Perla Hernandez: Breathing free, finally

Perla Hernandez would be laughing with her family when suddenly she couldn’t breathe. Each time it happened, she would be terrified, turn purple, and begin to lose consciousness. Then these spells started happening a few times a month to the 12-year-old, prompting her mom to take her to the doctor.

During medical appointments over a year or two, several physicians told Sandra Rodriguez and her daughter that they couldn’t see any reason why Hernandez was having difficulty breathing. They said she was just overweight and out of shape. But Hernandez was an active teen who loved to dance, play sports, and run. Perhaps she had a few pounds to lose, but nothing significant.

“Then it happened more and more often, when I would laugh, get mad, or do activities,” says Hernandez, who is now 16 and a high school junior. “My mom got very concerned.”

Taking doctors’ advice to heart, Hernandez started restricting her calories, skipping meals, and exercising vigorously. But she still had frequent breathing troubles, even passing out at school when she was in eighth grade. Again, Rodriguez took her daughter to the doctor but they got the same advice about weight loss.

Hernandez started to feel bad about her herself. “I got traumatized by the overweight thing, and I wouldn’t eat at all or just very little, or then I would exercise all the time,” she says. “It was really pulling me down.”

About a year ago Hernandez ended up in the emergency room after she struggled to breathe all day, feeling like a knife was stabbing her in the chest. An ER physician ran all manner of tests and couldn’t find anything wrong, telling the Rodriguez family that Hernandez probably had some bacteria between her rib cage and lungs.

Frustrated, Rodriguez found a new family doctor for Hernandez to see, who then referred her to William Gershan, MD, a pediatric pulmonologist at the University. Gershan noted that Hernandez was not suffering from asthma and suspected that she was having an issue with her vocal cords. He sent her to pediatric otolaryngologist Luke Jakubowski, MD, who identified the specific issue: vocal cord dysfunction.

To confirm and develop treatment, Jakubowski referred Hernandez to Deirdre Michael, Ph.D., a speech-language pathologist and co-director of the Lions Voice Clinic in the Department of Otolaryngology, Head and Neck Surgery. Thanks to Jakubowski and Michael, Hernandez and Rodriguez finally got the answers they had been seeking for four years.

“I felt so relieved. There was actually something wrong that was real, and it wasn’t my weight,” says Hernandez. “I am really thankful to the people at the University. Thank god there are people who actually know what they are doing and don’t just jump to conclusions.”

Vocal cord dysfunction, a functional breathing disorder, happens when the vocal folds come together at the wrong time. This traps air in the lungs, making it difficult to inhale, Michael explains. Using flexible endoscopy, Michael visualized Hernandez’s larynx and watched her vocal chords as she breathed.
Notes From the Chair

Diving into the New Year with many wonderful bits of news, it feels busier than ever in the department. The CSC clinic is very busy, and the OR’s are full. We have two new large grants to celebrate with faculty members Dr. Khariwala and Dr. Misono. Dr. Misono received an NIH National Institute on Deafness and Other Communication Disorders Mentored Patient-Oriented Career Development Award to study psychological factors influencing voice outcomes. Dr. Khariwala received an NIH Fogarty International Center International Tobacco and Health Research and Capacity Building R-01 program award to work on the study of tobacco carcinogen exposures.

The CEO of AAO-HNS, Dr. James Denneny, III visited in early December as the Larry Boies, Jr. Annual Lectureship speaker, sponsored by HCMC. It was a privilege to have time with him and to hear his insights about changes on the health care horizon, and the department was pleased to see so many community members present as well. Looking ahead, we will be hosting Tucker Woodson, MD as the John Young Lecturer on January 12, 2018 at 5:30 PM in our department, and on April 30, 2018, we are hosting Andrea Vambutas, MD, FACS for the annual Paparella Lectureship. Please join us if you are in town.

We are excited to welcome two new affiliate faculty: Dr. Stephanie Contag at Hennepin County Medical Center, and Dr. Barbara Malone at the Children’s of Minnesota. We are in the midst of recruiting 2-3 more faculty for the coming academic year. With sadness, we have had two retirements this year. Dr. Jim Sidman has retired from his clinical practice, but remains a very active faculty member and engaged with the pediatric fellowship program. Brianne Roby is now the Program Director of the fellowship program. Read more about Dr. Sidman below. Dr. Sam Levine has stepped away from his surgical practice, but is still very active in the clinic and with residents, both in the department and at the Minneapolis VA. He is hard at work planning for a new simulation lab in the future education building.

We thank you for your support, for your friendship, for your engagement with us as a department. We hope that 2018 will be as positive and exciting as this year has been.

James Sidman, MD

Paying it forward

Renowned pediatric otolaryngologist James Sidman, MD, has devoted his career to elevating training for pediatric head and neck surgeons. He aims to provide the best care for patients through his own hands and by sharing his wide-ranging expertise with others.

“I want to express to young people that taking care of humans, helping them get better, and being a surgeon is the most gratifying thing in the world,” he says. “Teaching what I’ve learned to the next generation is paying it forward, and there is nothing more exciting and fun than that.”

A private practice physician at Children’s Minnesota, Sidman has taught scores of otolaryngology residents and fellows from the University of Minnesota. He completed medical school at Dartmouth Medical School, then did his internship at Hennepin County Medical Center. After residency at University of North Carolina, Sidman spent four years in academic medicine at University of Connecticut, where he served one year as acting chair.

Seeking new opportunities, Sidman returned to Minnesota in 1993 at the invitation of HCMC friends and joined a practice that covered Children’s otolaryngology patients. He impressed Dr. Peter Hilger, a facial plastic and reconstructive surgeon, and others from the University with his skill in pediatric cleft lip and palate surgery, and Hilger opened doors for Sidman to teach his fellows.

In 2000, Sidman opened Pediatric ENT Associates, the first pediatric otolaryngology group in the Upper Midwest. (Children’s purchased his practice about six years ago.) Motivated to get more deeply involved in academic medicine, Sidman also took the initiative to start and self-fund a pediatric otolaryngology fellowship at Children’s.

Through the participation of Dr. Frank Rimell, a pediatric otolaryngologist at the University, bridges were built between Children’s and the U. Sidman’s fellowship has trained 16 physicians in pediatric otolaryngology, while fulfilling his vision for such specialists to focus on major issues like airway reconstruction, head and neck cancer, cleft lip and palate, craniofacial surgery, and more.

“This has always been the part of pediatric ENT that I’ve been interested in,” says Sidman, who is a professor at the University. “And I thought, ‘How can I share this with young people?’ Sharing it has been the biggest joy of my life. It’s been so much fun.”
But everything looked normal, mainly because the teen’s breathing issues were episodic and she didn’t show symptoms when she was breathing normally. So Michael had Hernandez run on the treadmill until she struggled to breathe, then did another endoscopy. Together they watched Hernandez’s larynx on a motion video monitor and saw the vocal cord dysfunction in action.

In a two-hour appointment this fall, Michael confirmed the vocal cord dysfunction diagnosis and trained Hernandez to overcome it. “By the end of the two hours, Perla was hugging me and she was so happy. She was so excited and her mom was so excited about the idea that she could be helped,” Michael says. “She went four years feeling horrible about herself when there was no need.”

Often when people have vocal cord dysfunction, they aren’t using their diaphragm and rib cage muscles to fully expand their lungs and pull in oxygen. Michael teaches her patients how to relax their abs and contract their diaphragm so they breathe more deeply. Michael also worked with Hernandez on breathing through her nose, which opens the vocal folds during respiration.

Usually Michael has patients practice the technique of relaxing their abdominal muscles, engaging their diaphragm, and breathing when they are sitting or lying down. Then they progress to standing, then walking, then running. For Hernandez, the entire process took about 20 minutes before she had it all figured out.

Michael sees many young patients who have gone through several doctors’ appointments before they are diagnosed with vocal cord dysfunction. She, Hernandez, and Rodriguez are hoping to get the word out about the condition so that others don’t have to live with breathing troubles for years like Hernandez.

A key question for clinicians to ask, Michael says, is whether the person is having trouble inhaling or exhaling. An issue with inhalation rules out asthma and points toward vocal cord dysfunction. Another indication is stridor—the high-pitched sound of labored inhalation, she says.

Rodriguez and Hernandez, after many visits to doctors and much anxiety, are happy to have answers about why Hernandez struggled to breathe. She encourages other parents to trust their instincts when something is wrong with one of their children. “The most difficult part was when doctors would say that she was fine, but I knew she wasn’t fine,” says Rodriguez. “We always have to look for a solution and never stop looking until we find the answer.”

For Hernandez, she is thrilled that she can continue laughing, dancing, and playing sports without having to worry about getting enough air. “It’s been a long process. I feel relieved,” she says. “I got my life back.”

About four years ago, the University and Children’s merged their pediatric otolaryngology divisions, becoming the only fully integrated program between the two institutions. Today, residents rotate through Children’s just like the U’s other four sites. Sidman is proud of that legacy of collaboration and excellence in training the next generation of pediatric otolaryngologists.

In addition to treating patients and teaching many courses at the University, Sidman also is a prolific researcher who published more than 100 papers. He reluctantly stopped treating patients recently, facing a terminal cancer diagnosis. Sidman misses caring for patients and training residents and fellows as much as he used to.

**AAO Committee Members**

- **Equilibrium Committee** - Meredith Adams
- **Microvascular Committee** - Samir Khariwala (Chair-Elect); Sobia Khaja
- **Sleep Disorders Committee** - Jennifer Hsia (Chair); Oleg Froymovich
- **Voice Committee** - Stephanie Misono
- **BOG Socioeconomic and Grassroots Committee** - Brianne Roby
- **Head and Neck Surgery Education Committee** - Samir Khariwala
- **Pediatric Otolaryngology Education Committee** - Brianne Roby
- **Humanitarian Efforts Committee** - Brianne Roby; Sandra Skovlund
- **WIO Leadership Development and Mentorship** - Meredith Adams (Chair)
- **WIO Program and Awards Committee** - Meredith Adams
In Memoriam...Virgil Terrance ‘Terry’ Rhodes, MD

Rhodes, MD, Virgil Terrance “Terry” November 6, 1942-September 2, 2017 Terry passed peacefully at the family cabin on September 2. Terry is survived by Sharon, his wife of 54 years; their four children Mark MD (Jane), Christie MD (Jeffrey), Michael MD (Tamara), Greg PhD (Devon); seven grandchildren Nicholas, Daniel, Sarah, Madeleine, Zachary, Jonas, and a new grandson due this month. Terry was raised on his family homestead near Palisade, MN. He graduated from University of Minnesota Medical School (1970). Terry completed a residency in Otolaryngology (ENT) at the University of Minnesota (1976), and he practiced in the Twin Cities, Crosby, and New Prague for 38 years. Children were always the source of happiness in Terry’s professional and personal life. He was especially proud of his role in the development of Children’s Minnetonka Surgical Center, and served on their executive committee until his retirement in 2014. Family was Terry’s dearest love and brought him his greatest joy. His most cherished times were spent with all the generations relaxing together in the woods at the cabin. His passing there, while overlooking the lake, was a blessing.
When patients see a physician about dizziness, do doctors order the same tests and treatments whether they are in Minnesota, Maine, or New Mexico? That’s the kind of fundamental question Schelomo Marmor, Ph.D., seeks to answer with his research, done in collaboration with physicians across the University, including the Department of Otolaryngology—Head and Neck Surgery.

By analyzing large sets of data from individual clinics, health care institutions, and systems, Marmor aims to identify ways to maximize quality and minimize costs in health care delivery. His work involves investigating national trends and outcomes to see what approaches are effective or wasteful.

“One of the things that resonates with clinicians and collaboration groups is that we’re often looking at more patients than they will ever see in their lifetime,” Marmor says. “It gives a window into what is going on across the country among their clinical colleagues. They might only have a window into their own work. When you start looking at bigger data sets, you see the universe of health care being provided across the country.”

Marmor taps into data from Medicare, Optum Health (an arm of UnitedHealth Group), or institutions like the National Cancer Institute to mine for trends, evidence-based practices, and other information that guides medical decision-making. An assistant professor in the Department of Surgery, Marmor works regularly with faculty from surgical oncology and otolaryngology on research initiatives.

He came to the University in 2006 to pursue a doctorate in health policy and management, completing his degree in 2013. Next he started working with Meredith Adams, M.D., to investigate trends in the treatment of vestibular disease and with Stephanie Misono, M.D., to evaluate outcomes for laryngeal cancer treatment.

With Adams, Marmor sought to identify national trends in treatment for dizziness in people older than 65. “What we found is that there is a lot of variation across the country in types of providers giving care—not necessarily specialists. We would hope that specialists might be more involved in the diagnosis and treatment. We’re not necessarily seeing that,” he says. “That was eye-opening.”

The pair also found significant variance in testing nationwide, with some areas over testing and some areas under utilizing tests. Now that Adams and Marmor identified the issue, they will try to determine the causes. “Are too many different providers giving care? Or is something else going on, like not having the right clinical guidelines to help providers identify the most effective diagnostic and treatment strategies?” Marmor says.

On top of guiding nonspecialist physicians, standardizing such approaches also helps patients and payers. Patients learn expectations for which providers to see or treatments to pursue; payers and patients benefit when physicians use best practices and evidence-based treatments, Marmor notes.

Marmor and Misono are researching whether surgery or radiation is more effective for treating localized laryngeal cancer. While radiation has become more common nationwide, the pair found that surgery outcomes are actually a bit better. Other surprising results include the wide variance of treatment approaches across the country.

Marmor is happiest when teaming with clinicians, building research around a clinical question they raise. “I’m passionate about collaborating with clinical colleagues in ENT,” he says. “They help me develop ideas I wouldn’t necessarily have had. It’s a fruitful partnership because we offer different perspectives on how the health care system works.”

Another rewarding part of Marmor’s work is knowing that his research helps inform and empower patients to learn more about their conditions and possible treatments. In some of his projects, patients have helped guide research questions and steered his team toward exploring unexpected areas. “It was a complete 180 the other way but it gave us more perspective, and they wanted to be even more involved,” he adds. “We love this—being at the ground level together with patients.”
Mark Your Calendar

Friday, January 12, 2018
John Young Lecture
Tucker Woodson, MD
PWB 8-335

April 5-7, 2018
Midwest Head & Neck Cancer Consortium
University of Iowa

April 18-22, 2018
COSM
Washington DC

April 30, 2018
Paparella Lecture
Andrea Vambutas, MD
PWB 8-335

April 18-22, 2018
Midwest Head & Neck Cancer Consortium

Saturday, June 2, 2018
Lions D-Feet Walk
MN Landscape Arboretum
Chaska, MN

Friday, June 15, 2018
Department Graduation
Lions Research Building Conference Room
Banquet - Metropolitan Ballroom