains that are important to quality of life (Francis et al., 2001). My colleague, Dr. Howard Francis used a well-tested survey of the things that people consider crucial to the quality of their life. The survey results revealed that impaired communication with others made people vulnerable to low mood and depression, and to some effects on thinking ability. All contributed to a significant reduction in the quality of life experienced by seniors with hearing loss.

For those with more advanced (severe-to-profound) sensorineural hearing loss, the cochlear implant (CI) provides a physiologically useful code of electrical signals. These signals trigger trains of impulses in nerves within the ear in severe-to-profound deafness.

The CI is actually a system of technology. A portion of that system worn on the ear processes information from incoming sound. The processed information is transferred across the skin to an implanted receiver-stimulator, which serves as a control tower that receives coded signals and transfers that code directly to the nerve of hearing.

A CI is designed for those who do not benefit from powerful hearing aids in a material way (a level of understanding of at least half of the words of every day communications). A large number of clinical studies now document the benefits of the cochlear implant in providing speech and environmental sound recognition.

The critical question for many seniors contemplating a cochlear
Deciding to Do Something About a Hearing Loss

Despite the clear benefits of amplification for elderly individuals with SNHL, market surveys indicate only about one-quarter of this population purchase hearing aids, and an even smaller percentage of the elderly who would be candidate for a cochlear implant pursue the intervention. The reasons for this low rate of device use are multiple and complex. But the main reasons are well known: SNHL is often minimized or denied because it typically evolves slowly and lacks visibility. Attitudes toward SNHL and its rehabilitation vary among affected individuals, but several are commonly encountered in surveys of individuals with hearing loss (Kochkin, 2000):

These attitudes include:

- Perceived level of loss
  — Level: “I hear well enough”
  — Psychosocial: “Fine hearing is unnecessary”
  — Occupation: “My loss is not disruptive”

- Associated stigma
  — Perception of embarrassment: “People make fun of you”
  — Difficulty in admitting the loss and pride: “It ages you”

- Expectations and prior experience
  — Amplification does not perform as promised
  — Skepticism: “Won’t work for nerve deafness/tinnitus or in noisy settings”

- Hearing rehabilitation is not cheap, and often not a covered benefit with health insurance

Studies of seniors demonstrate that impairments in listening under demanding circumstances produce deficits in daily communication. Thus the hearing loss fits the true definition of a “disability”—an impairment of a person’s capacity to function in addressing personal, social, or occupational demands. However, the perception of the hearing loss as a disability is highly variable.

Although SNHL, coupled with other effects of aging, limits an elderly person’s ability to communicate...

continued on page 18

implant is how to predict what level of benefit might result. A number of studies have applied multivariate statistical testing (assessing the many factors that can influence hearing results) in an effort to analyze cochlear implant results in seniors 65 years of age and older. Studies over the past 20 years document better speech-recognition performance in elderly listeners in a quiet environment with the use of a cochlear implant.

The results from these studies show that two factors have emerged as significant powers in explaining how much speech recognition will improve with a CI. Duration of deafness, and the word understanding scores achieved in testing before an implant is placed, are the main factors that carry significant predictive power in forecasting the benefit of a CI. A shorter duration of deafness and higher levels of retained speech understanding (for example in the 20 to 50 percent range) predict greater gains in speech understanding. About one-fourth of the overall range of outcome can be explained based on the length of deafness, and about one-sixth depends on the word understanding capabilities prior to implantation. Other patient, ear, and device variables demonstrated no significant correlations with the benefit achieved with respect to speech recognition.

A more recent analysis of a large group of patients indicates that age has a very small effect in determining post-operative outcome, and offers encouragement for seniors with advanced levels of hearing loss (Leung et al., 2005). Instead, studies continue to bear out that a more significant factor is the ratio of duration of deafness to age at implantation (Tyler & Summerfield, 1996)

Because duration of deafness and pre-implant speech recognition most consistently predict outcome, a concept of an auditory foundation is suggested. An auditory foundation appears to reflect the ongoing low-level activity that allows nerves within the hearing pathway to retain their potential to work well (in contrast to completely abolished activity that silences the pathway).

The auditory foundation:

- may be considered a form of cognition that reflects an internalized memory of the sounds of speech and the ability to process sensory inputs that are based in sound;
- appears key in predicting the ability to use restored hearing from a cochlear implant to discriminate words declared; and
- may moderate effects that might occur with senescent changes in elderly implant recipients.

These observations are further underscored by assessments of ultimate outcome. Implant recipients report significant satisfaction expressed as improvements in quality of life after receiving a cochlear implant. While some reports indicate that elderly people achieve the same, or nearly the same, level of benefit in speech-recognition as do younger recipients, elderly cochlear implant users may have a slower learning curve.

For people over the age of 70, the cochlear implant may produce, on average, slightly lower speech-recognition scores than younger people. These differences may reflect some limits in processing information that is presented at a rapid rate by the cochlear implant. Fortunately, however, these effects appear to be small.
effectively, the extent to which an individual actually recognizes the hearing loss as a disability varies. This lack of awareness likely reduces the motivation to seek assistance through a device or other hearing care option.

It seems that age affects the perception of the hearing disability. For example, compared with young adults with similar hearing, elderly adults with mild-to-moderate hearing losses report less social and emotional impact of hearing impairment, fewer communication problems, and less demand for communication. Because elderly people often experience a more gradual onset and subtle changes over time and fewer demands in spoken communication, there can be an illusion that the disability of hearing loss is simply unimportant.

Elderly people have different levels of hearing loss. Men of a given age demonstrate significantly more SNHL, especially in the higher frequencies. Ironically, however, men react differently to hearing loss in that they report less hearing disability than women. Surveys indicate that women are often more concerned than men with communicating effectively in social situations. This may result in women being more likely to have been widowed and thus more dependent on social networks.

Men appear to deny experiencing negative reactions to their hearing loss when compared with women; women reported more stress associated with their hearing loss. These factors suggest that some level of denial of the hearing loss operates for many, especially men, and may contribute to the relatively low rate of seeking alternatives.

Unfortunately the decision not to pursue hearing-care options can carry negative consequences. Elderly individuals who could benefit from hearing care have been shown to experience low self-esteem, depression, and a reduced sense of control of their environment. One very unfortunate result of these attitudes is that seniors who are subject to a dim view of hearing devices typically adopt communicatively less-active lifestyles, with isolation as a consequence.

Recent technological developments provide some solutions. As ear-worn devices are now commonplace in transmitting information via the telephone and entertainment devices, hearing aid and cochlear implant transcend no longer appear unusual to the casual observer.

Similarly, high-tech transmission systems can be built directly into behind-the-ear devices that offer telephone contact and access to music. Assistive listening devices, including FM and infrared transmitter systems, offer a cleaner signal and improve speech understanding in challenging listening environments. Transmission technologies can maximize the benefit of hearing aid and cochlear implant technologies.

In a society that marginalizes its seniors, we need to embrace a concept that advancing age remains a time for continued growth and development. Aging successfully is about entering a new stage of adulthood with the tools to negotiate this critical transition. Simply put, successful aging is about using all of life stages to continue to live boldly.

Seniors can use their sight to augment the sound inputs offered by hearing aids and cochlear implants as well. This is key in improving the reception of a spoken message in a challenging listening environment. Closed captioning provides access to the information provided by podium speakers, and from television and other video broadcasts. The text display of the audio portion of the program superimposed on the video can achieve rates of over 140 words per minute—a rate that is highly compatible with natural spoken communication. With closed captioning, difficulties in understanding speakers with accents and rapid speech are averted.

A Critical Concern: Costs
Are hearing devices such as hearing aids and cochlear implants too expensive for what they provide? In answering this question we need to consider the sophistication of circuitry that must be durably enclosed in a very small volume of space to provide reliable hearing gains. A hearing aid must deliver the same fidelity of a stereo system that is infinitely larger.

A cochlear implant must deliver electrical signals that require more intelligent processing with far greater precision than a cardiac pacemaker. Given these requirements, analyses have generally supported current costs of hearing aids and cochlear implants. However, both consumers and health care payers are wary of high reimbursement costs.

Addressing hearing loss in seniors carries costs. The current mindset of insurers and healthcare payers is to generally not provide hearing aid coverage as this would entail “exposure” to the extremely large population of candidates. For severe-to-profound SNHL, insurers will generally sup-
speech information may affect daily life activities. Most important from a public health perspective, we can ask the question of whether addressing a hearing loss affects general health and general levels of quality of life.

**What Can be Gained by Seeking Hearing Care?**

A variety of benefits can be realized if a senior listener obtains effective hearing care. Through the use of hearing aids, adverse effects of intermediate levels of SNHL appear reversible. Hearing aid intervention produced significant improvement in patient-reported scores of social and emotional function (Weinstein 1991), communication, cognition and depression (Mulrow et al., 1990) and, most important, these benefits appear to be sustainable when people consistently use properly fitted hearing aids. The use of amplification has been shown to reduce the perceived impact of the hearing loss in daily communication. An analysis of 36 consumer surveys of hearing aid satisfaction and benefit showed that 31 percent of hearing aid consumers (average age of 69) reported benefit from their hearing aids in noise, and 76 percent report overall benefit with their hearing aids. Greater benefit seems to come when more sophisticated, advanced hearing aids are used.

As mentioned, when a hearing loss is profound (beyond that level treatable with hearing aids), the hearing loss carries marked effects on quality of life. When the profound hearing loss of these seniors was addressed with cochlear implantation, a substantial level of quality of life was reclaimed. A significantly positive relationship was observed between speech recognition scores and improvements in health-related quality of life.

Several other studies of elderly patient groups have examined broader communication and quality-of-life effects of cochlear implantation. General surveys of quality of life, socialization, and confidence demonstrate markedly positive effects in the majority of cochlear implant users. One critical link that persists even in the area of computer-based communications relates to the ability to spontaneously hold a conversation by phone. In fact, most recent surveys indicate that this is achievable by the majority of senior implant users.

Quality-of-life measures which survey mental and emotional health, physical and social function and freedom from burdens associated with (acute and recurrent) illness and chronic disease, show strong improvements associated with cochlear implantation in the majority of implant users. Such gains most likely are a result of improved communication that enables healthier life activities and more effective use of health care systems.

**Conclusions**

In a society that marginalizes its seniors, we need to embrace a concept that advancing age remains a time for continued growth and development. Aging successfully is about entering a new stage of adulthood with the tools to negotiate this critical transition. Simply put, successful aging is about using all of life stages to continue to live boldly. Maintaining social connections is important in providing the stimulation that can support learning, memory, maintaining a vital personality, and continued engagement with society.

An advanced level of hearing loss represents a common and significant disability in seniors. Addressing a hearing loss represents a challenge. But clinical research increasingly underscores the importance of continued engagement with a world of busy communications and social networks, and avoiding the loneliness and boredom of social isolation. Hearing provides a pivotal link in accomplishing this.

Factors such as acoustics and characteristics of a hearing loss affect the ability to understand speech when a hearing loss is present. Unfortunately, factors that undermine effective hearing merge together in settings when we would like hearing to be at its best: when people gather to socialize and exchange new information. Modern hearing technologies are increasingly built to address challenges to hearing in such situations.

Those with SNHL often minimize or even deny the impact of a hearing loss. This can result in unfortunate delays in seeking hearing care. However, evidence suggests that addressing mild-to-moderate hearing loss with hearing aids can promote general health status and psychosocial function. Evidence also suggests that for seniors with an advanced level of hearing loss not correctable by amplification, the level of benefit a senior can expect from a cochlear implant approximates the level observed in younger adults, with significant enhancements of quality of life.

**John K. Niparko,** M.D., is the George T. Nager Professor, Department of Otolaryngology–Head and Neck Surgery and director, Division of Otolaryngology, Neurotology, and Skull Base Surgery, Johns Hopkins Hospital, Baltimore, Maryland.

**Courtney L. Carver,** Au.D., CCC-A, is a cochlear implant audiologist at The Listening Center at Johns Hopkins in Baltimore. She received her Au.D. degree from the University of Florida. She works with adult and pediatric cochlear implant recipients.

---

**We want to hear from you!**

Tell us about your experiences with hearing loss in the workplace and be a part of Hearing Loss Magazine! Author submission guidelines can be found on our website at www.hearingloss.org. For more information, e-mail Editor Barbara Kelley at bkelley@hearingloss.org.
Recapture the joy of hearing with Siemens Tek™

Enjoy the sounds of the season. Connect with all your entertainment and business devices. Turn your hearing instruments into a virtual wireless headset.

Tek™ wireless enhancement allows you to enjoy audio excellence in any situation, whether you’re taking a phone call, listening to the television, a radio, a DVD, or a webcast.

Hear the phone in both ears. The optional Tek enhancement connects to any Bluetooth® wireless technology enabled phone. Leave your cell phone in your pocket and answer calls with one touch of a button on your Siemens Tek Connect remote.

Stream stereo sound from your audio system or MP3 player directly through your hearing instruments. With Tek, nothing gets in the way of enjoying your favorite music.

What you see on the screen is what you hear. Tek delivers sound instantly, in real time, with virtually no delay from your television or computer.

Tek—all that’s needed to enjoy a listening experience that’s completely in sync.

For more information:

Call 1-800-724-1264 or visit www.siemens-hearing.com/hlaa for more details. Or visit your Hearing Care Provider to find out more about Tek® and which Siemens hearing instrument is right for you. No two ears are alike. That’s why Siemens has developed a wide array of products to fit your hearing and lifestyle needs.

*Tek is purchased separately to be used with a compatible Siemens Hearing Instrument.
Pure® is discreet.

Pure is for those who want the ultimate discreet hearing instrument. Yet despite its tiny size, Pure is sophisticated and powerful, with hands-free SoundLearning™ that adjusts automatically to your sound preferences.

Pure is rechargeable and available in a wide array of natural skin colors and hair tones that make it almost invisible, with a top-of-the-line Receiver-in-Canal style.

Life is style.

Life is all about making a statement in style. Life is sleek and smart in an elegant housing and palette of 16 colors and designs.

Life is style and power, with state-of-the-art technology. Life is easy to fit and comfortable to wear. You never have to adjust your style with Life.

Motion™ lets you be yourself.

Comfortable, convenient, and rechargeable, Motion is easy to fit and so fully automatic it takes care of itself; perfect for those who want to live life to its fullest.

Motion’s localization technology ensures a natural hearing experience from any direction, and its smart technology will actually learn your individual sound preferences and adjust automatically. Motion is available in BTE and custom models and looks great in all 14 colors.

Your music.
Your movies.
Your family.
Your friends.
Your shows.
Be one.
Your info.
Your world.

At last, for people who love technology—Siemens Tek® The wireless enhancement that streams audio from MP3 players, Bluetooth® wireless technology enabled phones, TVs, and stereos directly to select Siemens hearing instruments. So you can truly be one with your world.

SIEMENS
By Andrew Bopp

Hearing Industries Association (HIA) is honored to support HLAA and the great work of your staff and dedicated volunteers. We value our partnership with you at the national level and, increasingly, at the chapter level nationwide. We hope that our joint efforts will continue to enhance public policy affecting HLAA members as our members continue to enhance the hearing aids and assistive devices on which so many HLAA members depend.

HIA is the organization that represents virtually all of the companies that manufacture hearing aids, components and hearing aid batteries. HIA member companies invest millions of dollars annually on research to develop new technologies that will enhance the performance of hearing aids for people with hearing loss. Digital technology has provided great benefits for hearing aid users since the mid-1990s, and more recent developments in design and components have provided even more options for people with hearing loss. HIA members are working in all areas of interconnectivity between hearing aids and the ever-increasing array of consumer technologies to provide options for hearing aid users that were undreamed of in the past.

Exploring the Consumer’s Journey
As part of our commitment, HIA, in consultation with HLAA, launched a multi-year project that we call “Exploring the Consumers Journey.” We are deeply grateful to the many HLAA members who shared their experiences with us during in-depth focus groups and online surveys. We learned a great deal, and Carole Rogin, HIA’s executive director, will visit various events during the next year to share the results and gather additional input on enhancing the hearing aid acquisition process.

HIA’s long-standing partnership with HLAA goes back to the early days of the organization. HIA was the first exhibitor to sign up for a booth at the first SHHH Convention (as they were named then) in Chicago in 1984. We are proud to have been part of the program in some way at almost every HLAA Convention since that time, and anticipate continuing that tradition.

Legislation—Working Together
HIA is also proud to work with HLAA staff and chapter members to support initiatives such as the hearing aid tax credit (H.R. 2329/S. 1410). Working as a team, and in cooperation with other groups representing parents of children with hearing loss, dispensers and audiologists, we have generated a tremendous amount of support for this much-needed legislation.

HIA and HLAA members have worked in concert with others including the Alexander Graham Bell Association for the Deaf and Hard of Hearing and the International Hearing Society to hold events for Representatives Mike Thompson in California; Chris Van Hollen in Maryland; Dave Camp in Michigan; Melissa Hart in Pennsylvania; and Nick Lampson in Texas.

In addition, we were pleased to partner with HLAA to host Rep. Dean Heller of Nevada at the HLAA Convention 2008 in Reno. These cooperative efforts have been tremendously successful in focusing legislative attention of the lack of financial assistance for the vast majority of people who need hearing aids.

Working together, HIA and HLAA can truly make a difference, both in Washington, D.C., and in the lives of people with hearing loss. We applaud your organization and appreciate your partnership.

For information about HLAA’s Corporate Membership Program, visit www.hearingloss.org, click on “Membership,” or contact Christopher T. Sutton at csutton@hearingloss.org or 301.657.2248.
Sprint WebCapTel® On the Go!

Click. Listen. Read. Talk.

Mobile. It’s that simple!

www.sprintcaptel.com

Sprint WebCapTel® On the Go! allows you to LISTEN to your caller with one telephone device (wireless or standard telephone) while you READ the captions of everything that is being said on a second wireless device.

Sprint WebCapTel® is now On the Go!

Equipment requirement to use for the Sprint WebCapTel On the Go:

1) To read the captions -
   a wireless device with:
   - Windows Mobile® Version 6 (or higher)
   - Safari®

   Enter the URL address in the internet provider:
   www.sprintcaptel.com

2) To speak and hear your caller on a second phone:
   - cellular phone
   - landline phone

If you need a compatible device, visit
www.sprintrelaystore.com to purchase one today.

For more information:
www.sprintrelay.com/webcaptel_go.htm
By Michael Snyder

Does your phone cord tie you in knots? Do you dream of having the freedom and convenience of a digital cordless phone, but have issues with noise caused by interference when using the device with your hearing aid? Get ready to live the dream.
Last fall, digital cordless telephones that comply with a new standard to reduce noise when used by people with T-Coil-equipped hearing aids or cochlear implants were made available in retail stores nationwide. The boxes for the phones carry a mark so consumers can easily identify the products as “hearing-aid friendly.”

“We’re proud of our contributions to make this technology possible,” said Grant Seiffert, president of the Telecommunications Industry Association (TIA), which coordinated development of the standard for the reduced-noise cordless phones. “At TIA, we’re fully committed to improving lives through innovative technology.”

Developing standards is a familiar process to TIA. “We have dozens of engineering committees and subcommittees with hundreds of members who work on thousands of standards,” said Seiffert. “Industry’s development of this specific standard required a unique alliance with academic researchers from Gallaudet University and hearing loss community advocacy groups, including Hearing Loss Association of America, as well as legislative and regulatory experts working with Congress.”

The Beginnings in 2004

The process began in August 2004 when Linda Kozma-Spytek, a research audiologist at Gallaudet, was invited to a TIA engineering standards committee meeting. Kozma-Spytek had done some preliminary recordings of interference when cordless telephones were used with hearing aids in her research for the Rehabilitation Engineering and Research Center (RERC) on Telecommunications Access and the Technology Access Program at Gallaudet.

At the meeting, Kozma-Spytek gave members of TIA’s TR-41.3 Standards Subcommittee on Analog and Digital Wireline Terminals a recorded audio demonstration on the noise interference. “I got quite a number of comments,” said Kozma-Spytek. The subcommittee had already been engaging in work to reduce the noise, but the demo spurred them to fast-track the project.

Industry’s development of this specific standard required a unique alliance with academic researchers from Gallaudet University and hearing loss community advocacy groups, including Hearing Loss Association of America, as well as legislative and regulatory experts working with Congress.”

—Grant Seiffert, president of the Telecommunications Industry Association

“Linda’s presentation drove home the seriousness of the problem,” said TR-41 User Premises Telecommunications Requirements Committee Chair Steve Whitesell of VTech Communications, a manufacturer of cordless phones. “Manufacturers immediately undertook testing to better understand the source and nature of the interference.”

The TR-41.3.9 working group initiated a new project to develop a standard to establish performance requirements and measurement methods to address the issues of telephone noise related to hearing aids. This working group included TR-41.3 Chair Al Baum of Uniden America Corporation, TR-41.3.9 Chair James Bress of AST Technology Labs, TR-41 Chair Steve Whitesell, and many other members of the TR-41.3 Subcommittee.

Soon thereafter, members of the TIA working group visited Kozma-Spytek at Gallaudet. “We met to talk about how to shape the experiment,” said Kozma-Spytek, noting the value of “industry perspective” to get information to guide the performance requirements and testing methods for the standard.

HLAA Members Part of the Testing

After a significant amount of research and testing by the working group members, the consensus opinion was that magnetic interference was causing the noise. The working group established a testing method to characterize the magnetic interference culminating with round robin tests being made on a number of cordless telephones by three laboratories. The tests were then correlated with Kozma-Spytek’s subjective test results conducted during the 2005 Hearing Loss Association of America (HLAA) Convention.

Additional performance requirements were added, which led to further testing to help quantify the signal-to-noise ratios needed by hearing aid users employing T-coil coupling from cordless telephones. A collaborative study was conducted by Gallaudet University, Etymotic Research, and Motorola during the 2006 HLAA Convention.

The Results

The resulting standard—TIA-1083 Telecommunications Telephone Terminal Equipment Handset Magnetic Measurement Procedures and Performance Requirements—was published in 2007. Demonstrations of new TIA-1083 compliant cordless telephones were held at the HLAA Convention in Reno in June 2008. Al Baum described the reaction to the demos: “Typically when someone who has previously experienced interference with their hearing aid or cochlear implant listens to a TIA-1083 compliant phone, they are quite surprised and quite pleased with the performance.” The 2008 HLAA Convention was also used as an opportunity to educate consumers and promote the TIA-1083 logo to facilitate finding a compliant phone in retail stores.

Baum said working on the standard was motivational. “I learned a lot about the unique needs and concerns of people who are hard of hearing. I found it quite rewarding to see the positive impact the result of our work has on so many people’s daily lives.”

“I would say that those of us who were directly involved in the development of TIA-1083 were all very involved and passionate about the project,” said Whitesell.

continued on page 26
Kozma-Spytek, who began her career as a teacher of deaf people, praised the joint effort and sharing of expertise in developing the standard. She called the TIA committee members “a really knowledgeable group of individuals. They were always engaged and always followed through.” Even after working for the past 10 years as a researcher in telecommunications for the hearing-loss community, she acknowledged that there was a “steep learning curve” when the project began, “but with industry contacts like Al [Baum] and Steve [Whitesell] and Jim [Bress], they really teach you a lot. It’s a really nice collaboration.”

Kozma-Spytek said she called in to every working group meeting, and facilitated hearing aid manufacturer Starkey’s participation to add their perspectives to the standard’s development.

In addition to HLAA and Gallaudet, TIA works with other groups in support of initiatives to help those with hearing loss, including: Telecommunications and Electronic and Information Technology Advisory Committee (TEITAC), the National Association for Deaf, the U.S. Access Board, and the Federal Communications Commission (FCC).

In May, TIA also co-hosted an Accessible Technology Fair on Capitol Hill with the Consumer Electronics Association (CEA), the Cellular Telecommunication and Information Association (CTIA) and the Information Technology Industry Council (ITIC). Nearly 20 companies showcased a variety of accessible services and technologies used to improve the lives of people living with disabilities. The Tech Fair was attended by Rep. Ed Markey, Chairman of the House Subcommittee on Telecommunications and the Internet, and gave members of Congress and their staffs, as well as representatives from the disabled community, the opportunity to understand and evaluate accessible technology products, features and applications available today.

“With forward to continuing to team up with all who share our goals of helping people with disabilities through accessible technology,” said Seiffert.

Manufacturers Panasonic, Uniden and VTech are each licensed to place the new TIA mark which helps identify a product as “hearing-aid friendly” on their TIA-1083 compliant products. Other manufacturers are encouraged to contact TIA for more information about obtaining a license to carry the mark: TIA, 2500 Wilson Blvd., Ste. 300, Arlington, VA 22201; +1.703-907-7700; www.tiaonline.org.

About TIA
Currently in its 84th year, the Telecommunications Industry Association (TIA) represents the global information and communications technology (ICT) industry through standards development, advocacy, business opportunities, market intelligence and worldwide environmental regulatory analysis. Thousands of companies and individuals work through TIA to enhance the business environment for telecommunications, broadband, mobile wireless, information technology, networks, cable, satellite, unified communications, emergency communications and the greening of technology. TIA is accredited by the American National Standards Institute (ANSI). Visit www.tiaonline.org for details.

Michael Snyder is public relations manager for the Telecommunications Industry Association (TIA), the leader in advocacy, standards development, business development and intelligence for the information and communications technology (ICT) industry. He is a former journalist who worked most recently at washingtonpost.com and at The Chronicle of Higher Education.
How are you protecting your Investment?

www.dryandstore.com  800.327.8547

Better hearing through Better hearing aid care.

Introducing the Free Spirit Bluetooth® Headset

Hearing aid wearers can now experience CD quality stereo sound with the Free Spirit Bluetooth® Headset with DAI. Know who’s calling with Caller ID and easily reject, redial or end calls with the press of a button.

HARRIS COMMUNICATIONS
www.harriscomm.com
(800) 825-6758

Our new 2009 catalog is here! Request a free copy today.

Sign up for our email newsletter to receive updates on many new products and specials!

Better hearing through Better hearing aid care.

Teltex
Helping People Access Tomorrow’s Technology Today

Membership with Benefits
Provide your membership number when purchasing ANY item and receive a 25% Discount Exclusively for HLAA Members. Plus, an additional 10% is donated to Hearing Loss Association of America.

New Personal Amplifier from Sweden
Bellman® Audio Maxi is a revolutionary communication aid that uses digital state-of-the-art technology to bring out speech and music in difficult listening situations. The outstanding sound quality of the Maxi delivers the clear and crisp digital sound you deserve and has extremely low case noise.

The Maxi was developed especially for people who prefer an easy-to-use device with large tactile controls and clear indications.

Visit us on the web at www.teltex.com and request a FREE Full Line Catalog. Subscribe to our FREE Hearing Helpline Newsletter for more specials, product updates & FREE offers.

(888) 515-8120 Voice/TTY • www.Teltex.com

Use discount coupon code HLAA-25 when ordering online.

Member Price
$119.95

Personal Listening Device with Headset

Save 25% On Any Item + 10% Donated On All Sales
"Nothing About Us, Without Us"
A Worldwide View of the Hearing Loss Community

The Hearing Loss Association of America is one of 50 members of the International Federation of Hard of Hearing People. Marcia Dugan, a past president of IFHOH and an HLAA member, gives a worldwide view.
On December 13, 2006 the United Nations General Assembly adopted the Convention on Rights of Persons with Disabilities (CRPD), a binding human rights treaty that surpasses in significance and importance all previous such instruments. The signing of this most comprehensive civil rights document for people with disabilities followed four years of negotiations by the 191 member States of the United Nations (UN) and representatives from more than 100 non-governmental disability organizations worldwide during eight ad hoc committee (AHC) meetings in New York.

The AHC, established in 2001 as a subsidiary body of the United Nations General Assembly, held its first session in August 2002. Its task was dealing exclusively with the elaboration of the new convention on the rights of persons with disabilities. The resulting document was a response to the fact that although pre-existing human rights conventions offered considerable potential to promote and protect the rights of more than 650 million persons with disabilities in theory, they did not do so in practice. Persons with disabilities continued to be denied their human rights and were kept on the margins of society in all parts of the world.

The Convention sets out the legal obligations on States to promote and protect the rights of persons with disabilities. It does not create new rights but reinforces already existing rights.

World Responses
A little more than a year later, on March 30, 2008, the Convention and Optional Protocol (relates to how individuals or groups can seek redress for violations of the CRPD once national remedies are exhausted) authorizing individual complaints was opened for signatures and ratification.

Jamaica was the first country to sign. As of October 1, 2008, 136 countries have signed the Convention. Seventy-nine have signed the Optional Protocol, 41 States have ratified the treaty, and 25 States have ratified the Protocol.

While the international community has stepped up its level of commitment, the United States has not ratified. I don’t think we are at all close. It is going to be difficult in many ways, but one of the priorities is for the campaign for ratification to emphasize human rights of persons with disabilities in the United States rather than access.

The Convention sets out the legal obligations on States to promote and protect the rights of persons with disabilities. It does not create new rights but reinforces already existing rights.

I was in Panama in May 2007 for a meeting celebrating the opening of the Decade of the Americas for Persons with Disabilities. Panama has played a significant role in the Latin American Network of Non-Governmental Organizations (NGOs) of Peoples with Disabilities and their Families (RIADIS).

By April 3, 2008, the required 20 nations had ratified enabling the Convention to “enter into force” on May 3, 2008.

The CRPD
The CRPD is comprised of 41 articles that promote and protect the rights of people with disabilities in all aspects of life. It deals with a huge number of issues from non-discrimination to health, education, liberty, mobility, work, recreation, political participation to healthcare and access.

Inherent throughout is the fact that the universal definition and understanding of disability has rightfully moved from being merely medical to a human rights framework, and heralds a paradigm shift from charity to a rights-based approach.

Of particular interest to HLAA are articles 9 and 21 (Access and Access to Information). It is estimated that at least 70 member states do not have any access-related legislation and fewer than 10 of the 191 UN members have English as a first language.

CPRD Access Terms for Hard of Hearing People
Terms such as “design for all, barrier-free design, universal design, accessible design and inclusive design” are used throughout the articles and are often vague or misunderstood. There are many references to sign language interpreters and Braille, but the needs of hard of hearing people are rarely spelled out.

That is why the proposal that we worked on zealously was the one offered by the All Japan Association of Hard of Hearing People (ZENNANCHO), one of the IFHOH member organizations. It included the following requests in order to have a barrier-free enabling environment: Inclusion of text information and speech-to-text interpretation, inclusion of adequate hearing assistive devices such as induction loops and FM and infrared systems, and inclusion of lip-reading education.

By introducing these access needs of hard of hearing people, ZENNANCHO created awareness, and was the voice of IFHOH.

Access Demonstrations/Inclusion
In an effort to show the UN powers what true access for hard of hearing people is, IFHOH and our Japanese organization planned a side event at the final AHC meeting where CART was demonstrated in English and Japanese. We hoped the audience realized that CART would not only...
help people with hearing loss, but it also would be extremely helpful for people for whom English was not a first language.

I also was pleased that the draft of Article 21 (Access to Information), recommended that State parties to the Convention should take measures to “provide, maintain, and publicize the range of services and appropriate assistive technology used by and available to meet the access requirements of persons with disabilities; including sign language and speech-to-text interpreters, Braille and tactile signage, alternative augmentation communicative assistants, personal support services, live assistance, intermediaries, guides, readers, and effective methods of making oral communication available to people who are hard of hearing.”

The International Disability Alliance (IDA)
The most powerful voice during the negotiations was the IDA, a coalition of international disability organizations. Founded in 1999, it included the eight organizations of and for people with disabilities including IFHOH.

Even the IDA, whose member organizations are greatly concerned and knowledgeable about disabilities, had much to learn about communication access for people who are hard of hearing. In addition to accommodating the variety of disabilities among the participants at meetings, language interpreters were also needed, but not present, to assist one man who spoke only French and another woman who spoke only Spanish.

In order for the first meeting to be accessible for me, I used my FM receiver and transmitter. The transmitter was moved by an aide together with a system used by two hard of hearing and blind IDA members. No one spoke unless each person had all assistive devices in their hand.

Since then, with the help of Joe Gordon, HLAA member from New York City, the IDA secretariat purchased an FM system that not only benefited me but also two members of the World Federation of the DeafBlind.

The IDA CPRD Forum
During the negotiations, the IDA together with numerous other non-international disability organizations formed an International Disability Caucus (IDC) that worked extremely well in coordinating their positions during the negotiations. With the passage of the CRPD, IDA launched the IDA CRPD Forum, which will serve as a vital network to give persons with disabilities a renewed unified voice.

The IDA Forum will explore ways in which organizations can work together to promote law, policies and programs that fully take advantage this new powerful legal instrument upholding their rights. The Forum will be open to all civil society organizations that support the criteria set up by the Forum Steering Committee including the leadership of organizations of persons with disabilities, in the spirit of the motto “Nothing about us, without us.”

What Next?
The provisions of the Convention now need to be transformed into policies, programs, and practices that will have a real impact on the lives of persons with disabilities.

Each nation must immediately bring its laws into harmony with the Convention, and take pragmatic steps to implement the laws in ways that will improve the day-to-day lives of persons with disabilities.

It will be vital to ensure that persons with disabilities at national, regional, and international levels; representatives of our diverse constituencies, and allied NGOs such as development and human rights organizations, act in a coordinated way.

If the convention is really going to have an impact, the disability movement needs to engage actively and in a coordinated way in all the stages of implementation and monitoring.

Monitoring has already begun. A global survey to assess the extent of government implementation of actions leading to the achievement of full and equal rights of persons with disabilities was instigated by the UN Special Rapporteur (Reporter), Sheikha Hissa al Thani of Qatar. Both governments and disabled persons organizations were respondents to the same set of questions, which made it a tool for gathering information and validating it at the same time. There were 114 countries out of 191 who responded.

In March 2008, I attended the International Symposium on Information, Statistics and Research in Disability in Amman, Jordan. The survey is currently being updated and I was happy to learn after I noticed the absence of questions related to hearing loss among hard of hearing people, that the new survey will include questions related to hearing loss and access for hard of hearing persons.

Will the convention make a difference? Probably not in the immediate future in the poorest countries, where law reform alone will not bring about change. Eighty percent of people with disabilities live in developing countries, often times facing extreme poverty and social exclusion, particularly in rural and indigenous areas. In addition, putting some of the provisions of the Convention into practice can be costly. This will be difficult for developing countries.

But no matter how difficult, we must continue to move with determination from an inspired document to improving the lives of persons with disabilities all over the world.

Marcia B. Dugan
is immediate past president of the International Federation of Hard of Hearing People, a past president of the Hearing Loss Association of America National Board of Trustees, and a past president the HLAA Rochester Chapter. She served on the board of HLAA–New York State. A former director of public affairs at the National Technical Institute for the Deaf at RIT in Rochester, she is the author of Living with Hearing Loss, released by Gallaudet University Press in 2003.

Marcia B. Dugan

Dugan
Definitions for “Nothing About Us, Without Us”

**CART:** Computer Assisted Real-Time Translation (captioning)

**CRPD:** Convention on Rights of Persons with Disabilities

**IDC:** International Disability Caucus

**IDA:** The International Disability Alliance—Formed in 1999, a strong coalition of ten international and regional organizations of and for people with disabilities representing 650 million people with disabilities worldwide:
- Disabled Peoples’ International
- Inclusion International
- International Federation of Hard of Hearing People (of which Hearing Loss Association of America is a member)
- Rehabilitation International; World Blind Union
- World Federation of the Deaf
- World Federation of the Deaf-Blind
- World Network of Users and Survivors of Psychiatry
- Two regional organizations, the European Disability Forum (EDF) and the Arab Organization of Disabled People (AODP) became members in 2008.

**IFHOH:** International Federation of Hard of Hearing People: A coalition of national associations of and for hard of hearing and late deafened people. IFHOH was organized 1977, and currently has 50 general and associate members in 32 countries

**NGOs:** Non-Governmental Organizations

**States:** Used at the United Nations to designate countries

**UN:** United Nations

**ZENNANCHO:** All Japan Association of Hard of Hearing People

---

**We Are Family!**

Hearing loss doesn’t just affect the person who has it but also friends and family. If you would like to tell us about how you deal with hearing loss in your family (you can have a hearing loss or be a hearing person), please send us your story. Send 500 words or less in Word doc to Editor Barbara Kelley at bkelley@hearingloss.org. Include a color photo (you or your family) in high resolution jpg format with a caption.

---

**ALL YOU NEED IS A T-COIL EQUIPPED HEARING AID**

**GET IN THE LOOP**

*Wireless Hearing Solutions*

...completing the hearing aid experience

**InLoop Winter Special**

Only $225 until March - $320 value

**EASY TO INSTALL - Velcro the microphone on the TV speaker and sit on the chair pad.**

www.inLoop.tv
Hearing Loss Association of America has touched many lives over these 30 years. Whether under our former name of SHHH or our current name of HLAA, we’ve had the opportunity to talk to you and learn from you. We’ve surveyed you at our conventions, in the mail, and online. We’ve listened as you’ve told us what you think are your challenges and heard your ideas. We dreamed with you as you told us the kinds of technology that would make you feel like a full participant in life. And we’ve worked hard to bring those dreams to life.

Work Done at HLAA National Office

One way we can see some of these dreams become reality is through strong advocacy. Simply put, advocacy is the process of making a case for a specific cause for legislation and/or encouraging groups to take action. In our case, the advocacy work has been done on behalf of people with hearing loss.

HLAA has supported strong national advocacy since its early days. The advocacy coming out of this office has resulted in real change for all people with hearing loss. Before Brenda Battat moved into her current position as executive director, she spent endless hours on Capitol Hill, in the halls of legislators, at meetings with an assortment of industry representatives, and with several different coalitions to see to it that the interests of people with hearing loss were represented.

HLAA has supported strong national advocacy since its early days. The advocacy coming out of this office has resulted in real change for people with hearing loss. Before Brenda Battat moved into her current position as executive director, she spent endless hours on Capitol Hill, in the halls of legislators, at meetings with an assortment of industry representatives, and with several different coalitions to see to it that the interests of people with hearing loss were represented.

By Lise Hamlin

Advocacy: 30 Years of Working for You

Hearing Loss Association of America’s 30th birthday is this year. It’s a good time to look back and take stock, see where we’ve been, and where we’re going.

Landline Phones

Does your phone at work have a telecoil? Can you control the volume? If your answer is yes, you are enjoying the results of years of hard work by this organization. HLAA, as well as other advocates, pushed hard to ensure the Hearing Aid Compatibility Act (HAC) of 1988 resulted in real change for people with hearing loss.

The Act requires all new telephones to be HAC after August 1989. However, even after the law was passed, the phone industry was not pleased about putting telecoils in all phones. When it became clear that industry was resistant to making all phones hearing aid compatible, HLAA and long-time advocate Joe Gordon worked with industry to set requirements that would allow a longer timeline for HAC phones to be in place, but in exchange those phones would include a volume control feature. So the next time you use the telecoil or volume control on your phone, think of HLAA.

Cell Phones

Long before many of us ever even considered owning a cell phone HLAA was working on the front lines to ensure cell phones sold in the United States were hearing aid compatible. As far back as 1994, HLAA raised the issue and started working to change the HAC rules that specifically excluded cell phones. After many long years of work, in 2001, the FCC concluded that it would be in the public interest to extend the HAC Act to include wireless communication. That would not have happened if HLAA and other advocates had not been knocking on the door of the FCC for all those years. Next time you reach for your cell phone, think of HLAA.

Captioning

Have you seen any good captioned television recently? Remember when you had to buy a closed-captioned decoder to get the few programs that had captions? According to Karen Strauss’ book, A New Civil Right: Telecommunications Equality for Deaf and Hard of Hearing Americans, at a hearing before Congress in 1990, Founder Rocky Stone told the story of a 79-year-old who paid $98 to two separate service men, neither of whom could figure out how to connect the caption decoder to both the VCR and cable box so it would all work together.

Those types of stories and the strong advocacy of HLAA and others pushed the Decoder Circuitry Act forward. That Act provided for computer chips that decode captions to be installed in every television larger than 13 inches. With the passage of that law, we no longer need that...
clunky caption decoder box on top. Caption-ing became suddenly available to everyone. Advocates followed that up by working to ensure that more captioned programming would be seen on those sets with decoder chips. With the Telecommunications Act of 1996 and the rules set by the Federal Communications Commission, advocates again saw their cause advanced: the final rules mandated all non-exempt programming to be 100 percent captioned by 2006. So, the next time you watch a captioned program on your television, think of HLAA.

“The Future Ain’t What it Used to Be” (Yogi Berra)
HLAA has worked hard on these and many other issues. We’d love to be able to rest on our laurels, but there’s no time for that. With the movement toward Internet-based information technology, the old rules are becoming less and less applicable. When you download TV onto your computer, do you get the captions that were there when it was broadcast? What will happen to your TV in February, 2009 when the Digital TV transition takes place? What happens now with captions on your HDTV? Will the cell phones you now depend on continue to be hearing aid compatible as they venture into 4G—or other technology we can’t even imagine today?

As long as HLAA is here, we will continue to work for improvements in the lives of people with hearing loss at home, at work, and at play. Whether it’s working to ensure that they have access to emerging technology, access to the movies or plays, access at the football game, accommodations in the workplace, or the information they need in an emergency, we’ll be here to see them through it.

Lise Hamlin is director of public policy and state development, joining the staff last year after being a long-time advocate and HLAA Board member. She worked at the League for the Hard of Hearing and most recently at the Northern Virginia Resource Center for Deaf and Hard of Hearing Persons. Lise lives in Rockville, Maryland, and can be reached at lhamlin@ hearingloss.org.
Thank You to the 2008 Walk4Hearing Sponsors Coast to Coast

The Walk4Hearing is a nationwide collaborative walk program produced by the Hearing Loss Association of America, with the goal of raising awareness and generating funds for national and local programs and services for people with hearing loss and their families. HLAA Chapters are involved at the local level to organize walks and to put monies raised toward programs in their communities.

The 2008 Walk4Hearing was held in 17 cities with an estimated 4,000 participants. Thank you to sponsors, volunteers and walkers.

National Sponsors

Advanced Bionics
Aetna
T-Mobile
Phonak
Sorenson SIPRelay

Local Sponsors

Accessible Signs
Advanced Hearing Centers
Advanced Hearing Systems
AG Bell
All About Hearing
Allen Carter
Allison Audiology
Amy Beckett
Anthony Lentine, DDS
Arminda Tolentino
ASL Interpreter Referral Service, Inc.
Audio Accoustic Hearing Centers, Inc.
Audiology Professionals
AVA Hearing Center
Balance Diagnostic
Bank of America
Bataille Architecture & Planning
Best Buy Children’s Foundation
Tag Team Award
Beth Wilson
Botz Deal Company
Boulder Roofing
Brown and Brown Insurance
Brown Shoe Company
Brown-Howlett Hearing Aid Services
Budget Blinds
Buttonwood Press
Buzz and Betsy Hurt
C2 Media.com
Calibre Financial Services
California Ear Institute
Canandaigua National Bank & Trust
Canteen Services
Capurro Contracting, Inc.
Castle Insurance
Catholic Healthcare West
CSDVRS
Center for Better Hearing Aids
Center for Hearing & Speech
Center for Hearing and Balance Disorders
CGI Federal
Chelsea Moving and Storage
Children’s Hearing Institute
Children’s Memorial Hospital
Childs Voice
Christian Blue Pages
Clover Capital
Cochlear Americas
Communication Axess Ability Group (CAAG)
Complex Community Federal Credit Union
Conoco Phillips Company
D. David Loder, DDS
David and Lisa Seidner
David Mason, Ph.D.
DCARA Org.
DEAFund
Ditzler & Company
Dynamic Audiology
EMF Electric
Energizer Corporation
ENT and Allergy Associates
Epstein and Wengert Foundation
Farrior Ear Clinic
Fire & Ice Heating and Air Conditioning

Florida Coordinator Council for the Deaf and Hard of Hearing
Foundation Key Bank
Franklin Heating & Refrigeration, Inc.
G. Fried Flooring
Gannon Properties
Georgia Academy of Audiology
Georgia and Howard Potnude
Hamilton Relay
Hands on Video Relay
HARC Mercantile, LTD.
Harris Communication
Hear for You
Hear USA
HEARx
Hearing Center of Excellence
Hearing Services & Systems
Hearing Solutions
Hearing Systems
Hearing & Speech Center–Northern CA
HeartUSA/HEARx
Henry Ford Hospital
Hillcrest Hearing Aids (Kooser Program)
Hilliard Rotary
HLA – Illinois Cochlear Implant Chapter
HLA – San Francisco Chapter
HLAA Texas State Office
Hochberg Family Foundation
Howard Lowery, M.D.
Hug Center for Hearing
Illinois Academy of Audiology
Impulse Electric
Interpretype
ITT Gould Pumps
J & R Music and Computer World
Jacques Herzog
Jeanette Voight
Jerry Lancaster
JFK Audiology
Joe Gordon
Joel and Lynn Rousseau
JP Morgan Chase
Kaczmarski Hearing Services
Kaiser Permanente
Karen Ratner
Kate Schwerin and family
Kathy and Tom Borzell
Kathy’s Cleaning Service
Keith Golden
Key Bank
Knapp Hearing Aids
Konar Properties
Landow and Co.
Lawrence Hasara
Let Them Hear Foundation
Lifespan
Lockton Companies
Luebbe Hearing Services
M & J Contracting, LLC
Maco Group
Manning and Napier
Marcia Dugan
Marilyn Knol
Mark and Bobbie Hargrave
Mary Dopico Reporting Services
Maryland Relay
Maryrose McInerney
January/February 2009 35

MASS Commission for Deaf and Hard of Hearing
Maurice Wilson
McAuliffe Chiropractic
Mediating Issues
Medical Center Hospital
Melissa DeMong
Methodist Elder Care Services
Metro Health Hospital
Meyer and Associates
Michael An
Michael Greene
Mill Neck Family of Organizations
Millbrea Lock
Miller Leaman
Mobile Ear
Morgan Keegan
Mountain Ocean
Nan Johnson
New Jersey Relay
New York Relay Service
Noridian Capital Management
Northeastern Technologies Group, Inc.
Northwestern Cochlear Implant Program
NTID
NVRC Northern Virginia Resource Center
Ohio Academy of Audiology
Ohio State University Speech-Language-Hearing Clinic
Ontario Hearing
Oticon
Pacific Dream Home Builders
Pacific Hearing Services
Pat and Bob Young
Paul Johnson
Personalized Hearing Care, Inc.
Pete Facikler
Phyllis MacDonald
PLP Companies/Kleiman Family
Premium Hearing Solutions
Premovation
Principled Real Estate
Ray and Ginny Koenig
Raymond Allen
Raytheon Company
Regal Cinemas
Relay Colorado
Relay Missouri
Resound US
Richard Porras Painting & Restoration, Inc.
Richter + Ratner
Riverdale Kiwanis Club
Robert Case, M.D.
Roger Traxel, M.D.
Rosemary and Jim Tuie
Roy D. Belk, CPA
Royal Cabinetry & Design, Inc
S & H Auto Services, Inc.
SafeCall
Schiff Hardin LLP
sComm
SDG Security
Sequoia Hospital
Shawn Key, Au.D.
Shen Milson & Wilke
Shepard Schwartz and Harris LLP
Shores Financial Service
Signa-Aldrich
Silverstein Institute
Sonus Hearing care Professionals
Sound Advice
Sprint Relay
SSM St. Joseph Health Centers
St. Dominic’s Deaf Center
Starkey Labs, Inc
StreetScape Magazine
Sue and Scott Miller
Supermarkets Publix
Sweatband
Tema Oil & Gas Company
Teri and Ray Wathen
The Bank of Tampa
The Downing McGrath Group
The Ear Center
The Hearing Clinic
The Pope Family
The Ruth Becker Foundation
for Deaf Support
Theatre Development Fund
Thrivent Financial for Lutherns
T-Pittman Construction
Triple M Oil Tool
Truckloads Fireworks
UBS
Uccelli Foundation
Ultrade, Inc.
United Bank
University of Florida
University of Illinois at Chicago
VanB Enterprises
VDDHH Virginia Dept. for the Deaf and Hard of Hearing
Wachovia Securities
Walgreens Co.
Walker Systems
Wesley Glen
West Michigan Hearing
Widex Hearing
Wiedman, Vazzana, Corcoran & Volta PC
Worthington Women’s Club
Zounds, Inc.

AMERICAN ACADEMY OF HEARING LOSS SUPPORT SPECIALISTS

The Academy has created an affordable online, self-paced, distance learning program for adults that focuses on the biological, medical, psychological, and social aspects of hearing loss. The broad curriculum has been developed by HLAA professional staff, members of the Academy Advisory Board, and other leaders in the hearing health professions. It consists of 4 online courses that focus on these topics:

- Introduction to Hearing Loss
- Coping with Hearing Loss
- Hearing Assistive Technology
- Advocacy Resources and the Law

Opening Doors, Changing Lives
To register and for more information, visit our website at www.hearingloss.org

Building Knowledge to Better Serve People with Hearing Loss…

The Academy is now accredited by the National Association of Social Workers and the Commission on Rehabilitation Counselors.

January/February 2009 35
For more information about HLAA Convention 2009, visit www.hearingloss.org or e-mail Nancy Macklin, director of events, at nmacklin@hearingloss.org.
Whether This is Your First or Your 24th Convention, Get Set to be Amazed and Exhilarated!

HLAA Convention 2009 will be one for the history books as we celebrate 30 years of extraordinary accomplishments. You are invited to share the excitement of our achievements while we look forward with anticipation to the challenges and triumphs of the future.

Chief Google Evangelist
Following the Exhibit Hall Grand Opening on Thursday, June 18, 2009, Vinton Cerf, Ph.D., will be the keynote speaker at the Opening Session. Dr. Cerf, widely known as one of the “Fathers of the Internet,” will speak about technology and hearing assistance including the role of mobile, Internet-enabled devices.

Educational Sessions
Communication accessible workshops begin Thursday afternoon, June 18, 2009 and continue through Saturday afternoon (except Friday morning), including an educational track especially for young adults. From advocacy to technology, you’ll be sure to find a myriad of workshops of interest to you.

Research Symposium—You Won’t Want to Miss This One
The Deafness Research Foundation is sponsoring the research symposium on Friday morning, June 19, 2009, entitled An Update on the Latest in Hair Cell Regeneration Research. Scientists from across the United States will be on hand to present their latest findings.

A Night at the Opry
A trip to Nashville would not be complete without a visit to the Grand Ole Opry for a communication accessible performance on Saturday, June 20, 2009. Strap on your cowboy boots for a memorable night of fun, friends and music! Did you know that the Opry began as a radio broadcast in 1925 and is the longest-running radio show in history?

Convention Hotel
The Gaylord Opryland Resort & Convention Center boasts nine acres of indoor gardens, waterfalls and an indoor river complete with its own flatboat. It is located just minutes from the airport and a short drive to the infamous honky-tonks in downtown Nashville.

For more information about the Gaylord Opryland Resort and a link to the reservation system, go to our website at www.hearingloss.org and click on Convention. See you at the Gaylord Opryland Resort & Convention Center, June 18–21, 2009!

Believe It or Not…
There is a handful of members who have 23 conventions under their belt—every one since 1984! For those of you making mental calculations, the first three conventions were in 1984, 1986, and 1988, and annually thereafter.
Are you looking for mutual support and information about hearing loss? Hearing Loss Association of America has more than 200 chapters and 14 state organizations. For a chapter near you, go to www.hearingloss.org.

Share your good news. If you have news about what is happening in chapters or state organizations, send 400 or less words and JPG photos (300 dpi) to Editor Barbara Kelley at bkelley@hearingloss.org.

Albuquerque Chapter Participates in Training Conference

Dr. Norm Dawson, HLA-Albuquerque Chapter (HLAAabq) president, was among an impressive list of speakers at a three-day workshop in Albuquerque organized and conducted by the New Mexico Commission for Deaf and Hard of Hearing Persons. The conference, Hard of Hearing Training for Professionals, was designed to give people who work with hard of hearing clients the knowledge and tools to do so.

Presenters included psychologist Sam Trychin, Ph.D., as well as experts on cochlear implants, assistive devices, telecommunications services, hearing aids, audiology basics. Christopher Sutton, director of development and education from the national Hearing Loss Association office, was also a presenter. In attendance were counselors from the Division of Vocational Rehabilitation (DVR), independent living agencies, educators, hearing care providers, and others from New Mexico, Arizona and Colorado.

An exhibit hall gave attendees an opportunity to see and try various assistive devices and get information on technology and services available to their hard of hearing clients. HLAAabq had a booth packed with material explaining what HLAA does on both the local and national levels to provide advocacy and support to people who are hard of hearing. Chris Addis, Vivian Boyle, Norm Dawson, Steve Frazier, Rosemarie Rodriguez and Eleanor Strout each volunteered a half day to staff the booth and spread the word about our organization.

New Jersey Reports on Relay Conference Captioning

Arleen Romoff asks: Do You Know About This Useful Relay Service?

As president of the HLA-New Jersey state association, and co-coordinator of the Bergen County Chapter, it’s no surprise that I knew about Sprint Relay Conference Captioning (RCC), a provision of our state’s Relay contract that provides for real-time captioning of conference calls, free of charge to New Jersey residents. I’d never had the chance to use RCC myself, though, until recently.

I had a board meeting for the League for the Hard of Hearing, via conference call, so this was my opportunity to try it. I wanted to be able to concentrate on the issues at the meeting—not just the words—and this would be easier to do if I listened while following the captions. I accessed the RCC website at www.njrelaycc.com and scheduled the conference call 48 hours in advance. After I entered the conference call phone number and access number, I received a confirmation number. On the day of the meeting, I logged onto that website again, entered my confirmation number, and a screen popped up, with a captioner ready to caption my meeting!

I also dialed the conference call number using my own phone and supplied the access number so I could hear the conference attendees, and speak directly at the meeting.

The text was provided via remote CART captioning, appearing on my computer. I sat at my computer, listened to the meeting by phone with this wonderful captioning “safety net” catching any words I missed. This allowed me to concentrate on the issues. I could participate fully, adding my own comments appropriately.

At the end of the meeting, I had the option of saving the transcript. I was so delighted with RCC, I immediately wanted to tell everyone about it! Now you know about this outstanding service, too—and will surely want to include it in your state’s Relay contract. More information is at: http://www.sprintrelay.com/relay_conference_captioning.htm.

Arleen Romoff is author of HEAR AGAIN—Back to Life with a Cochlear Implant.

Joan Andrews Scholarship Available to Hearing Loss Association of Florida Members

The Hearing Loss Association of Florida announces the first “Joan Andrews Scholarship.” Joan Andrews, former president of the Florida Association of Self Help for Hard of Hearing People, now known as the Hearing Loss Association of Florida, worked tirelessly to improve the quality of life for individuals with hearing loss.

The scholarship will be awarded to an individual who demonstrates in writing (by completion of the application process) a sincere educational interest in and commitment to sharing the mission of the Hearing Loss Association with others affected by hearing loss. The selection committee will give priority consideration to an applicant who meets all the criteria as set forth in the application process and who cannot afford to attend the HLAA con-
vention without the assistance of this scholarship.

Scholarship description: The scholarship will entitle the winner to a registration to the Hearing Loss Association of America Convention in Nashville, TN, June 18-21, 2009. The scholarship will also include a room at the convention hotel for three nights and round trip airfare or automobile travel expense between Florida and Nashville. The maximum value of the scholarship is $1,200. The winner is responsible for making all travel, hotel and convention registration arrangements.

Eligibility: An applicant must be a Florida resident and member in good standing of the Hearing Loss Association of America. Current members of the HLA-FL Board of Trustees are not eligible.

The deadline for receipt by HLA-FL of the completed application is March 31, 2009. For more information and/or to receive an application, please contact Kathy Borzell, Scholarship Committee, kborzell@verizon.net or call 813-298-6380.
Can you hear speech but not understand what people are saying?

Have you tried hearing aids only to find that everything is too loud and you still can’t understand speech?

Have you been told that you have a “ski-slope” hearing loss?

You may be a candidate for a clinical trial* with MED-EL!

Combined Electric and Acoustic Stimulation (EAS), the concept of integrating a hearing aid and cochlear implant technology in the same ear, may be an ideal solution for individuals (ages 18-70) with high frequency hearing loss who have residual low frequency hearing. Contact MED-EL at 1-888-633-3524 or via email at adminresearch@medelus.com to inquire about opportunities to improve your hearing!

* CAUTION: EAS is an Investigational Device. Limited by Federal law to investigational use in the USA.

The Hearing Implant Company

HEARING IMPLANTS • MIDDLE EAR IMPLANTS
TOLL FREE (888) MEDEL-CI (633-3524) • V/TDD PHONE (919) 572-2222 • www.medel.com

“WOW! I can finally hear what I’ve been missing!”

“I used to have to strain to hear TV, turning the volume WAY up and still not fully understanding it. Not any more! Since I got my Sennheiser Set 820 wireless listening system I hear clearly at a volume that is comfortable for me, without disturbing those around me. Thanks, Sennheiser!”

• Works with any TV or stereo system!
• Two year warranty!
• 30-day worry-free money back guarantee!

Discover True Sound

Call 800-726-0851 or Local: 303-794-3928 to learn more!
HLAA’s New Initiative for People Ages 18-35 with Hearing Loss

HearingLossNation is a non-profit online community designed specifically for hard of hearing individuals between the ages of 18 and 35.

Go to www.hearingloss.org and click on HearingLossNation on the home page.
A Day in the Life

By Marilyn Devine

Waking Up with a Cochlear Implant

I wake up every morning in a totally silent room with gray walls, white woodwork, and a wide expanse of bay windows overlooking my tree-lined street. A huge white kimono serves as my headboard, sharply defined against the darkness of the wall.

Noiselessly, my feet hit the floor as I get out of bed. I quickly walk into the bathroom, not hearing my feet hit the floor, nor the sharp “click!” as the door locks behind me.

Turning on the polished chrome faucet, I watch the water rushing silently into the white pedestal sink. After brushing my teeth, I step into the shower. While I feel the force of the hot water streaming down my face and chest, I hear nothing…even though the liquid spatters strongly against the white tiled walls and floor of the bathtub.

After toweling off, I return to the bedroom and retrieve today’s clothes: a black long-sleeved top, sky blue jeans, black socks and the beige-and-orange sneakers I bought in that little store in Budapest. Shivering slightly in the damp chill, I get dressed and brush my hair.

Then I open the gray/brownish plastic box with the red glowing light on the top, and take out my two cochlear implant sound processors. I check my log: okay, I replaced the batteries two days ago. Good to go.

Carefully, I attach one processor to the left side of my head. First, the transmitter with its magnet connects itself to the piece of metal inside my skull. Then I drape the beige, curved plastic piece over my ear, so it lays like a lazy cat across the back of a chair.

I repeat the process with the other ear, fluff my hair to hide the evidence, and quickly flick the switches on both processors.

“VROOM!” the sudden roar of a plane headed for Philadelphia International Airport fills my ears and I jump a little, always startled when sound first invades my day.

“THUMP, THUMP, THUMP!” My feet clatter down the stairs as I head for the newspaper, coffee, and the start of my morning routine.

“GURGLE, BURBLE, SQUINK!” The big black coffee pot cheerfully sputters its greeting in the kitchen.

Yep. Those cochlear implants really work!  

Marilyn Devine is a freelance writer who lives and writes in suburban Philadelphia. She’s had a cochlear implant since 1989 and received a bilateral implant in January of 2008 at the Hospital of the University of Pennsylvania. Marilyn has written advertising copy for more than 30 years and was a vice president, senior copywriter at MBNA (now Bank of America) until 2005. This is her first non-advertising published work.

JUNE 18–21, 2009

Marking 30 Years

You are invited to join HLAA in Nashville, Tennessee as it celebrates its 30th Birthday! Nashville is called the “Music City” with good reason. It has been home to the Grand Ole Opry since the 1920s and known as the Capital of Country Music ever since. Whether you hear country music calling you or the celebration of HLAA’s 30th Birthday, there’s no doubt that the place to be next June is the Gaylord Opryland Resort & Convention Center in Nashville, Tennessee!
Why we are Leaders in Assistive Listening Devices

**Comfort Contego® HD**

The High Definition Digital Wireless FM System

- Digital wireless technology with high definition FM sound
- 38 coded channels preventing electronic eavesdropping
- Very light weight, only 2.1 oz.
- Remote zoom microphones with directional and omni-directional settings
- Use with or without hearing aids
- Use with TV and audio systems

**Comfort DUETT®**

The Compact Multipurpose Personal Amplifier

- Superior sound quality, up to 60 dB amplification
- Ideal for small groups, one-on-one and in cars
- Built in T-coil enables listening in induction loop areas
- TV kit delivers clear sound at regular TV or audio volume
- Telephone kit amplifies standard phones
- Recharges overnight in base unit

Comfort Audio, Inc.
847-656-5450 · www.comfortaudio.us
“I just can’t hear on the phone…”

But with Hamilton Web CapTel, I can see what they say.

If you’ve ever missed out on what was said during a phone call – you no longer need to. Hamilton Web CapTel turns your personal computer into your personal telephone captioning service. So when you just can’t hear everything a caller says, with Hamilton Web CapTel you can read the written captions of everything that’s being said.

- All that's needed is:
  - A computer
  - High-speed Internet connection
  - Standard or mobile telephone
- Service is absolutely free
- No software to download
- Captions available in English and Spanish
- Available in all 50 states

See What They Say

Visit: www.hamiltoncaptel.com  •  E-mail: info@hamiltoncaptel.com
Call toll-free: 877-455-4227 (English)  •  866-670-9134 (Spanish)

If you're an Audiologist, you can connect your patients with Hamilton Web CapTel right in your office – for free! Call 866-576-1991 for more information.