Pain free with his life back

Scott Winnick spent three years in excruciating pain in his face and on the bridge of his nose. It felt like someone had clamped pliers on the bridge of his nose and wouldn’t stop squeezing. “It was never-ending. It was hard to function for three years,” says Winnick, 68, of Deephaven. “The pain was ongoing and it consumed everything.”

Winnick previously had two surgeries to repair a deviated septum and clean up infection in his sinuses; he suspected the pain came from those procedures. The original surgeon suggested living with the pain or trying more surgery. Winnick didn’t like either option.

The surgeon referred him to Holly Boyer, MD, an Otolaryngologist, head and neck surgeon at the University who specializes in facial pain and nasal and sinus disorders. Motivated to figure out the root cause of Winnick’s pain, she worked tirelessly and patiently over numerous office visits to rule out a variety of conditions.

“Dr. Boyer was determined to find out what was causing the pain, and she didn’t give up,” Winnick says. “She just doesn’t take no for an answer. Some doctors will give you drugs to mask the pain, but she wanted to get to the source.” Boyer first treated the nerves that might have been affected by the surgeries or infection. When that didn’t help, Boyer tried treatments, including chemical cautery, that would calm and reset some of Winnick’s nasal nerves. Dr. Boyer’s treatments definitely made a difference to reduce the pain, but it still kept returning.

Still not satisfied, Dr. Boyer thought more could be done to reduce the pain. Boyer arranged an appointment for Winnick to see her with a group of other specialists at the University, including Dr. Donald Nixdorf, DDS, an associate professor of temporomandibular disorders and orofacial pain. That way, they could collaborate on finding the source of his facial pain. It impressed Winnick to have Boyer reach out to other providers for their expertise.

Dr. Boyer and Dr. Nixdorf concluded that the nose and facial pain was the result of the muscles involving the jaw and neck. Dr. Nixdorf prescribed sessions of facial physical therapy which consisted of exercises for postural correction of the jaw, head, and neck. The exercises significantly reduced the pain. Winnick asked if more could be done to completely eliminate the pain. Dr. Nixdorf said it might be possible, and referred him to Dr. Alfred Clavel, a Neurologist who specializes in head and neck pain.

Dr. Clavel also concluded that Winnick’s pain came from the nerves in the neck and resulted from his years of weightlifting. Dr. Clavel recommended different weightlifting techniques and prescribed additional exercises, to be done daily, to eliminate the pain. The sessions with Dr. Clavel were successful in eliminating the pain.

The team’s all-encompassing approach was key to finding the pain source, as well as monitoring how Winnick’s body responded to his pain, Boyer says. This knowledge guided providers in developing a series of exercises for Winnick to retrain his body in interpreting the pain. He also learned relaxation exercises and different weightlifting techniques.

All of the treatments and regular follow-up care with Dr. Boyer—coupled with the exercises Winnick still does several times a day—did the trick. Several years later, the pain that wouldn’t let up is gone. He’s now working, weightlifting and working out every day without pain and feeling like a new person.

“To say that Dr. Boyer turned my life around is an understatement,” says Winnick. “She gave me my life back. Without her I would still be having this pain today.”
Emiro Caicedo-Granados, MD
Driven to Treat and Cure Cancer

Emiro Caicedo-Granados, MD, has devoted his career to battling head and neck cancer on multiple fronts. In addition to doing surgeries to remove patients’ tumors, he researches new treatments for cancer and teaches residents his craft.

An otolaryngologist and head and neck surgeon at the VA Medical Center and the University of Minnesota in Minneapolis, Caicedo focuses on complex cancers of the head and neck and skull base. He joined the VA in late 2015 after spending six years as a provider and professor at the University. He remains an assistant professor of otolaryngology and continues to treat patients at the U who need endoscopic removal of sino-nasal and skull base tumors through their nose—one of Caicedo’s areas of expertise.

Caicedo is energized about researching cancer of the oropharynx caused by the human papilloma virus (HPV). He is an active member of a translational research multidisciplinary team at the VA including oncologists, doctorate-level basic scientists, pathologists, statisticians, and more. Together they focus on head and neck cancers associated with HPV, a type of cancer that is growing exponentially.

Caicedo enjoys the team approach to translational research and hopes to discover findings about how the virus works. That way, physicians can identify the best ways to treat the cancers it causes.

Research has always been an integral part of Caicedo’s career. He came to the University in 2000 as a National Institutes of Health training grant fellow, where he did basic science research on head and neck cancer. Caicedo then completed his otolaryngology residency at the U before doing a fellowship in advanced oncologic head and neck and skull base surgery at University of Pittsburgh.

A native of Colombia, Caicedo is known for playing salsa music when operating and teaching residents. He enjoys teaching both how to perform surgery and interact with patients in the clinic. But above all, Caicedo finds it most satisfying to treat and connect with his patients.

“What I really like is when I see my patients after surgery or any treatment, and they are so appreciative of what I have done. That’s the best reward ever,” says Caicedo. “When you are treating patients with cancer, you have to give them the one thing they are looking for, and that’s hope.”

Notes From the Chair

This year, spring at the University of Minnesota Medical School comes with the opening of the first new clinical building on our campus in decades. The new University of Minnesota Health Clinics and Surgery Center opened in February, and is now home to nearly all the outpatient clinic and surgery activity on the campus. The building, located on Fulton Street near Huron on the East Campus, is a beautiful five-story, 342,000 square foot facility. Of particular interest for alumni of our department, our historians Drs. Kent Wilson and Tom Christiansen have confirmed that Fulton Street was named after Dr. John Fulton, who became the first professor of Eyes, Ear, Nose, and Throat at the University of Minnesota in 1888, and first chairman of the new Department of Otolaryngology and Ophthalmology in 1902.

In addition to a new structure in a new location, the building uses the newest in information technology to help improve the way we deliver care. The new structure has been designed with the help of information technology and location devices that will allow us to avoid traditional check-in desks and patient queues. This is certainly an ambitious project, and we are thrilled to be able to treat and help patients in this new setting.

Of course, the Department of Otolaryngology–Head and Neck Surgery’s innovation is still led by our people. We have long been leaders in clinical care based on our novel research, and we are proud to continue this tradition. There are so many exciting projects involving our faculty not only at the University, but in our affiliated hospitals in the Twin Cities. We cannot possibly highlight all of these projects, but I hope you will enjoy reading about some of our leading innovators in this issue.
There were many things that William Meyerhoff, MD, PhD, loved about starting the Department of Otolaryngology–Head and Neck Surgery at University of Texas Southwestern Medical School in Dallas. Teaching residents and helping them develop from newly minted doctors to full-fledged specialists definitely ranks at the top.

Now retired, Meyerhoff looks back fondly on all of the residents he helped launch into acclaimed careers. Some stayed at Southwestern while others moved on to lead departments at other prestigious medical schools.

“Teaching was my favorite. I miss my patients, and I enjoyed research, but I really liked teaching,” says Meyerhoff. “It’s an equal reward when you see these kids do well. To watch them develop from bright, brilliant minds to accomplished head and neck surgeons is a really good feeling.”

Launching and growing a new department at an excellent medical school also ranks highly for Meyerhoff. During 20 years as founder and chair of Southwestern’s Department of Otolaryngology/Head and Neck Surgery, Meyerhoff grew it to 23 full-time physicians. That included specialists in pediatrics, otology (diseases of the ear), head and neck surgery, allergies, facial plastic surgery, and skull base surgery.

“We had an atmosphere that was always very vibrant. We had a lot of good people, and we had very, very low turnover,” notes Meyerhoff, who played a major role in recruiting. “We had a cohesive team that worked well together, and I was impressed by that.”

Meyerhoff believes he came from an excellent training ground at the University, well-prepared to lead at Southwestern. During his residency in Minnesota, he thrived from the University’s emphasis on patient care, academics, research, and administration.

He aimed to build a similar department in Texas. “I wanted to replicate the intense desire to achieve excellence and not be satisfied with mediocrity. I don’t think there is a place for a mediocre physician,” says Meyerhoff, who also earned a PhD in physiology from Minnesota. “The University had a very academic posture with many people doing research.”

Meyerhoff returned to Minnesota in 1977 after spending three years in San Antonio, Texas. He was an associate professor, then professor and chair of otolaryngology at Hennepin County Medical Center for five years. Then Southwestern came calling. Starting a new department in a top medical school with the most Nobel laureates in the world certainly was appealing to Meyerhoff.

At Southwestern, Meyerhoff focused on skull base surgery and treating patient with ear diseases, tumors, and infections. He enjoyed the variety of his practice, from teaming with neurosurgeons on complicated surgeries to helping patients with intractable vertigo. His focus on otology and neurotology won him election to the exclusive American Otological Society.

Meyerhoff also did research throughout his career into diseases of the middle and inner ear. In all, he had more than 200 scientific publications and was either the author or editor/coeditor of six textbooks.

Today he is retired in North Carolina, spending plenty of time fishing, exercising, reading, and taking care of his property. “I’m happy, I’m healthy, and I’m enjoying life. When I look back at every decision I made—to go into medicine, to go into head and neck surgery, to go into academic medicine, to move up through the ranks—I don’t think I would have changed one of them.”
Andrew Oxenham: Pitch Perfect

Cochlear implants have been a wonder for the hearing impaired, offering access to speech and sound. They’ve exceeded their inventors’ expectations from when they were developed in the early 1970s.

But they certainly aren’t perfect. The sounds people hear are different from typical sound. They often lack pitch, which makes music perception and understanding speech quite difficult. Plus, like hearing aids, the sounds cochlear implants receive often get masked by background noise.

Andrew Oxenham, PhD, a Distinguished McKnight University Professor in psychology and otolaryngology, targets his research at improving sound and speech perception for people with cochlear implants. One problem is that implants have 12 to 24 electrodes attempting to replace the intricate and complicated structure of the inner ear—quite a tall order for a relatively crude device, he notes.

Oxenham heads the Auditory Perception and Cognition Lab at the University, where he applies his expertise in auditory perception to improve the design and function of cochlear implants. He got interested in the field after earning a bachelor’s degree in music and sound recording from the University of Surrey, where he also played bass guitar and keyboards in some bands.

While doing a research project for the BBC about digitizing music, Oxenham got interested in how the ear processes sound. That prompted him to earn a doctorate in psychology from University of Cambridge. Next Oxenham completed a postdoctoral fellowship at the Institute for Perception Research in the Netherlands. He came to the University in 2006 from MIT.

Oxenham has several research projects ongoing. In one, he tests different sounds on people with normal hearing to see how they perceive pitch. With information about how their auditory system processes diverse pitches, researchers translate that knowledge to improve processing for people with cochlear implants.

Ultimately, Oxenham hopes his research helps manufacturers improve the pitch sensitivity of implants. “It’s not just a question of letting people understand speech better or appreciate music more,” he says. “Hearing loss leads to social isolation, and it has negative cognitive, health, and social consequences.”

Another study involves researching how the brain processes sound. Oxenham’s group is investigating whether sound amplification in the ear changes if someone is paying attention to the sound or to something else. Subjects look at a screen and perform complex visual tasks while researchers play sounds into their ear.

“Your ear may change its response depending on whether you are paying attention to what’s coming in or not,” he notes. “These kinds of effects may disappear, even with a small amount of hearing loss.”

Oxenham says his team is at the very early stages of discovering what specifically changes in the ear as we shift our attention in space and between vision and hearing, so that it could be replicated in hearing aids. “Ideally the hearing aid could amplify only the sounds we’re interested in,” he says. “Just the process of listening hard for something may change the way the sound is processed in the ear itself, so that it turns down the sounds that aren’t important.”

As millions of people with hearing loss attest, there is plenty of room for improvements to hearing devices. Oxenham strives to have his research contribute to those advancements.
Michael Paparella, MD: Global Recognition

Most physicians believe Meniere’s disease is “idiopathic” which means we do not know what causes it. 30 years ago based on a study of 500 patients with Meniere’s disease plus routine observations of anatomical anomalies in patients during surgery, Paparella presented a paper at the Collegium in Basel Switzerland. He described the cause the pathogenesis (how the cause leads to the patient’s problem) and the causes of the symptoms. The title of the paper and publication which followed was titled “The Cause (Multifactorial Inheritance) and Pathogenesis (Malabsorption of Endolymph) of Meniere’s Disease and its Symptoms (Mechanical and Chemical)” . At that time, one could find no other publications on the genetic causes of Meniere’s disease.

Since that time, almost a hundred articles in genetic journals and the basic science journals have described chromosomal abnormalities in Meniere’s disease patients. The causative gene has not been identified.

Recently, Paparella traveled to Brazil and Italy to teach others. In Brazil, he was an honored guest and spoke at the World Congress. The president of the Congress trained as a fellow with Paparella at the University. Paparella also was the keynote speaker and Guest of Honor at The International Symposium on Meniere’s Disease and Inner Ear Disorders in Rome which is held every five years. Paparella was fortunate to be Guest of Honor at two of the last three meetings.

Paparella lectured at the opening ceremony in Rome and his lecture was “Cause, Pathogenesis and Symptoms of Meniere’s Disease”. Thus the genetic cause originally described by Paparella has and is being proven scientifically. There he had the opportunity to meet Pope Francis, thanks to another former student, who is the hearing specialist for the Pope and cardinals at the Vatican. The Pope holds a Papal Audience every Wednesday, often with 40,000 people in attendance. Then to his surprise, Paparella was invited onto the stage with the Pope and 80 cardinals. “Pope Francis came around and chatted with me, and I shook his hand. He was very kind, smiling, a modest guy,” recalls Paparella. “It was wonderful.”

A few years prior to this joyous event, Paparella and his wife Treva, were invited guests to India and had the great privilege of a personal 45 minute meeting with Mother Theresa six months before she passed away and who will soon be bestowed sainthood this coming September. Another rare and wonderful experience.

Making lasting connections with patients, other physicians, and even the Pope and Saint Mother Theresa—it’s been a fortunate time in Paparella’s career.
Department Events & News

Oral Head & Neck Cancer Awareness Conference
On Saturday, April 16, the department will hold its annual conference at the University of Minnesota. This free educational and social event is open to the public, held in Moos Tower, 2-620.

Resident and Fellow Graduation
Friday, June 17, 2016 is the annual resident/fellow department graduation. 7:30 AM will be a continental breakfast, with the scientific program at 8:00 AM, held in the Lions Research Building 1st floor conference room. We are honored to have Dr. Timothy McCulloch, MD, Professor and Chair of Otolaryngology at the University of Wisconsin School of Medicine and Public Health as the guest speaker. The day will be capped with the evening banquet.

Qi Zhang, MD, 1st Place at MAO Poster Session
Dr. Qi Zhang, a fourth year resident, was awarded first place in the Minnesota Academy of Otolaryngology Resident Poster Session. The title of her poster was “Effect of Triptolide on MDM2 Expression in HPV-positive Squamous Cell Carcinoma”.

Wade Swenson, MD, 3rd Place at MAO Poster Session
Dr. Wade Swenson, a fifth year resident was awarded third place in the Minnesota Academy of Otolaryngology Resident Poster Session. The title of his poster was “A Potential Role for Pioglitazone in the Chemosensitization of Human Sinonasal Undifferentiated Cancer Cells (SNUC)”.

Sobia Khaja, MD will join faculty
Dr. Sobia Khaja will join the University of Minnesota Department of Otolaryngology-Head and Neck Surgery faculty in August 2016. She recently completed a fellowship in Head and Neck Surgery and Microvascular Reconstruction at the Medical University of South Carolina. Welcome to Minnesota, Dr. Khaja!

Drs. Hsia and Adams with Goldy Gopher

D-Feet Hearing Loss Walk 2016
This year’s D-Feet Hearing Loss Walk will take place at the Minnesota Landscape Arboretum on June 4, 2016. The walk raised over $100,000 for research and clinical training at the University of Minnesota Department of Otolaryngology last year. We are grateful for the tireless volunteers of the Lions who strive to raise money to benefit those who have lost hearing.

Faculty & Resident Awards

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Congratulations to both of our residents!

Matthew Greulich, MD, Humanitarian Resident Travel Grant
Dr. Matthew Greulich, a fifth year resident was awarded the AAO-HNSF Humanitarian Resident Travel Grant. Only fifteen of these grants are awarded nationwide.


Mark Your Calendar

**Saturday, April 16, 2016**
*Oral Head & Neck Cancer Awareness Conference*
2-620 Moos Tower

**Monday, May 2, 2016**
*Paparella Lecture*
Bill Meyerhoff, MD, PhD
PWB 8-335

**May 18-22, 2016**
*COSM*
Chicago, IL

**Saturday, June 4, 2016**
*Lions D-Feet Walk*
MN Landscape Arboretum
Chaska, MN

**Friday, June 17, 2016**
*Department Graduation*
Timothy M. McCulloch, MD, FACS
Lions Research Building Conference Room
Banquet - North Oaks Golf Club

**July 15-20, 2016**
*AHNS 9th International Conference*
Seattle, WA