LOUD & CLEAR

NEWS FOR ALUMNI AND FRIENDS OF THE UNIVERSITY OF IOWA
DEPARTMENT OF OTOLARYNGOLOGY—HEAD AND NECK SURGERY

SUMMER 2015
VOLUME 4 ISSUE 2

Enhancing speech through music

Health care workers are increasingly using music to treat a number of conditions such as Alzheimer's disease, stroke, and brain injury. Music can benefit individuals with hearing loss and cochlear implants (CIs), as well.

Researchers in the Iowa Cochlear Implant Clinical Research Center are exploring how music impacts speech in people with hearing loss by studying the signals and differences among cochlear implants and other hearing assistive devices. **Kate Gfeller, PhD**, leads the Music Perception Project in the center, which involves audiologists, speech-language pathologists, physicians, engineers, and others.

Finding the pitch

As a professor of music at the University of Iowa, Gfeller was asked join the center in 1990 to expand her studies of music perception in individuals with hearing aids to include cochlear implants. Soon after, University of Iowa Hospitals and Clinics cochlear implant program was one of the first worldwide to establish a comprehensive and systematic study of music and cochlear implants.

The center's research of cochlear implants revealed that tasks related to pitch, such as recognizing a melody or singing in tune, are extremely difficult for a large proportion of CI users. Improved technology is one approach. The UI has developed the Iowa Hybrid, a new CI design, which Gfeller's research indicates helps some CI users to attain better music perception. With additional research and training, Gfeller believed that people could get more out of their cochlear implants than originally thought possible.

Gfeller and her colleagues have developed therapy techniques for using music with children who have assistive hearing devices. The group provides therapy on-campus and assists families with online and in-home activities to enhance speech recognition.

"We decided to develop a music training program that could potentially help less-adept music listeners optimize their use of the CI," recalls Gfeller. The training program included listening exercises that require careful and repeated listening, which can result in more efficient perceptual processing of pitch and tone quality. This requires persistence and motivation, as well as contextual cues, multimodal input, and realistic expectations. The group also developed a take-home music training program for adults who use conventional CIs to help them improve music perception and the sound quality of music.

"Part of our job is helping patients make those adjustments and find ways to have a full rich life"

– Kate Gfeller, PhD

"Enhancing speech through music" continues on page 2

UNIVERSITY OF IOWA HOSPITALS & CLINICS
University of Iowa Health Care
Department of Otolarynology—Head and Neck Surgery

IN THIS ISSUE:

Patient Care & Clinical Updates page 2
Research News & Awards page 4
Resident & Education News page 6
Philanthropy Impact page 8
Faculty & Staff News page 10
Events & Activities page 12

Treatment and services are available for:

Otolaryngology (General)
Otolaryngology (Pediatric)
Acoustic Neuroma
Balance Disorders
Cleft Palate (Pediatric)
Cochlear Implants
Diagnostic Audiology
Head and Neck Cancer
Hearing Aids
Nasal and Sinus Conditions
Otology/Neurotology
Plastic Surgery and Cosmetic Services - Facial
Skull Base Surgery
Speech and Swallowing
Tinnitus

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Continuing education information:
medicine.uiowa.edu/oto/courses

Department events, news, and information:
medicine.uiowa.edu/oto

UI Hospitals and Clinics ranked among the nation's best

U.S. News & World Report released its annual "Best Hospitals" rankings for 2015-16 and once again, UI Hospitals and Clinics is among the leading hospitals in the United States. The Department of Otolaryngology – Head and Neck Surgery ranked #8 and has been among the best programs since surveying began.

UI Hospitals and Clinics has seven specialties ranked in the Top 50 and five more listed as high-performing. *U.S. News* also ranked UI Hospitals and Clinics as the No.1 hospital in Iowa.

The 2015-16 hospital rankings are available at usnews.com/besthospitals

"Enhancing speech through music" continues from page 1

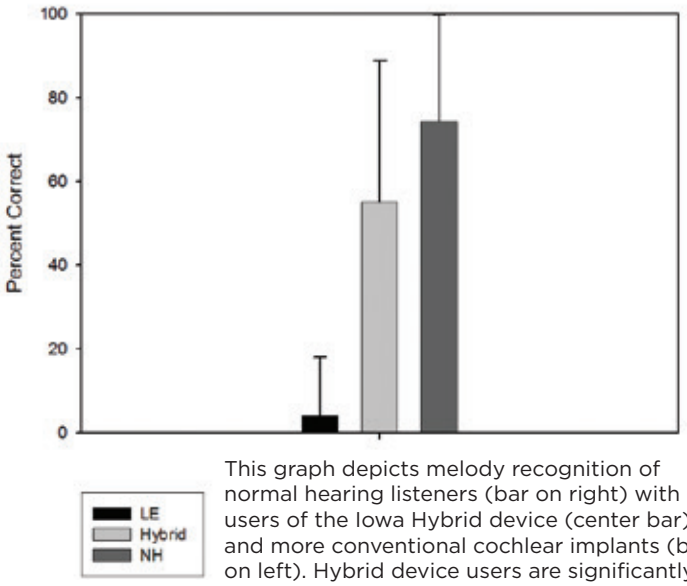
Why does music matter?

Over the past 20-plus years, music perception has gradually become one of the hot topics in cochlear implantation. One reason is that researchers now realize that music shares some structural characteristics that are also important to perception of more complex aspects of speech.

CIs are pretty good at conveying basic sounds of speech – vowels and consonants – especially in quiet listening conditions. However, we live in a noisy world and often converse in noisy situations, such as parties or in the presence of noise. CI recipients, especially when using the telephone, can find it difficult to tell who is speaking by the tone of their voice. They can also miss out on the emotional message or how the person feels about what they are saying.

All of these aspects of speech require better perception of pitch, or tone quality – features that are especially important in understanding and enjoying music. Researchers have concluded that if we can improve perception of music, there may also be a positive influence for speech. Indeed, Gfeller has seen improvements in some patients within a matter of a few weeks.

"At the beginning of this whole process, we were astonished at how well it worked at transforming the lives of patients. We are now more aware of some of these differences, such as speech in noisy environments, enjoying music, being able to recognize the emotional content of someone's voice, being able to deal with difficult listening environments, and hearing preservation."



This graph depicts melody recognition of normal hearing listeners (bar on right) with users of the Iowa Hybrid device (center bar), and more conventional cochlear implants (bar on left). Hybrid device users are significantly more accurate on recognizing familiar melodies than the users of conventional implants.

Next steps

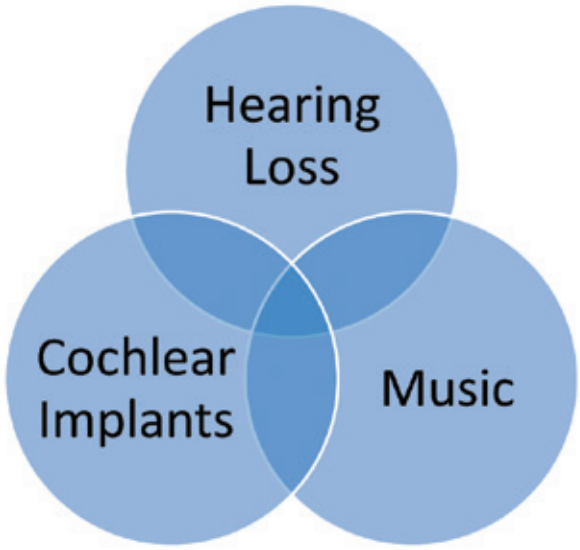
Gfeller and her colleagues continue to explore changes in neural response to see which individuals are most influenced, and who could most benefit, by music training. New technology is being evaluated to determine if it is better and which individuals are best served by the various devices. Variables such as an individual's age and cause of hearing loss are also being studied with the objective of finding the best match of rehabilitation strategies and cognitive learning styles.

"I'm fortunate to be on a team that has moved outside the box, and we've been able to come up with a lot of innovations. Many of the protocols we've developed here have become the foundation for research being done at other centers," states Gfeller. For example, the group was the first to establish a "brain training" protocol that significantly improves aspects of music perception and enjoyment for CI users.

In addition to seeing quantitative improvement in perceptual accuracy, Gfeller routinely receives comments from patients and their family members regarding an improved quality of life. The wife of a CI user who completed the training program told Gfeller, "For the first time in years, we went to a movie and my husband enjoyed the sound. We're going to go to the movies again!"

For another patient, the protocol's success came during a Christmas Eve church service. Gfeller recalls an email she received from a woman who had completed the training program. "She told me that when the choir sang, 'Do you hear what I hear?' I could understand it and was overcome with emotion!"

To learn more, visit uihealthcare.org/CochlearImplant



Iowa's Cochlear Implant Clinical Research Team was one of first to establish a comprehensive and systematic study of music and cochlear implants.

The University of Iowa is leading the way in the development of new devices that are superior to conventional cochlear implants for speech perception in noise, as well as for music perception and enjoyment. The Cochlear™ Nucleus® Hybrid™ Implant System developed in conjunction with Cochlear Ltd. has been shown to provide superior hearing performance and music listening.

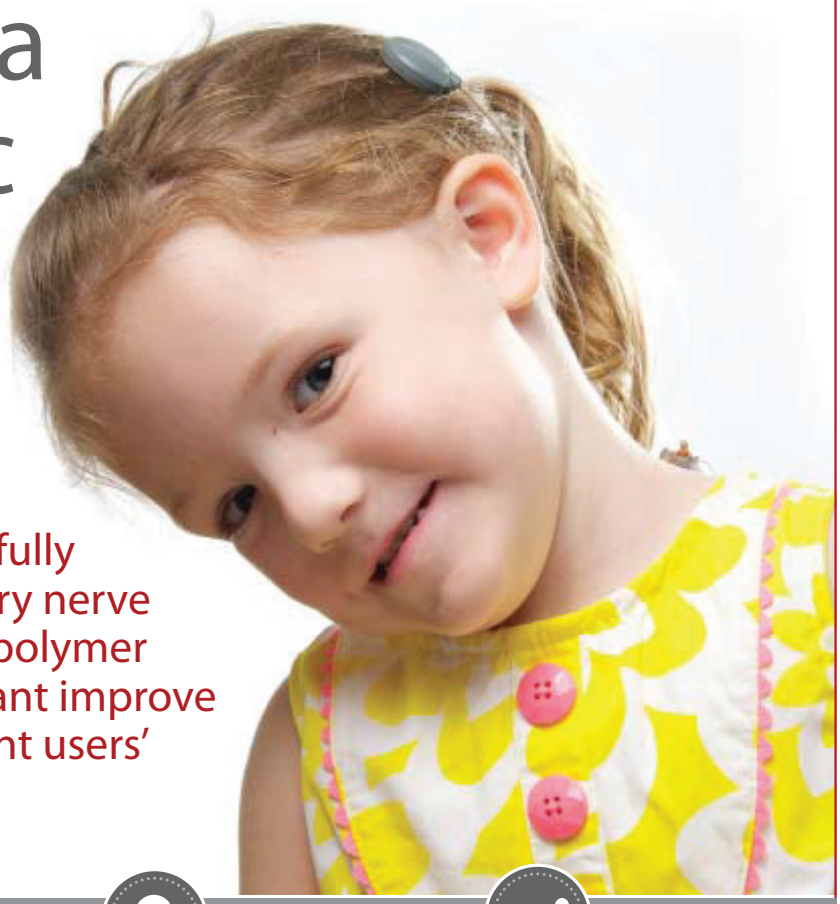
Image courtesy of Cochlear Ltd.

Dr. Gfeller discusses cochlear implants with graduate research assistants in music therapy and audiology. Many of these individuals go on to provide clinical services to adults and children across Iowa and beyond.

Speech-language pathologists work closely with physicians and other health care professionals to provide effective management of speech, language, and voice and swallowing disorders. Music therapy is used to help patients with hearing loss, as well as other physical, cognitive, social, and emotional needs.

The Department of Otolaryngology – Head and Neck Surgery works closely with the Department of Communication Sciences and Disorders and the UI Wendell Johnson Speech and Hearing Center to train the next generation of specialists.

Improving upon a classic



Could purposefully guiding auditory nerve fibers across a polymer within an implant improve cochlear implant users' hearing?

Pilot Grant | Innovation | Progress

MARLAN HANSEN, MD

Assistant Professor of Otolaryngology

C. ALLAN GUYMON, PhD

Professor of Chemical and Biochemical Engineering

PROPOSAL TITLE
Photopolymerized Micropatterns to Improve Cochlear Implant Performance

Individuals with cochlear implants can normally hear basic speech and sounds but cannot filter out background noise or perceive complex sounds like music.

This procedure allows the brain to receive sound impulses from more channels than would be possible with unguided fibers. While the medical community has attempted to guide nerve fibers in other parts of the body, this is the first effort to do so in the auditory system.

The new interdepartmental, intercollegiate collaboration has received an American Hearing Research Foundation grant, ($25,000), and a R01 grant ($300,000) from the National Institutes of Health.

Publications

• Clarke JC, Tuft BW, Clinger JD, Levine R, Figueroa LS, Guymon CA, Hansen MR. Micropatterned methacrylate polymers direct spinral ganglion neurite and Schwann cell growth. Hear Res. 2011; 278(1—12):96—105.

• Tuft BW, Li S, Xu L, Clarke JC, White SP, Guymon BA, Perez KX, Hansen MR. Photopolymerized microfeatures for directed spiral ganglion neurite and Schwann cell growth. Biomaterials. 2013; 34(1):42—54.

Genetic testing gets stamp of approval

Recent guidelines support the use of comprehensive genetic testing early in the evaluation of sensorineural hearing loss as a step to increase the ability to diagnose the cause of hearing loss and to decrease the utilization of uninformative tests.

Genetic testing results are discussed in weekly Hearing Group meetings at the MORL. Clinical experts, research scientists, data analysis specialists, human geneticists, and genetic counselors participate in these meetings to ensure expert clinical and scientific input into every case.

Two recent publications by University of Iowa researchers evaluating the use of genetic testing include:

Massively Parallel Sequencing for Genetic Diagnosis of Hearing Loss: The New Standard of Care
A. Eliot Shearer and Richard J.H. Smith
Otolaryngology -- Head and Neck Surgery, August 2015; vol. 153, 2: pp. 175-182., first published on June 17, 2015

Sensorineural Hearing Loss: A Changing Paradigm for Its Evaluation
Asitha D. L. Jayawardena, A. Eliot Shearer, and Richard J. H. Smith, MD
Otolaryngology -- Head and Neck Surgery, 0194599815596727, first published on July 27, 2015

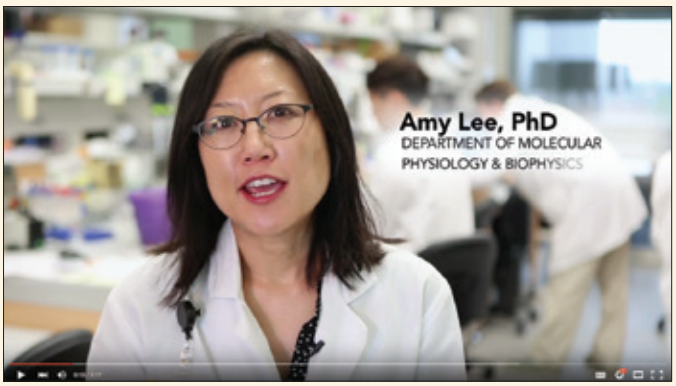
The Molecular Otolaryngology and Renal Research Laboratories (MORL) at the University of Iowa has more clinical and research experience with hereditary hearing loss and complement-mediated renal disease than any other laboratory in the world. **Learn more about genetic testing at medicine.uiowa.edu/morl**

ONLINE **EXTRA**

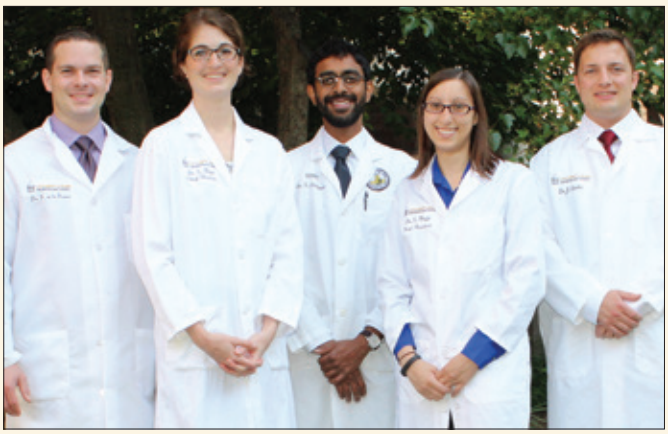
"Great Science" at the University of Iowa

Amy Lee, PhD, discusses her lab's research of electric currents in nerve cells in a new video series from the University of Iowa.

Lee is an associate professor in otolaryngology and an associate professor of molecular physiology and biophysics. Her lab in the Iowa Center for Auditory Regeneration and Deafness studies the forces that regulate unbound calcium (Ca2+) channels and their roles in refining Ca2+ signals in the nervous and cardiovascular systems. Her research involves disorders such as deafness, blindness, epilepsy, and migraines.



Learn more about Dr. Lee's research at http://bit.ly/1leTTAF



The 2015 graduates

Residents and fellows graduating from the University of Iowa are off to pursue their next medical career move.

Graduating Residents: Clinical Track (pictured left to right)
Gabe de la Garza, MD ('15R): joining Mid-Kansas ENT in Wichita, Kan.
Semirra Bayan, MD ('15R), Co-chief Resident: pursuing laryngology fellowship at Massachusetts General, Boston, Mass.
Siva Elangovan, MD ('15R): pursuing private practice opportunity in Moline, Ill.
Sobia Khaja, MD ('15R), Co-chief Resident: joining Medical University of South Carolina in Charleston, S.C.
Joseph Clarke, MD ('15R): joining a private practice in Medford, Ore.

Fellows:

Ghassan Alokby, MD ('15F), Rhinology Fellow: pursuing a faculty position with the University of Miami Miller School of Medicine

Brian Hughley, MD ('15F), Head and Neck Cancer Fellow: joining the faculty at University of Alabama School of Medicine

Elton Lambert, MD ('15F), Pediatric Otolaryngology Fellow: joining the faculty at Baylor College of Medicine

Andrew Davis, MD ('15F), NIH Otolaryngology Research Fellow: remaining at the University of Iowa for otolaryngology residency

Christopher Kaufman, MD ('15F), NIH Otolaryngology Research Fellow: remaining at the University of Iowa for otolaryngology residency

New colleagues

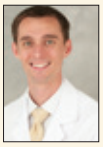
Residents:

Jasmine Hernandez, MD ('14MD): University of Iowa Roy J. and Lucille A. Carver College of Medicine

Andrew Liu, MD, PhD: Medical school and Bioengineering PhD at the University of Pennsylvania Perelman School of Medicine, Philadelphia, Penn.

Mckay Moline, MD: University of Texas Medical Branch School of Medicine, Galveston, Tex.

Adam Schwalje, MD: University of California San Francisco, Calif.



Richard Tilton, MD: Temple University School of Medicine, Philadelphia, Penn.

Fellows:

Bryan Liming, MD is the new pediatric otolaryngology fellow. Liming completed his residency at the Madigan Army Medical Center and medical school training at The Ohio State University.

Oluwafunmilola Okuyemi, MD is pursuing a Head and Neck Fellowship. Okuyemi completed residency and medical school training at Washington University School of Medicine, St. Louis, Mo.

Ala Sharif, MBBS joins the Rhinology Service to pursue a fellowship. Sharif completed residency through the Ministry of Health Hospitals in Jordan and medical school training at the Jordan University of Science and Technology.

App brings hearing screening home

By Dawn Goodlove

Early detection is key to treating babies with hearing loss, the most common birth defect in the world. However, not every mother around the globe has access to proper hearing screening for her newborn or infant.

Even among babies born in U.S. hospitals who undergo screening, which is the majority of newborns, those who fail should be rescreened. But nationally, in 45 percent of those cases, parents never return their babies for rescreening.

Now, using an iOS smartphone or tablet and a free app created by **Eric Kraus, MD** ('83MS, '83R), a Greensboro, N.C., surgeon in otology and neurotology, parents can screen their baby's hearing at home.

"The earlier that hearing loss is identified and treated, the better opportunity that a child has to develop speech and language and to achieve their genuine developmental potential," says Kraus, who developed an app to screen a baby's hearing at home.

The Sleeping Baby Hearing Test App, available free at the iTunes Store, uses a built-in, self-calibrating sound level meter that measures voice volume to help a mother "see" the loudness of her voice while speaking the Ling 6 Sound Test to her lightly sleeping baby. The app includes the Ling Sounds ("ah," "oo," "sh," "sss," "mmm," "ee"), which the mother repeats at 60-70 decibels within five minutes of her baby falling asleep in a quiet room. Interestingly, the mother's voice must be used for the screen rather than the father's voice or another female speaker. Babies are really tuned-in to hearing their mother's voices.

Dr. Eric Kraus developed an app to screen a baby's hearing at home. Photo courtesy of The Ear Center of Greensboro

A normally hearing newborn, between the ages of 2 weeks and 6 months, will arouse and move around when the mother speaks. If the baby arouses, he/she probably has normal hearing in at least one ear. A hearing-impaired infant will not arouse. If an infant fails to arouse repeatedly, parents should seek further professional hearing testing for their baby.

If a baby is ultimately fit with hearing aids, the Sleeping Baby Hearing Test may be performed again at home with the baby wearing hearing aids. If the baby arouses, it is a good indication the aids are providing genuine benefit.

The original Sleeping Baby Hearing Test was developed by Bill House, an ear surgeon, who invented the first cochlear implant in the 1960s and was Kraus' mentor. To promote the Sleeping Baby Hearing Test for home use, House intended to mail thousands of kits with instructions and complicated sound level meters to pediatricians in the 1990s, Kraus says. But physicians were either not interested or parents couldn't properly operate the sound meters.

Kraus placed an update to the original screen on his website several years ago, but rarely did users have the required sound level meter at home. In a 2012 phone conversation with House, Kraus reported the disappointing response to the online version.

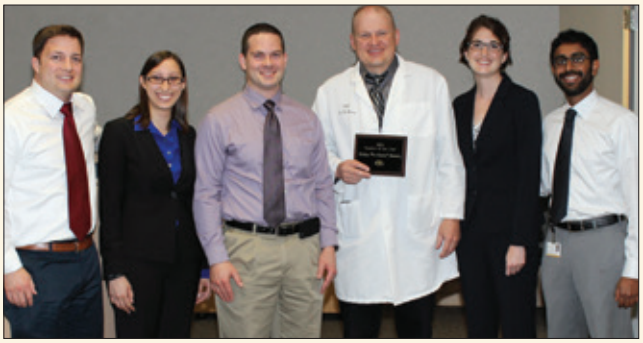
"I ended the call with Bill very frustrated, looked at my iPhone, and had an epiphany: What if we created the Sleeping Baby Hearing Test App and used the iPhone as the sound meter?" Kraus said.

With House's blessing, Kraus spent eight months directing design of the app, which launched in May 2013—five months after House passed away at age 89. In its first year, the app recorded more than 1,200 downloads from around the world without any advertising or marketing.

"I wish I could call Bill up on his smartphone and say, 'Bill, we figured it out. We finally took a good idea and applied it to the right technology,'" Kraus says. "It's our hope and our goal that this app will help millions of families and children around the world."

Recognition for teaching

Third-year resident **Nathan Schularick, MD** was selected for 2015 Humanism and Excellence in Teaching Award. Presented and funded by the Arnold P. Gold Foundation, the award recognizes and honors residents who demonstrate commitment to teaching and compassionate treatment of patients and families, students, and colleagues.



Graduating residents selected Marlan Hansen, MD, professor of otolaryngology – head and neck surgery, as the department's 2015 Teacher of the Year.

ALUMNI**CORNER**

The UI Carver College of Medicine HOST (Help Our Students Travel) Program seeks to reduce medical student debt by matching fourth-year medical students with alumni hosts during students' residency interviews around the country. The program serves as a wonderful way for alumni to share career insight and local advice, as well as a chance for students to save money as they seek to further their medical training.

Mark Griffin, MD ('04R) (second from left) and his family generously hosted UI medical student David Jung (left) during Jung's interview trip to Colorado. Griffin practices at Colorado West Otolaryngologists, P.C. in Grand Junction, Col.

Receive a special award or distinction? Change your contact information lately? Let us know so we can share department news and keep in touch. Send an email with details to iowaoto@uiowa.edu.

Celebrating new professorship

Marlan R. Hansen, MD, professor of otolaryngology – head and neck surgery and neurosurgery, was honored as the inaugural Marvin and Rose Lee Pomerantz Professor in Otolaryngology.

The professorship recognizes Hansen for his commitment to providing the finest patient care and his pursuit of innovative research into the preservation and restoration of hearing.

Family members and friends joined faculty and staff in a celebration honoring Dr. Hansen and the Pomerantz family. The ceremony took place earlier this spring in the Medical Education and Research Facility on campus.

"The Pomerantz family has been incredibly generous in their support of our academic mission. Funding through this professorship will allow me to explore new approaches to treating and restoring hearing loss, something that impacts many patients in Iowa and beyond," remarks Hansen.

The Pomerantz family has provided numerous visionary gifts to the University of Iowa and UI Hospitals & Clinics over the years, which includes several endowed professorships like this one.

Marlan Hansen, MD (right) receives his endowed professor medallion from Vice President of Medical Affairs and Interim President of the University of Iowa Jean Robillard, MD. Photo courtesy of UI Foundation.

The long view

Growing up in the back-country of Canada, Gary Geroy has always enjoyed being outdoors and nurturing a sense of adventure. After a stint in the United States military, he utilized the GI Bill to pursue a college degree. He worked in a variety of roles in environmental sciences with federal and state governments for several years before taking time off to consider his career options and travel. Eventually, Gary pursued an academic career where he specialized in the study of human factors and cultural variables associated with international economic development.

After retiring in Fort Collins, Colo., he and his wife, Cathy, envisioned a life on the road travelling to the many places they wanted to visit. Their plans hit a bump in the road, however, when Gary noticed something was closing off his throat and he had trouble swallowing. The couple was planning a trip to Europe but decided he needed to get checked out.

Gary saw a local physician who thought it might be a tumor and referred him to a specialist in Denver who concurred. The surgeon in Denver also found a second tumor near the top of Gary's spinal cord and predicted an undesirable surgical outcome – that Gary would be left without a voice and need to eat through a tube.

The grim prediction was enough to cause Gary and Cathy to do some online research on their own for another opinion. Research led them to University of Iowa Hospitals and Clinics and **Bruce Gantz, MD**, professor of otolaryngology – head and neck surgery.

Gary picked up the phone and called Dr. Gantz's office to find out whether or not UI Hospitals and Clinics would be interested in his case. Dr. Gantz, who was out of town at the time, had his assistant call the Geroys within two hours to schedule an appointment. Soon afterwards, the couple found themselves in Iowa City, a town where Cathy spent time as a youth and later studied occupational therapy at the UI.

Recalling his first visit to UI Hospitals and Clinics and meeting Dr. Gantz, Gary says, "There were two things that really impressed me. He was in no rush and he walked in with a full team. Dr. Gantz was very embracing about our participation in the discussion. He took time to teach us while we reviewed all the pictures and X-rays. It was very reassuring, and we didn't feel like we needed to look any further.

"His whole approach was different. He wanted to go at the tumor from a less invasive angle and anticipated a different outcome than what I was told previously."

Gary and Cathy Geroy have been able to travel extensively since receiving care at University of Iowa Hospitals and Clinics. Grateful for Gary's care, the couple has included the UI Department of Otolaryngology – Head and Neck Surgery in their estate plans.

Gary underwent surgery two weeks later to remove the tumor in his neck. A second surgery was required three months later by **Arnold Menezes, MD**, UI professor of neurosurgery, to remove the tumor growing on Gary's spinal cord. The results have been very extremely positive.

Although his left vocal cord and a portion of throat are paralyzed, he can speak and eat using techniques learned from medical staff, a result that far exceeded Gary's expectations. He returns for periodic evaluations and follow-up care. "I'm extremely happy with what's been accomplished," says Gary.

Less than a year later, the couple began to realize their travel dreams with a trip to Antarctica, the first of many global adventures that includes an upcoming journey to southeast Asia. "Going to the University of Iowa and having the surgery there has allowed us to do so much," adds Cathy.

> "And, since I was impacted so much first hand, why not give back?"
> —Gary Geroy

Grateful for the care received, the Geroys make an annual contribution to the department of otolaryngology – head and neck surgery that may be used toward the department's area of greatest need. The couple also have supported a fund created in honor of Dr. Menezes.

The couple also worked out an estate plan with the University of Iowa Foundation where the department of otolaryngology – head and neck surgery is a beneficiary. The plan includes two separate trusts that will collectively total millions of dollars to support UI and the department. Proceeds from the charitable bequest will support innovative research projects, faculty recruitment, fellowship training, or other areas of importance.

"Long view" continues on page 10

"Long view" continues from page 9

"We have a high level of trust with the department and believe they will do what is best with the funds. Both of us have dedicated our lives to the advancement of environment and human condition. This (gift) represents a contribution in the effort to advance the human condition," states Gary.

He adds, "You look at the research they're doing, how they're articulating their thinking and their research ideas into applied outcomes that advance people's lives, and the quality of those lives. That's a pretty powerful thing they do. And, since I was impacted so much first hand, why not give back?"

The University of Iowa Foundation offers planned giving options through wills, trusts, charitable gift annuities, retirement plan assets, real estate, life insurance policies, and other charitable options. To learn more about how planned giving can help meet your philanthropic and financial goals, contact Susan Hagan, JD, at 800-648-6973 or susan-hagan@uiowa.edu

Visit uifoundation.planningyourlegacy.org

The University of Iowa Foundation

There are many ways to make a difference through charitable donations. To learn more about how philanthropic support helps advance the important work of the UI Department of Otolaryngology—Head and Neck Surgery, please contact:

Sean Matthys, Associate Director of Development
University of Iowa Foundation
319-467-3649 or 800-648-6973
sean-matthys@uiowa.edu

The UI acknowledges the UI Foundation as the preferred channel for private contributions that benefit all areas of the university. **For more information or to make a donation, visit the UI Foundation's secure website at givetoiowa.org/OTO**

Faculty profile:

Associate professor **Douglas Van Daele, MD**, is rather busy these days. In addition to seeing patients in clinic and supporting the academic mission of his department, Van Daele serves UI Health Care in several ways.

Share a little about your background.

"I completed undergraduate education at Iowa and transitioned from engineering to medical school here. When considering residency programs, I was really impressed with the breadth and depth of Iowa's otolaryngology program and was able to stay here for training. At each juncture of my education, I thought I might go someplace else but really felt this was the best place for me."

What attracted you to the specialty of otolaryngology, and what is your clinical area of expertise?

"I became interested in medicine and otolaryngology when I was doing research as an undergraduate that involved the physiology of the larynx and swallowing. My clinical focus is on speech and swallowing, as well as general otolaryngology. I am in clinic one day a week and the OR one day a week. I also split my time between the main hospital and UI Health Care – Iowa River Landing locations."

Are you involved in any particular area of research or the training program?

"Earlier in my career I received an NIH "K" grant that allowed me to study how the brain controls the larynx and pharynx in a variety of models. We were able to obtain a considerable amount of data and I am still working on publishing our findings. I have also been involved in some exciting national clinical trials, including a NCI-funded trial investigating the use of electrical stimulation to improve swallowing after cancer treatment.

I'm involved in didactic teaching to our residents around the larynx, which I enjoy very much, and am involved in developing the core competencies and ACGME guidelines for training involved with swallowing and speech. I am also the current president of the Dysphagia Research Society and am planning the society's annual meeting, which has an educational component."

Explain your role as chief medical information officer (CMIO) and involvement with technology

"My interest began as I wanted to make our homegrown system work better for otolaryngology but our organization

A man of many hats

made the decision to pursue a commercial EHR product. I participated in the selection of vendors and was among a small number of physicians involved in modifying the final system for use. In 2008, I was programming data sets and tapped into my engineering background. When we went live with the new system in 2009, the institution decided there was a need for a full-time CMIO and I was recruited into that role.

I'm actually transitioning out of the CMIO role now, but it has given me good enterprise experience working across departments and across service lines, and with physicians and personnel I might not have otherwise worked with here."

How is technology changing the landscape of healthcare and how is it impacting patient care at UI?

"I believe information technology is an incredibly important part of moving forward and being innovative. We must push our boundaries in all aspects, just like we do in patient care and research. In the long-term, we really need to use technology to advance patient care. That is the holy-grail.

We've made great progress and have demonstrated benefits from technology implementation. For example, we were the first institution to take Smart Pumps – the pumps that deliver medications to patients – and connect those to the EMR. This dramatically reduced the number of medical transcription and communication errors, and improved care.

In Otolaryngology, we've enjoyed the benefit of improved patient safety and better risk profiles. Working with residents and faculty, we were able to update our safety profiles to put them more in line with the type of patients we are seeing. We now have one of the highest case mix indexes in the University HealthSystem Consortium database."

What about your other roles with UI Health Care?

"I am now executive director with UI Physicians, where I represent our faculty in high-level issues. In this role, I have an opportunity to advocate for our physicians and collaborate with senior administration. I'm involved in discussions involving reimbursements with insurance providers, the VA Medical Center, and work with Accountable Care Organizations, so there is a great deal of variety in my day." [Van Daele also serves as vice dean for clinical affairs at the UI Roy J. and Lucille A. Carver College of Medicine.]

How do you prioritize your time, and what do you enjoy most about your various roles?

"Balancing my time is the most difficult thing, but I firmly believe that I should maintain a clinical practice because our patients are why we are here. That keeps me grounded, so to speak. Patient care is one of the most humbling things you can do. It is also one of the most important and difficult things I do.

Helping shape a patient's future in terms of their treatment plan or managing their disease is what I enjoy doing as clinician. I think that is what I enjoy in my other roles, too, is that I get a hand in shaping what this organization is going to look like in the future."

Faculty accolades

American Speech-Language-Hearing Association

The American Speech-Hearing-Language Association (ASHA) selected **Richard Tyler, PhD, CCC-A**, for an ASHA Media Outreach Champion Award. The award recognizes Dr. Tyler's outstanding efforts to help promote public awareness of communication disorders and for serving as a media resource on stories involving tinnitus and other hearing issues.

LOUD & CLEAR

LOUD & CLEAR is published periodically for alumni, colleagues, and friends of the Department of Otolaryngology—Head and Neck Surgery at The Roy J. and Lucille A. Carver College of Medicine.

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University of Iowa Hospitals & Clinics
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Join us in Big 'D'

Alumni, friends, and colleagues are invited to join us during the 2015 AAO-HNSF Annual Meeting in Dallas.
Sunday, 6:30 – 8:30 pm
Sept. 27, 2015
Iron Cactus Mexican Grill

IRON CACTUS

AAO-HNSF ANNUAL MEETING & OTO EXPO 2015

LOUD&CLEAR **EVENTS**

Mark your calendars

Sept. 27-30	AAO-HNSF Annual Meeting & OTO EXPO, Dallas, Tex.
Sept. 27	Iowa Alumni Reception, Dallas, Tex.
Oct. 9-10	UI Homecoming Reunion Weekend (Classes of '80, '85, '90, '95, and '05), Iowa City
June 3-4, 2016	Functional Endoscopic Sinus Course, Iowa City
June 6-10, 2016	49th Head and Neck Cancer Reconstructive Surgery Course, Iowa City
June 9-11, 2016	UI Carver College of Medicine Alumni Reunion (Classes of '46, '51, '56, '61, '66, '71, and '76), Iowa City
June 16-17, 2016	24th Annual Management of the Tinnitus Patient Conference, Iowa City
June 2016	Research Day and Resident/Fellow Graduation, Iowa City
July 5 - August 2016	Basic Science Course, Iowa City
Aug. 13-19, 2016	UI Carver College of Medicine and Alaska Professional Seminars, CME Homer Alaska Conference, Homer, Alaska (alaskaprofessionalseminars.com)

Educational meeting information with dates and details can be found at medicine.uiowa.edu/oto/courses