

LOUD & CLEAR

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

 UNIVERSITY OF IOWA
HEALTH CARE

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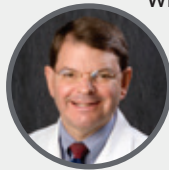
Surgeons at University of Iowa Hospitals and Clinics Employ First-of-Its-Kind Robotic-Assisted Cochlear Implant Insertion System

As part of a Food and Drug Administration (FDA)-approved evaluation, the University of Iowa Hospitals and Clinics became the first medical facility in the world to employ the iotaSOFT™ Insertion System, a robotic-assisted cochlear implant (CI) insertion system. iotaSOFT is designed to allow surgeons to control the speed of electrode array insertion during CI surgery.

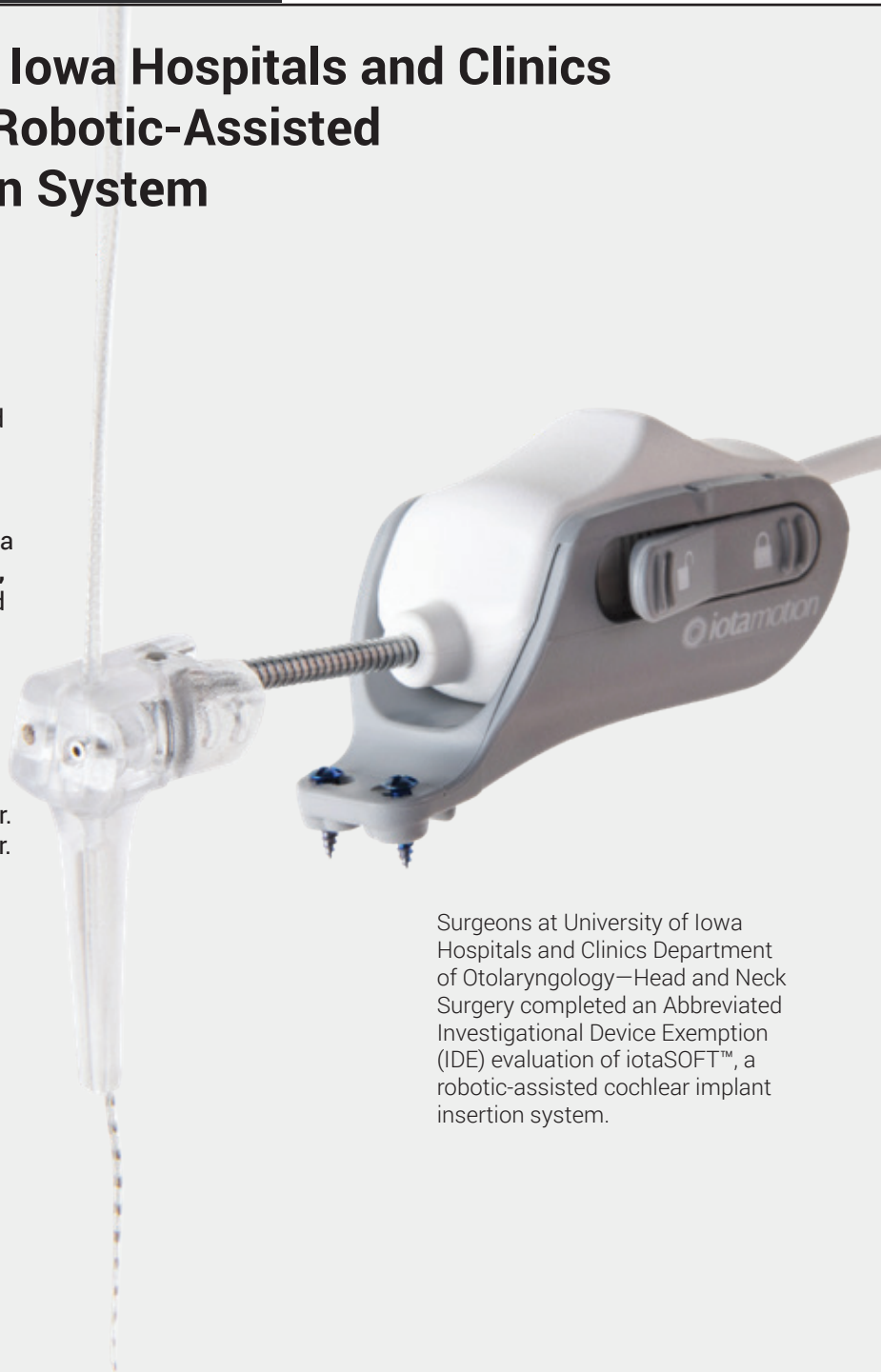
iotaSOFT was developed by iotaMotion Inc., an Iowa City-based company co-founded by **Marlan Hansen, MD** (left), professor of otolaryngology—head and neck surgery and Brian F. McCabe Distinguished Chair in Otolaryngology—Head and Neck Surgery, and **Christopher Kaufmann, MD, MS**, a former otolaryngology resident at the UI Roy J. and Lucille A. Carver College of Medicine, who serves as the company's president and CEO. Dr. Hansen serves as iotaMotion's chief medical officer.



The Abbreviated Investigational Device Exemption (IDE) evaluation involved 21 patients, most of whom received cochlear implants in 2020.



Bruce Gantz, MD (left), professor of otolaryngology—head and neck surgery, former chair of the department, and a world-renowned leader in cochlear implant technology, performed most of the surgeries. Neither he nor the others involved in the evaluation have a financial relationship with iotaMotion.



Surgeons at University of Iowa Hospitals and Clinics Department of Otolaryngology—Head and Neck Surgery completed an Abbreviated Investigational Device Exemption (IDE) evaluation of iotaSOFT™, a robotic-assisted cochlear implant insertion system.

"IOTASOFT" CONTINUES ON PAGE 3

LOUD & CLEAR

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

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MESSAGE FROM THE CHAIR

Happy 2022. We hope this year brings health, peace, and happiness.

After a pause, we are pleased to bring you the next edition of the *LOUD & CLEAR* publication. Our hope is to update you on the many amazing accomplishments, activities, and people in the Department of Otolaryngology—Head and Neck Surgery at the University of Iowa.

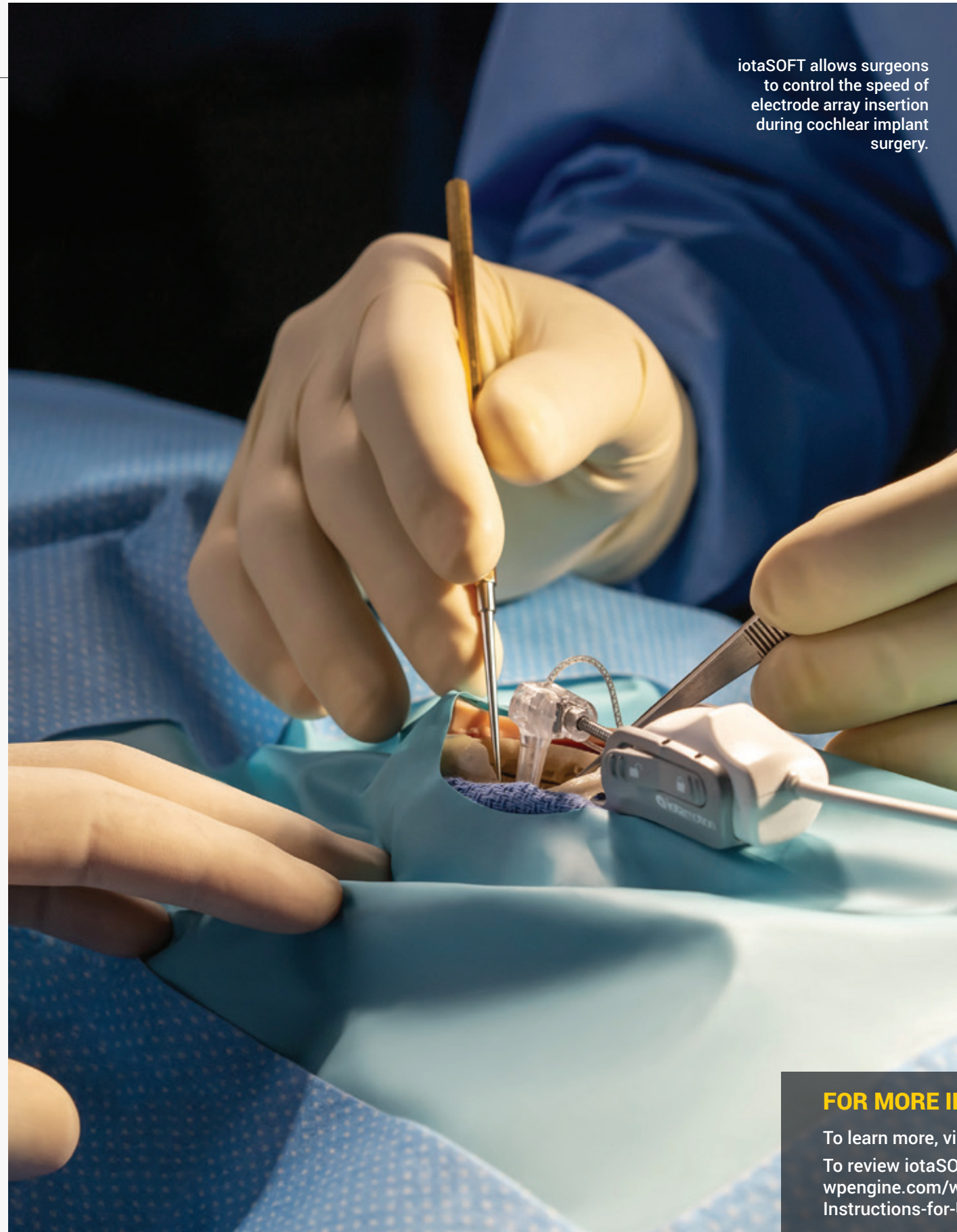


While the COVID-19 pandemic presented challenges for each of us, the department continues to thrive in our mission to provide outstanding care for our patients, to lead in discoveries and innovations that improve patients' lives, and to train the next generation of surgeons and leaders in our field.

This edition will highlight a few of these activities and people; subsequent editions will cover others. We are especially pleased to welcome new faculty members, fellows, and residents from diverse backgrounds and expertise to the Iowa team; each has enriched and strengthened us.

We also express heartfelt gratitude to our nurses, audiologists, speech and language pathologists, administrative assistants, and support staff. They have been heroes in ensuring that each patient received timely, compassionate, and world-class care.

Marlan Hansen, MD
Professor of Otolaryngology—Head and Neck Surgery
Brian F. McCabe Distinguished Chair in Otolaryngology—Head and Neck Surgery
Professor of Molecular Physiology and Biophysics
Professor of Neurosurgery



iotaSOFT allows surgeons to control the speed of electrode array insertion during cochlear implant surgery.

“IOTASOFT” CONTINUES FROM PAGE 1

In the fall of 2021, the FDA granted iotaMotion's De Novo classification request to market the system. Five additional sites are expected to use iotaSOFT in the first quarter of 2022, Dr. Hansen says. iotaMotion is moving forward with a controlled market release, with several additional sites actively considering purchase of iotaSOFT.

The system consists of a single-use sterile electrode control drive unit connected to a reusable, non-sterile, touch screen control console and foot pedal. Inserting the electrode array into the cochlea is the most delicate part of CI surgery, says Dr. Hansen. iotaSOFT allows surgeons to insert the array more slowly and at a more consistent speed than can be done manually, he explains. Dr. Gantz notes that the robotic device can nudge the electrode array along at a rate of just 0.1 millimeters per second.

Medical facilities that employ the system will no longer be as dependent on the experience and skills of the individual surgeon, explains Dr. Hansen. iotaSOFT integrates with natural workflow and is compatible with a variety of implants, he says. Studies in cadavers showed that iotaSOFT reduces trauma that can lead to scarring and fibrosis that adversely affect the efficacy of implants. It is the first-of-its-kind system and the only FDA-approved robotic system designed for any aspect of CI surgery.

iotaSOFT is one of a variety of products under development by iotaMotion, which was founded in 2015. In its early stages, it received support from UI Ventures, a part of the University of Iowa Office of the Vice President for Research and Economic Development. iotaMotion also received a highly competitive National Science Foundation Small Business Innovation Research Phase I grant and National Institutes of Health Small Business Innovation Research (SBIR) Phase I and Phase II awards.

FOR MORE INFORMATION

To learn more, visit iotaMotion's web site: <https://iotamotion.com/>
To review iotaSOFT's instructions for use: <https://iotamodev.wpengine.com/wp-content/uploads/iotaSOFT-Insertion-System-Instructions-for-Use-403-036-2000-v6.pdf>

“Our residents get exceptional training in ear surgery. Very few institutions can rival it [the new Bioskills Lab].”

MARLAN HANSEN, MD, PROFESSOR OF OTOLARYNGOLOGY—HEAD AND NECK SURGERY AND BRIAN F. MCCABE DISTINGUISHED CHAIR OF OTOLARYNGOLOGY—HEAD AND NECK SURGERY



TOP: The state-of-the-art Bioskills Lab in the Center for Procedural Skills & Simulation boasts 16 stations with wet sinks, pull-down microscopes, and video monitors.

BOTTOM: Scott Owen, MD, center, and Sohit Kanotra, MD, right, look on as Catalina Mulanax, a fourth-year medical student, practices endoscopic airway procedures. Dr. Owen is director of Facial and Plastic Reconstruction and director of the Facial Nerve Center at University of Iowa Hospitals and Clinics, as well as assistant residency program director, Department of Otolaryngology—Head and Neck Surgery, UI Carver College of Medicine. Dr. Kanotra is a clinical associate professor of otolaryngology—head and neck surgery and director of the Complex Pediatric Airway program at University of Iowa Hospitals and Clinics.

Madia Russillo, MD, PGY-4, works in the Bioskills Lab.



Department of Otolaryngology—Head and Neck Surgery Benefits from New, State-of-the Art Bioskills Lab

Residents and faculty of the Department of Otolaryngology—Head and Neck Surgery at the University of Iowa Carver College of Medicine now have access to a state-of-the-art Bioskills Lab located in the new UI Hospitals and Clinics Center for Procedural Skills and Simulation (CPSS).

The lab features 16 stations with wet sinks, pull-down microscopes, and video monitors. Work done at any station can be projected onto either or both of the facility’s big-screen TVs to enhance teaching opportunities. The lab space is available to many UI Carver College of Medicine departments, but the Department of Otolaryngology is the highest-volume user, says **Marlan Hansen, MD**, professor of otolaryngology—head and neck surgery and Brian F. McCabe Distinguished Chair of Otolaryngology—Head and Neck Surgery.

Scott Owen, MD, clinical assistant professor of otolaryngology—head and neck surgery and the department’s assistant residency program director, says the lab is one of the best in the country for otolaryngology residents, allowing extensive opportunities to work with donor temporal bones. Located only an elevator ride from the Otolaryngology Clinic at UI Hospitals and Clinics, it is much larger, brighter and more up-to-date than the decades-old facility in use previously.

The CPSS also includes a mock operating room, four simulation rooms, two central venous catheter insertion training/certification rooms, and a conference room. UI Health Care funded the facility, which includes ample space to offer classes to external learners. A temporal bone course, sponsored by the Iowa Cochlear Implant Clinical Research Center, is planned for 2022, if COVID transmission rates make in-person classes possible, says Dr. Hansen. Surgical instruments for use by residents and faculty of the Department of Otolaryngology were funded by generous donations from the Roger A. and Mary P. Simpson Fund.

“Our residents get exceptional training in ear surgery,” says Dr. Hansen. The new facility provides a world-class environment for simulating ear surgery and microvascular surgery, among other procedures. “Very few institutions can rival it,” he says.

There are numerous opportunities to support this initiative by making a charitable gift. If you’d like more information about this, please contact Sean Matthys. Email: sean.matthys@foriowa.org.

Otolaryngology Department NIH-funded Grants

In fiscal year 2020, the University of Iowa Carver College of Medicine Department of Otolaryngology—Head and Neck Surgery inched up one spot to be ranked 11th in National Institutes of Health (NIH)-funded grants as compiled by the Blue Ridge Institute for Medical Research. Total funding exceeds \$5.8 million, an increase of almost 14 percent from fiscal year 2019.

Current National Institutes of Health Grants
(Contact PIs are faculty members in the Department of Otolaryngology).

R01:
Reduction of Intracochlear Fibrosis and Bacterial Infection Using Photopolymerized Durable Zwitterionic Coatings on Cochlear Implant Biomaterials
PI: Marlan R. Hansen, MD
Award Number: 5R01DC012578-09
Current Award Total: \$2,311,368
Project Award Total: \$3,899,951

Role of Macrophages on Tissue Remodeling Following Cochlear Implantation
PI: Marlan R. Hansen, MD
Award Number: 5R01DC018488-02
Current and Project Award Total: \$2,048,027

Autosomal Dominant Non-Syndromic Hearing Loss - Its Genetic Diagnosis and Treatment
PI: Richard J.H. Smith, MD
Award Number: 5R01DC017955-03
Current Award Total: \$2,642,597
Project Award Total: \$11,004,674

Non-Syndromic Hearing Loss - A Collaborative Study
PI: Richard J.H. Smith, MD
Award Number: 5R01DC002842-26
Current Award Total: \$3,128,320
Project Award Total: \$13,862,501

Optimizing Genetic Testing for Deafness for Clinical Diagnostics
PI: Richard J.H. Smith, MD
Award Number: 5R01DC012049-10
Current Award Total: \$2,626,438
Project Award Total: \$5,694,823

C3 Glomerulopathy - A Collaborative Study
PI: Richard J.H. Smith, MD
Award Number: 5R01DK110023-05
Current and Project Award Total: \$3,136,865

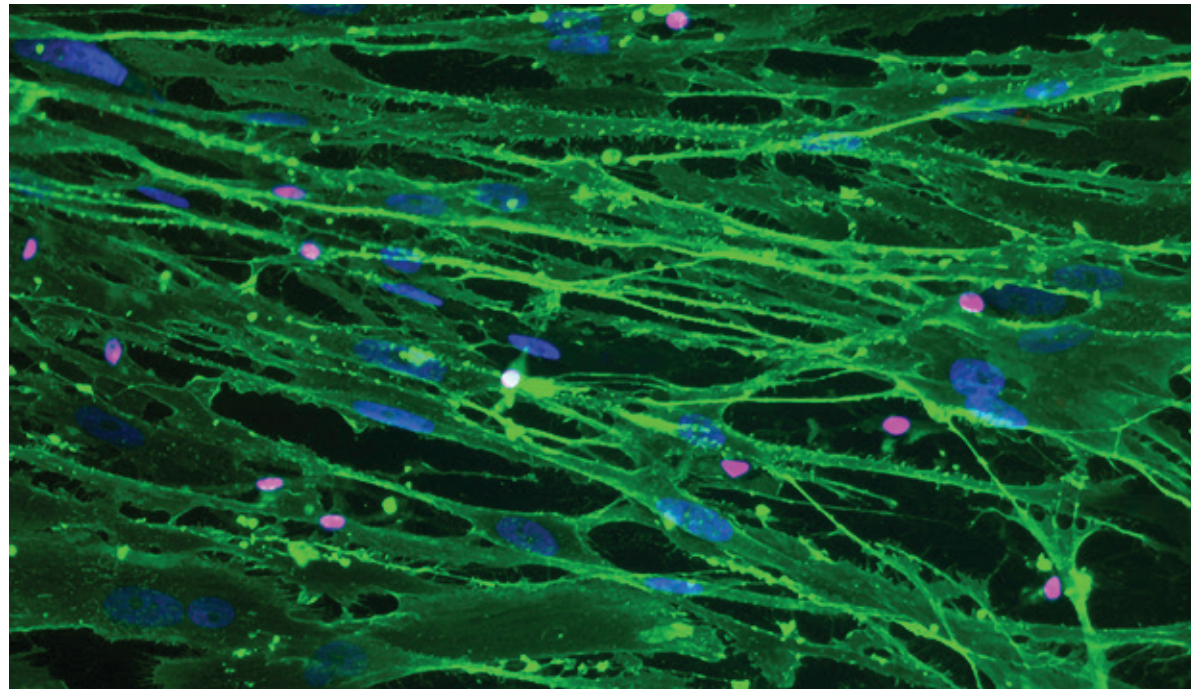
U54:
"Clinical and Translational Science Award"
PI: Patricia Winokur, MD, and Marlan R. Hansen, MD
Award Number: NCATS U54 TR001013
Current Award Total: \$3,921,687
Project Award Total: \$21,047,942

P50:
Iowa Cochlear Implant Clinical Research Center VII
PI: Bruce J. Gantz, MD
Award Number: 5P50DC000242-35
Current Award Total: \$12,365,130
Project Award Total: \$60,456,666

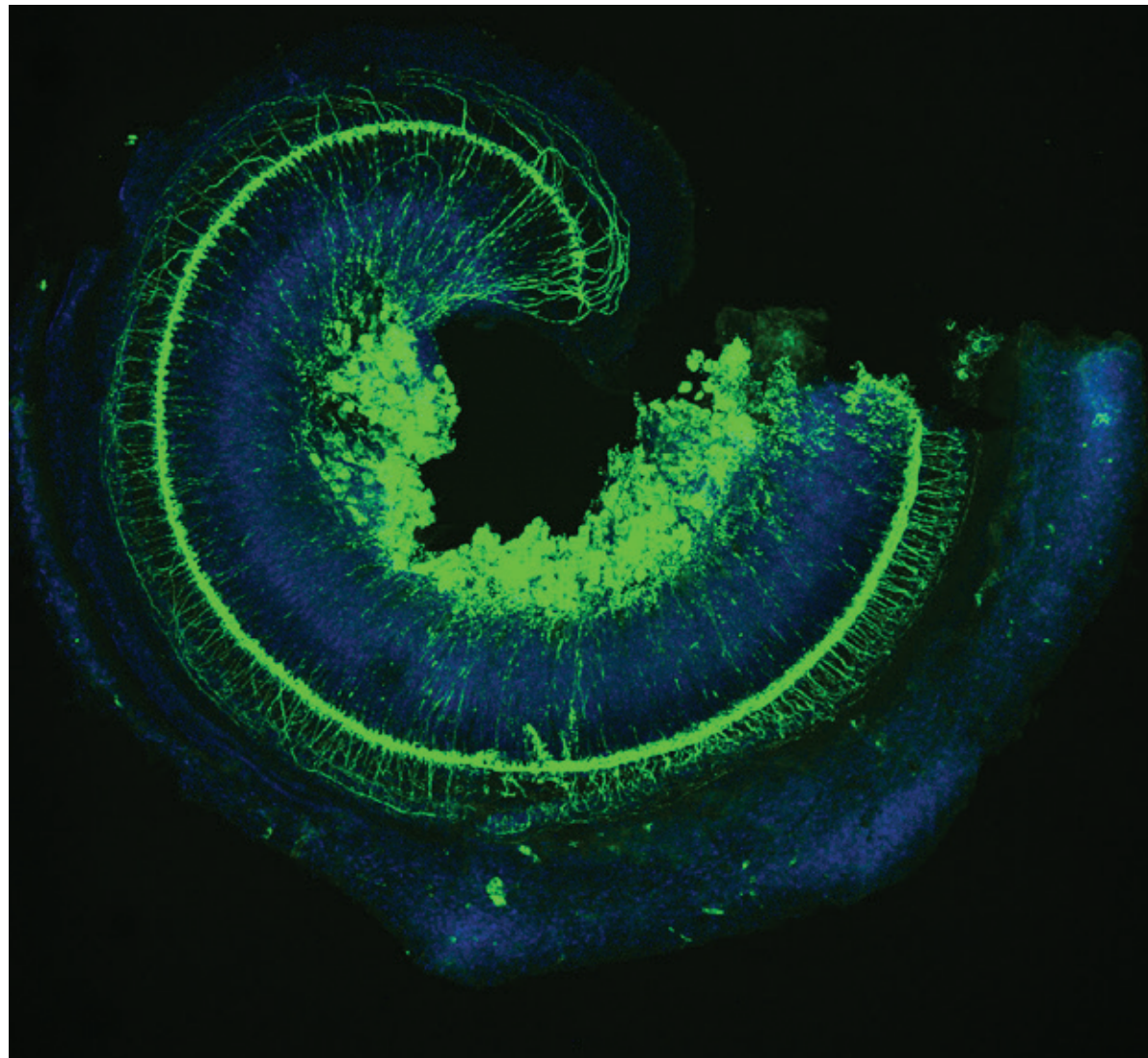
T32:
Research Training Program in Otolaryngology
PI: Marlan R. Hansen, MD
Award Number: 2T32DC000040-26A1
Current Award Total: \$1,502,305
Project Award Total: \$6,454,752

R13:
12th Conference on the Molecular Biology of Hearing and Deafness
PI: Richard J.H. Smith, MD
Award Number: 1R13DC018522-01
Current and Project Award Total: \$35,000

KL2:
The University of Iowa Clinical and Translational Science Award
Scholar Recipient: Xiaoyang Hua, MD
Award Number: 5KL2TR002536-04
Oto Award Total: \$253,230



Culture of vestibular schwannoma cells from Dr. Marlan Hansen's lab.



Illuminating the beauty of the cochlea: mouse organ of Corti immunolabeled with DAPI and NF200.

Acknowledgement:
Azaiez H et al.
PLoS Genetics.
2015 Mar 27;11(3):
PMID: 25816005

\$5.88 million
EXTERNAL FUNDING FOR FY 2020

#7
RANKING IN NIH FUNDING FOR FY 2021

Biopaste Under Development Aims to Eliminate Cranioplasty

Brian Andrews, MD, associate professor of otolaryngology—head and neck surgery, is working to improve treatment of traumatic brain injury (TBI) by developing a novel hydrogel that would eliminate the need for a second surgery following decompressive craniectomy. The biopaste, which is comprised of decellularized bone and cartilage, expands to accommodate brain swelling and ultimately becomes osteoinductive, allowing for cranial bone regeneration as brain swelling subsides.



If successful, surgeons would be able to employ the biopaste in lieu of performing a cranioplasty procedure to replace the skull section removed during craniectomy. Using funds from a previous R03 grant from the National Institutes of Health, Dr. Andrews has demonstrated proof of concept in a rodent model.

He has applied for an R01 grant, “Single Stage Surgical Intervention for the Treatment of Severe Traumatic Brain Injury,” to further the development of the hydrogel. Based on the grant’s percentile score, he is cautiously optimistic about funding in spring 2022. “It would be great” if the hydrogel could become a reality, he says, “because there is a real need for novel TBI treatment. There have been surprisingly very few advancements in TBI management in the last century despite its prevalence.”

Dr. Andrews joined the faculty of the University of Iowa Carver College of Medicine in 2021 after 10 years at the University of Kansas. He completed medical school and residency at the UI before completing a second residency in plastic surgery at Harvard University and a craniofacial fellowship at UCLA.

Cochlear Implant Center Continues Groundbreaking Research

The Iowa Cochlear Implant Clinical Research Center (ICICRC) VII P50 grant currently funds four interrelated projects designed to provide a better understanding of how individuals use both acoustic and electric speech processing (A+E) to facilitate improved hearing in noise, says **Bruce Gantz, MD**, professor of otolaryngology—head and neck surgery, former chair of the department, and ICICRC program director. Dr. Gantz is also a professor of neurosurgery in the University of Iowa Carver College of Medicine.



The Center’s multifaceted projects involve normal hearing subjects, those who use a hearing aid, patients newly implanted with A+E hearing preservation implants, and those previously implanted with A+E, bimodal, or single cochlear implants (CIs).

Researchers with the ICICRC, which has been continuously funded by NIH grants since 1985, developed an app that measures ambient noise. When the app is used, subjects are prompted to answer questions that can aid researchers in evaluating cognitive function. A Peripheral Electrophysiology project measures resistance in the cochlea over time.

The Central Auditory Integration project uses electroencephalograms (EEGs) to see where activity in the brain occurs when subjects listen; EEGs are followed up with positron emission tomography (PET) scans. In addition, the Cognitive Dynamics of Language Processing research involves stimulating the brain electrically to better understand how the 75-millisecond delay between patients with CIs versus hearing patients affects lexical processing.

In addition to Dr. Gantz, the interdisciplinary research team includes **Paul J. Abbas, PhD**, professor emeritus; **Carolyn Brown, PhD**, and **Inyong Choi, PhD**, from the UI Wendell Johnson Speech and Hearing Clinic; **Camille Dunn, PhD**, director of cochlear implants at the ICICRC and research assistant professor of otolaryngology—head and neck surgery; **Marlan Hansen, MD**, professor of otolaryngology—head and neck surgery and Brian F. McCabe Distinguished Chair in Otolaryngology—Head and Neck Surgery; **Bob McMurray, PhD**, F. Wendell Miller Professor of Psychological and Brain Sciences at the UI; and Tim Griffiths, FMedSci, professor of cognitive neurology at Newcastle University in England.

Studying the Immunological Interactions Between the Nose and Lungs

Xiaoyang Hua, MD, assistant professor of otolaryngology—head and neck surgery, conducts research to better understand the immune crosstalk between the nose and lungs. Dr. Hua, who completed his residency at the University of Iowa Carver College of Medicine and conducted a fellowship with **Stanley Perlman, MD, PhD**, professor of microbiology and immunology in the UI Carver College of Medicine, says such research may ultimately help lead to potential treatment options during respiratory pandemics. It could also have implications for the treatment of asthma.



His collaboration with Dr. Perlman involves delivering a small amount of live virus into the noses of mice to activate their nasal mucosal immune systems to determine

if this can act as an inoculation against future lethal virus infections in the lungs by initiating communication between the lungs and the mucosal lining of the nose. Dr. Hua used genetic, immunologic, and histologic methods to rule out that the virus had traveled to the lungs of those receiving nasal inoculation. Two days subsequent, Dr. Hua infected the lungs of the mice that received nasal inoculations with severe acute respiratory symptom coronavirus (SARS-CoV). Strikingly, all the mice that had received the nasal inoculation survived SARS-CoV-caused pneumonia, while 100 percent of those in a control group did not.

Dr. Hua repeated the experiment, using other viruses, including influenza virus, and observed similar results. Dr. Hua also worked with **Steven Varga, PhD**, professor of microbiology and immunology in the UI Carver College of Medicine, to conduct similar studies using human respiratory synthetic virus (RSV).

As he continues his research into how the mucosal immune system in the nose can regulate lung immunity, Dr. Hua says it is critical to determine the mechanism in the mucosa that helps mouse models develop lung immunity. He is the recipient of a KL2 grant from the National Institutes of Health and a COVID-19 pilot grant from the Roy J. Carver Charitable Trust through the UI Center of Advancement.

UI Lab Releases Upgraded OtoSCOPE® Platform

The University of Iowa Carver College of Medicine Molecular Otolaryngology & Renal Research Laboratories (MORL), directed by **Richard J.H. Smith, MD**, professor of otolaryngology—head and neck surgery and Sterba Hearing Research Professor of Otolaryngology—Head and Neck Surgery, released its ninth version of the OtoSCOPE® platform in 2021. Dr. Smith is also vice chair of the department and professor of molecular physiology and biophysics, professor of pediatrics, and professor of internal medicine (Division of Nephrology). OtoSCOPE, which was the first comprehensive genetic testing panel validated in the United States for any disease, uses targeted genomic sequencing to detect genetic variation in all genes known to cause non-syndromic hearing loss (NSHL), as well as common syndromic causes of hearing loss like Usher syndrome, Pendred syndrome, and Waardenburg syndrome.



OtoSCOPE has transformed the evaluation and care of people with genetic hearing loss. Prior to its development, physicians only had the results of audiograms to guide treatment, making it impossible to prognosticate such things as stability or likelihood of progression of hearing loss. In addition, OtoSCOPE makes it possible to identify comorbid conditions, such as future visual impairment in persons with Usher syndrome, so that intervention and treatment can begin earlier. UI Hospitals and Clinics’ Department of Otolaryngology—Head and Neck Surgery also employs a genetic counselor who specializes in genetic hearing loss, one of the very few departments in the country to do so.

The 40 scientists in the MORL have been at the forefront of the study of genetic hearing loss for more than two decades. Work has been funded by three R01 grants from the National Institutes of Health, including a grant entitled “Optimizing Genetic Testing for Deafness for Clinical Diagnostics,” which was recently competitively renewed. Dr. Smith believes the MORL is poised to help make targeted gene therapy for hearing loss a reality in the near future.

New Horizons in Facial Plastic and Reconstructive Surgery

Scott R. Owen, MD, clinical assistant professor of otolaryngology—head and neck surgery, became enamored with facial plastic and reconstructive surgery while in medical school at the University of Virginia School of Medicine. He completed residency at the University of Iowa, and, while in his fellowship in Facial Plastic and Reconstructive Surgery at Vanderbilt Medical Center, he was thrilled to be invited back on faculty at his residency alma mater. He joined the faculty of the University of Iowa Carver College of Medicine in 2017. Today he wears many hats in the department, including director of Facial and Plastic Reconstructive surgery, director of the Facial Nerve Center, and assistant residency program director.



Dr. Owen's clinical interests encompass disorders of form and function in the head and neck. At UI Hospitals and Clinics, he performs a variety of cosmetic and reconstructive procedures. He has worked to grow the Facial Nerve Reanimation clinic, offering both static and dynamic options for patients with facial paralysis. This has expanded into his research interests, and he currently has funding for projects improving periocular reanimation. His reconstructive clinic also encompasses skin cancer reconstruction and facial trauma, as well as work with pediatric patients with congenital conditions, including cleft lip and palate and microtia.

His cosmetic practice includes aging face surgery and a significant rhinoplasty focus. The last several years have included trips to Istanbul, Turkey, to advance his knowledge of new techniques in preservation rhinoplasty and bring them back to the UI.

As assistant residency program director, Dr. Owen is passionate about sharing his expertise, ramping up training in his subspecialty. In 2020, he received the coveted resident teaching award for his efforts. For the current academic year, he was accepted into the elite UI Carver College of Medicine Teaching Scholars program, where he will develop advanced skills he can share with colleagues. In addition, he oversees the department's social media presence (Twitter: @IowaOto, Instagram: @IowaOto), as well as the facial

plastics Instagram account (@owenfacialplasticsurgery) geared to educating the next generation of facial plastic surgeons.

Dr. Owen was inspired to enter the field of medicine by the work of his grandfather Arlyn Moeller, MD, who graduated from the UI Carver College of Medicine in 1956. Dr. Moeller shaped the way Dr. Owen saw a physician as a leader, educator, and positive force in a community. Dr. Moeller started a family practice in Fayetteville, North Carolina, and focused on hiring physicians with diverse backgrounds to serve the population, pushed an unpopular anti-smoking campaign in a tobacco state, and was one of the only physicians who would treat patients with HIV/AIDS in 1984, says his grandson.

Spearheading New Surgical Treatments in Obstructive Sleep Apnea

Douglas Van Daele, MD, professor of otolaryngology—head and neck surgery and vice dean for clinical affairs for the University of Iowa Carver College of Medicine, participates in two clinical trials involving medical devices to treat obstructive sleep apnea for patients who cannot tolerate continuous positive airway pressure (CPAP) treatment. Dr. Van Daele, who is also executive director of University of Iowa Physicians (UIP), has surgically implanted the Inspire device in patients at UI Hospitals and Clinics and the Iowa City VA Medical Center since 2018 and is now participating in Inspire Medical Systems' trial aimed at making improvements to its product.



He also is involved in the Dream clinical trial for the Genio device as its Belgian manufacturer Nyxoah works to get U.S. Food and Drug Administration approval. Enrollment began in May 2021; UI Hospitals and Clinics is one of only 10 participating institutions worldwide. Dr. Van Daele, who holds an undergraduate degree from the UI in biomedical engineering, says, "As a comprehensive department, it's important to participate in clinical trials to push technology further. It allows us to advance the work toward what's best for our patient population." Dr. Van Daele is also taking over most airway stenosis cases, which are increasing because of complications from some SARS-COVID-19 treatments. The UI is a

member of the North American Airway Collaborative (NoAAC), whose members exchange information about the treatment of advanced airway disease, which has become more common because of COVID-19.

As executive director of UIP, the largest multi-specialty medical and surgical group practice in Iowa, Dr. Van Daele oversaw UI Health Care's initial pandemic response, including testing, evaluation, cohorting of patients into home treatment teams, and the administration of monoclonal antibodies. He also oversees centralized scheduling and employee contracts. Later this year, UIP will roll out a new compensation plan. Designed to be more incentive-based and flexible, it will include components that recognize both clinical and academic quality, he says, to recognize work that has not been valued in the same way historically.

Head and Neck Cancer Surgeon/Scientist Revolutionizing Research Education

Marisa Buchakjian, MD, PhD, combines her love of surgery—discovered at Duke University School of Medicine—and her long-time passion for cancer research as one of a handful of female head and neck surgeons in the United States who holds a PhD. She joined the University of Iowa Carver College of Medicine as assistant professor of otolaryngology—head and neck surgery in 2019 and sees patients at University of Iowa Hospitals and Clinics. She also holds a secondary appointment in the UI College of Dentistry's Iowa Institute for Oral Health Research.

On the clinical side, she specializes in microvascular reconstruction and transoral robotic surgery (TORS). UI Hospitals and Clinics is the only facility in Iowa with TORS capabilities to treat oropharynx cancer. As part of the UI's Metastasis Research Group, Dr. Buchakjian leads a basic science lab looking at cancer metabolism. She is also involved in two clinical trials: she sequences DNA and RNA from tumor samples to better understand the genetic pathways of oral cavity cancer and works with colleagues to measure micro-RNA levels from saliva and bone samples in patients and correlates them to surgical healing and cancer outcomes.

Inspired by a program she became aware of during her head and neck oncologic surgery fellowship at the University of Michigan, Dr. Buchakjian founded the Department of Otolaryngology—Head and Neck Surgery Resident Research Committee in 2020 to formalize a research curriculum. She and other committee members meet with the department's 25 residents monthly to review their research projects, encourage them to apply for grants, read their abstracts, and set them up with mentors. In 2022, a one-day "Research Bootcamp" is planned.

She's also working with researchers across University of Iowa Hospitals and Clinics and the College of Dentistry to submit an Oral Cavity P50 SPORE grant. If funded, it would allow Dr. Buchakjian to run four clinical trials and serve as co-principal investigator on two projects. She would also be co-director for the clinical research core to help make oral cavity cancer research and trials more accessible to patients in Iowa.

Marisa Buchakjian, MD, PhD, assistant professor of otolaryngology—head and neck surgery, was a visiting professor at Mayo Clinic in 2021.



Meet Cori Walker, MD

When **Cori Walker, MD, PGY-2**, attended the University of Chicago Pritzker School of Medicine, she initially planned to become a pediatrician. Her plans changed when she got involved with a research project on early language development. The project's principal investigator (PI) was a pediatric otolaryngologist, who thought the field might be a good fit for the future Dr. Walker.



As a result, she did some job shadowing and discovered she thrived on the relationships she was able to build with patients as well as the ability to learn new skills in the operating room. Whether she chooses pediatric or adult otolaryngology, Dr. Walker loves the unique opportunity otolaryngologists have to perform specialized surgeries and medically treat and follow patients for many years.

At the University of Iowa Hospitals and Clinics Department of Otolaryngology—Head and Neck Surgery, “The faculty are all so accomplished in their respective specialties but also very committed to teaching residents,” she says. “They want us to become experts in this field as well.” She also loves that the large resident group “feels like a close-knit family.”

Dr. Walker recently joined a research team through the UI Public Policy Center. She is working with **Natoshia Askelson, MPH, PhD**, an associate professor in the UI College of Public Health, on an initiative to promote awareness of the importance of the human papillomavirus (HPV) vaccine for prevention of oropharyngeal cancers, and to investigate what role otolaryngology clinics may have in advancing this initiative.

She is also helping to lead the department's diversity, equity, and inclusion efforts, made possible in part by a grant from the UI Division of Diversity, Equity, and Inclusion. Her efforts are two-fold: increase diversity in the field of otolaryngology by introducing local medical students to the field and educate current residents on diversity, equity, and inclusion through professional development.

Meet Adam Schwalje, MD

When the SARS COVID-19 pandemic shuttered performing arts venues and caused uncertainty about whether making music was safe, **Adam Schwalje, MD, PGY-7**, used his medical knowledge and passion for music to help others. Making music has long been an important part of Dr. Schwalje's life. He earned a Doctor of Musical Arts in bassoon performance and music education before traveling the world and performing with the Macau Symphony. In addition, he was a high school band teacher for two years before entering medical school at University of California San Francisco.



In 2020, he teamed up with **Henry Hoffman, MD**, professor of otolaryngology—head and neck surgery at the University of Iowa Carver College of Medicine, and **Charles Stanier, PhD**, a UI professor of chemical and biochemical engineering, to learn more about the role of aerosol dispersal in music making. He and Dr. Hoffman wrote a paper for the Iowa Head and Neck Protocols web site about the risks of making music during COVID and how to mitigate those risks, which attracted attention from international music organizations. Zoom presentations followed, as well as interviews with *USA Today*, the BBC and others. “More importantly, I think we helped guide the community of musicians and educators in developing safer practices,” he says.

Dr. Schwalje also has conducted research on music perception in people with cochlear implants and has studied how electric and acoustic harmonic integration predicts speech-in-noise performance in hybrid cochlear implant users. Dr. Schwalje was exposed to the field of otolaryngology earlier than most. He has moderate to severe hearing loss in both ears; as a result, he has worn hearing aids since age four. He hopes that his personal perspective can help him connect with his patients. While in residency, he has mentored and encouraged others through HI-ARO, a community of Deaf and Hard of Hearing Scientists from academic and research settings.

Following completion of residency in June 2022, Dr. Schwalje will join an otolaryngology practice in Davenport, Iowa.

Iowa Team Bests Competition

Congratulations to Team Iowa for winning the Society for Ear, Nose, and Throat Advancement in Children (SENTAC) 2021 Pediatric Otolaryngology Academic Bowl. The University of Iowa Carver College of Medicine team made a comeback in the rapid-fire round. The three-person team competed against those from University of Pittsburgh, University of San Diego, University of Wisconsin, University of Toronto, University of Arizona, and University of Campinas in Brazil.



From left: Austin Walker, MD, PGY-2; Sohit Kanotra, MD, team mentor, clinical associate professor of otolaryngology—head and neck surgery and director, Complex Pediatric Airway program; Richard Hubbell, MD, pediatric fellow in otolaryngology—head and neck surgery; and Abigail Moore, BS, a fourth-year medical student, celebrate their victory.

Contact Us!

Alumni Corner

We would love to hear from alumni. Send us an email to tell us about your current position, research, special awards, or other milestones. Email: sarah-elliott-1@uiowa.edu

Update Your Information

Keep in touch with the University of Iowa to get the latest news and information for alumni, fans, and friends of the University of Iowa: foriowa.org/update-information

Follow Us!

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Website: medicine.uiowa.edu/oto/
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IOWA

Center for Advancement

Philanthropic support plays a vital role in enhancing the mission of the Department of Otolaryngology—Head and Neck Surgery. Investments through financial contributions help to advance research, clinical care, and training for the next generation of otolaryngologists. There are many ways that you can make a lasting impact. To learn more about how to support the department, please reach out to our colleague Sean Matthys at the UI Center for Advancement.

SEAN MATTHYS

Executive Director of Development –
Health Care Philanthropy

The University of Iowa Center for
Advancement
One West Park Road
Iowa City, IA 52242

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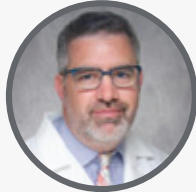
EMAIL: sean.matthys@foriowa.org



DIRECTORY

Department of Otolaryngology—Head and Neck Surgery

Providers



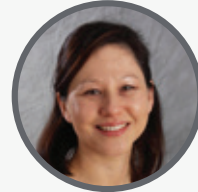
Brian Andrews, MD
Otolaryngologist,
Plastic and
Reconstructive Surgeon
Cosmetic, Craniofacial,
Plastic Surgery



Rodrigo Bayon, MD
Otolaryngologist
Oncology



**Marisa Buchakjian,
MD, PHD**
Otolaryngologist
Oncology



Kristi Chang, MD
Otolaryngology
Oncology



Bruce Gantz, MD
Otolaryngologist
Neurotology



Scott Graham, MBBS
Otolaryngologist
Rhinology



Marlan Hansen, MD
Otolaryngologist
Neurotology



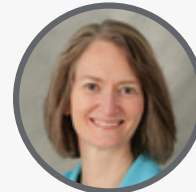
Henry Hoffman, MD
Otolaryngologist
Laryngology,
Oncology



Himena Harris, ARNP
Nurse Practitioner



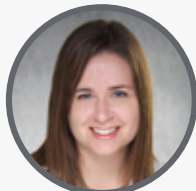
Xiaoyang Hua, MD
Otolaryngologist
Rhinology



**Deborah
Kacmarynski, MD**
Otolaryngologist
Pediatrics and
Craniofacial



Sohit Kanotra, MD
Otolaryngologist
Pediatrics



Meg Lamparek, ARNP
Nurse Practitioner



Jose Manaligod, MD
Otolaryngologist
Pediatrics, Allergy



Scott Owen, MD
Plastic and
Reconstructive Surgeon
Cosmetic, Craniofacial,
Plastic Surgery



Nitin Pagedar, MD, MPH
Otolaryngologist
Oncology



Lindy Pelzer, ARNP
Nurse Practitioner



Regina Randall, ARNP
Nurse Practitioner



**Amanda Schaefer,
MD, LGC**
Genetic Counselor



Richard Smith, MD
Otolaryngologist
Pediatrics



Richard Tyler, PhD
Audiologist
Tinnitus and
Hyperacusis



Douglas Van Daele, MD
Otolaryngologist
Allergy, Laryngology



Jarrett Walsh, MD, PhD
Otolaryngologist
Allergy, Rhinology

2021–22 Fellows



Jay Gantz, MD, PhD
Neurotology Fellow



Sameer Alvi, MD
Oncology Fellow



Richard Hubbell, MD
Pediatric Fellow



Nuha Alrayes, MBBS
Rhinology Fellow

2021–22 Research Residents



Nir Ben-Shlomo, MD



Miles Klimara, MD



**Alexandra
McMillan, MD, PhD**



Osama Tarabichi, MD

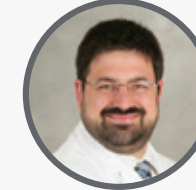
PGY-5s



Elyse Hanly, MD, PhD
Chief



Andrew Liu, MD, PhD



Adam Schwalje, MD



Kristen Seligman, MD
Chief



Ryan Smith, MD

PGY-4s



Zaid Al-Qurayshi, MD



**Douglas Bennion,
MD, PhD**



**Monica Rossi
Meyer, MD**



Madia Russillo, MD

PGY-3s



Jackson Deere, MD



Megan Jensen, MD



Alexander Michael, MD



Amanda Ngouajio, MD



Vivian Zhu, MD

PGY-2s



Tatiana Correa, MD, MPH



Nathan Kemper, MD



Ryan Thorpe, MD

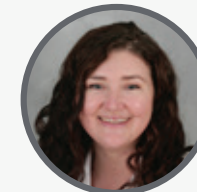


Austin Walker, MD



Cori Walker, MD

PGY-1s



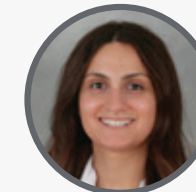
Jackie Devries, MD



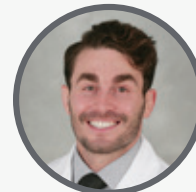
Paul Escher, MD



Nick George-Jones, MD



Heba Isaac, MD



Zack Tanenbaum, MD



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2022 EVENTS & ACTIVITIES

THE UNIVERSITY OF IOWA DEPARTMENT OF OTOLARYNGOLOGY—HEAD AND NECK SURGERY

All events will be held in Iowa City or virtually.

MAY 24–27	12th Molecular Biology of Hearing and Deafness Meeting
JUNE (VIRTUAL)	Head and Neck Cancer Reconstructive Surgery Course
JUNE 16–17	International Conference on the Management of the Tinnitus and Hyperacusis Patient
JUNE 18	Celebration Honoring Dr. Bruce J. Gantz’s 25-year Tenure as Chair
JUNE 25	Resident Research Day & Resident/Fellow Graduation
JULY 5–14	Foundations of Otolaryngology Lecture Series (Anatomy)
JULY 18–AUGUST 5	Foundations of Otolaryngology Lecture Series (Clinical Sciences)