Cara Holmes was an otherwise healthy 26-year-old when her larynx suddenly began to spasm for no apparent reason. “I felt like I couldn’t breathe in. When I’d try, my throat felt blocked,” Holmes, now 31, says. “I would make this terrible seal noise. Then I’d go into panic mode.”

She ended up in the emergency room a lot, was intubated twice and once put into a medically induced coma. In 2015, roughly two years after the onset of the spasms, Holmes, who was living in the Washington, DC area at the time, was referred to an otolaryngologist who diagnosed her with laryngospasm, a rare condition most commonly caused by acid reflux. In cases as extreme as Holmes’, however, almost anything could trigger it—talking, inhaling cold air, even inhaling a particular scent.

“I had a sense of what was wrong, but I was still in and out of the ER and on anti-anxiety medications,” Holmes says.

The specialist injected her with Botox in an attempt to weaken the vocal folds to the extent that they couldn’t come together forcefully enough to block the airway. It lessened the spasms and their severity, but it also brought Holmes’ voice down to a whisper. And after several treatments, the Botox lost its effectiveness, which led Holmes to opt for a tracheostomy tube.

“I was really disheartened, but it was a quality-of-life decision,” she says. “I was tired of being in and out of the hospital. The thought of not waking up every morning in fear of breathing—it was a no-brainer.”

Last summer, Holmes relocated to the Philadelphia area with her fiance and in the course of the move was referred to Nausheen Jamal, MD, Assistant Professor in Temple’s Department of Otolaryngology—Head and Neck Surgery. Dr. Jamal started Holmes on acid reflux medication and noted that she had never tried respiratory retraining therapy. “When I met Cara, the laryngospasm was controlling her life,” Dr. Jamal says. “What we do in respiratory retraining therapy is show the patient that she is in control. She can effectively manage these symptoms.”

A month later, Holmes began meeting with Barbara Ebersole, BFA, MA, CCC-SLP, Director of Speech and Language Pathology for the Temple Head & Neck Institute.

“We had Cara breathe in a very specific way that’s a little bit abnormal, but it changes the pressures in and around her larynx, and those pressure changes facilitate a release of the problem,” Ebersole says.

Midway through their first session, Holmes was already able to stop an attack within three breathing cycles.

The respiratory retraining therapy also includes an emotional-counseling component. “This is a condition that makes people feel out of control with a function that’s fundamental to being alive,” Ebersole says.
ALUMNI UPDATE: Common Ground Proves to be an Effective Icebreaker

Sonya Wexler, MD, describes her introduction to Richard Herman, MD, with all the breeziness of two friendly strangers who got to talking after they both reached for the same pint of strawberries at the supermarket. But in that moment, her career prospects suddenly assumed a definite shape.

“He came to a Temple alumni event looking for a partner. Lo and behold, I was looking for a job,” she says with a laugh. More seriously, “Temple was instrumental in bringing the two of us together.”

After earning her medical degree at George Washington University School of Medicine & Health Sciences in Washington, DC, Dr. Wexler, who also holds a master’s in biophysics from Georgetown University, completed her Otolaryngology—Head and Neck Surgery residency at Temple University Hospital in 2015.

Nearing the end of her residency, Dr. Wexler attended the alumni event in question, where she met Dr. Herman, who happened to be in the midst of a search for an ear, nose and throat specialist to join his private practice.

Dr. Herman himself completed his Otolaryngology—Head and Neck Surgery residency at Temple in 1994 after graduating from the Lewis Katz School of Medicine at Temple University and finishing a general surgery residency at Temple University Hospital.

The common ground proved to be no small advantage for Dr. Wexler, who accepted Dr. Herman’s invitation as soon as she finished her residency. There, she’s developed a particular interest in otology.

“I get a bit of everything in private practice, though,” she says.

Since leaving Temple University Hospital, Dr. Wexler admits that her involvement in alumni affairs has been limited—helping to run a private practice and raising two young kids tends to devour your time—but she retains vivid, fond memories of John H. Krouse, MD, PhD, MBA, the former Chair of Otolaryngology—Head and Neck Surgery, and Interim Chair Ahmed M.S. Soliman, MD, with whom she authored a paper during her residency. Their tutelage continues to influence much of her daily practice—as Dr. Herman seemed to know it would.

Respiratory Retraining Therapy for Breathing, continued

“So, I’m very careful, especially when I work with patients who have this condition and have been trached, to share the control with them. We’re not going to talk about removing the trach until you feel that you are ready.”

Holmes arrived at that point in early December 2017, three months after her first session with Ebersole and 21 months after the tracheostomy tube was placed. Just a couple of weeks later, on December 30, Holmes and her finance were married. “The highlight of this whole experience was not having a tracheostomy tube in my wedding photos,” she says.

“I knew that we could get her better,” Dr. Jamal says. “I wasn’t certain that we could get her as well as we did. It’s a little bit patient-dependent, how well therapy will work.”

Laryngospasm is a permanent condition, and those with it are prone to relapse. “Our goal in therapy is to make sure that the patient leaves understanding that if it happens again, they have the tools they learned in therapy to address it,” Ebersole says. “However, sometimes it’s a year or more before they have a relapse, so they have to come back for a tune-up—a ‘refresher course,’ we call it.”

Holmes continues to undergo voice therapy with Ebersole. Her spasms are down to a couple of times a day, though she says she can control them so quickly and confidently that her husband never even notices she’s experiencing one.

Nor do her students, though they’ve been curious about her condition and treatment. Holmes is a third- through sixth-grade reading specialist in the School District of Philadelphia.

“The kids have been really supportive,” she says. “They asked a million questions, and it’s been empowering to share my story with them.”

Also empowering: The prospect of snorkeling, which she plans to do every day when she heads to Hawaii in June for her honeymoon.

“Temple has changed my life,” Holmes says. “When I first arrived here, there was no light at the end of the tunnel. But, immediately, Dr. Jamal was so calm and collected. She looked at me and said, ‘No, we can get that trach out.’ It was the first real hope I had in five years.”
Suddenly, There’s a Decidedly Laidback Vibe Among the Residents

Round up a small group of West Coast transplants in the middle of the winter and they’re bound to complain about the weather. Can you blame them? Think how much you hate shoveling. Now imagine doing it with the following burrowing through your thoughts: It’s 80° and sunny back home.

Such is the life for five of Temple’s 11 current Otolaryngology—Head & Neck Surgery residents. Four grew up in California and did their undergraduate studies there: Derrick Tint, MD, (’18); Steven Zuniga, MD, (’19); Marian Ghraib, MD, (’20); and Suraj Kedarisetty, MD, (’21). The fifth, Jessica Tang, MD, (’22) moved there in high school from Hawaii.

“I guess the cliché California thing to say when you come to the East Coast is that you can’t handle the weather,” says Dr. Zuniga, a Bay Area native. “But I went to medical school in Chicago and I’m a fourth-year here, so I feel like I’ve been cold for almost a decade.”

“You know that song, ‘It’s Beginning to Look a Lot Like Christmas?’” asks Dr. Ghraib, a Los Angeles native. “I never knew what that meant until we moved here.”

“Or, people say it smells like snow, and I’m like, ‘What?’” Dr. Tang says.

The griping soon shifts to the traffic, but it gradually becomes apparent that the issues are more with the other drivers.

“My driving is horrible,” admits Dr. Kedarisetty, who hails from the Bay Area. “But it matches the rest of Philadelphia, so it’s OK. You’re not allowed to wait for people to cross the road here.”

“I always get honked at,” Dr. Tang says. “My husband’s like, ‘Why do we get honked at every time we leave the house?’ Welcome to Philly,” Dr. Ghraib says.

It’s not as bleak as it sounds. In their defense, the residents were asked to name the hardest part of their adjustment for this story. Dr. Tint, for one, says he loves Rittenhouse Square, where he lives nearby with a group of new friends. “We walk a block away and we’re at a five-star restaurant. It’s just one of the greatest things. You’re close to everything,” says Dr. Tint, who relocated from Orange County by way of Pitt’s School of Medicine.

The positive comments about their residencies come faster than any complaint, specifically an appreciation for the diversity of their experience.

“If you say ‘templemade’ to anyone who’s trained here, they’ll know what you mean. You have some grit. And this program gives it to you. It also gives you the support that we need,” Dr. Ghraib says. “We’re learning grit in a safe place.”

Still, when there are 3,000 to 5,000 miles between you and much of your family, as is the case for Dr. Zuniga, a father of a 20-month-old daughter with another on the way shortly, facing their absence is a daily reckoning. His parents now live in Hawaii, and the rest of his family remains in California.

“I feel like I go through periods where I love Philadelphia for a lot of the reasons that everybody has said. There’s a great restaurant scene, there’s plenty of family-centric activities,” he says. “But every time I go back to California, I feel at home there.”
Painting a More Complete Picture of a Career in Medicine

Diverse as the medical residents’ training has become in Temple’s Department of Otolaryngology—Head and Neck Surgery, it was still leaving them with an appreciable void upon graduation.

Nausheen Jamal, MD, Residency Program Director and an Assistant Professor in the department, developed a concept that covered that gap, but it would take her another couple of years to determine how to incorporate it into the curriculum. When the residents’ protected weekly education hours were extended from two to three, she found her opportunity.

Dr. Jamal’s program, The Business of Medicine, started last July.

“The premise is, although we train our residents to become good physicians from a clinical standpoint, we haven’t been telling them as much as we should about the business side of the profession,” she says.

Together with Thomas Lubiski, MBA, Senior Administrator in the department, they surveyed alumni about what they wish they had known about running a practice. Then they supplemented those responses with data from medical education literature to formulate a two-year curriculum comprised of 12 bimonthly lectures.

All 11 of the Department of Otolaryngology—Head and Neck Surgery residents attend the lectures. Out of their allotted three hours a week of protected education time, the Business of Medicine sessions account for one. They are largely PowerPoint-based lectures, but they’ve been very interactive through the early going, says Dr. Jamal.

“The residents have been asking a lot of questions,” she says. “And the speakers have been great about engaging with them on these very complex concepts.”

Because there is no funding for the program, Dr. Jamal and Lubiski have recruited their speakers from across Temple University and its health system, all of whom are presenting on a volunteer basis. Lubiski himself led the first session, “Practice Management (Part 1),” which delved into the critical minutiae of practice accounting, such as profit and loss statements, cash flow and capital expenses.

Eric Brunner, Temple’s Assistant Vice President of Learning and Development, led a lecture in October on professionalism, which touched upon several wide-ranging, but essential, interests, including workplace attire and writing a professional email.

In January, Dr. Jamal and Lubiski convened a small panel to dissect how to go about choosing between private and academic practice. The panelists distinguished not only between the two but also among their nuances, such as a solo practice compared with a single-specialty-group practice and a multispecialty-group practice, or for-profit and nonprofit environments.

“This course does a good job of covering the essential skills needed for transitioning from an otolaryngology resident to a physician in practice,” says fifth-year resident Resha Soni, MD. “We simply don’t get too much exposure to the business aspect of medicine in medical school. The challenges of balancing cost and quality in healthcare has been eye-opening.”

Second-year resident Bahbak Shariat-Madar, MD, echoes her sentiments.

“From a resident perspective, prior to the course I was unaware of how regimented and specific the language in medical documentation has to be, not only from the standpoint of communicating with other physicians, but also in order to be appropriately reimbursed for the work that you actually did,” he says. “I also gained a lot of insight into our department’s finances, how physicians are reimbursed in an academic setting, and how incentives work in our health system. Had it not been for this course, these are all things I would have probably had to learn ‘on-the-job’ after residency is finished.”

Future lectures will address malpractice insurance and risk management, marketing, contract negotiations and investing and retirement planning, among other subjects. Henry Pitt, MD, Chief Quality Officer of Temple University Health System and Associate Dean of Clinical Affairs, is leading a session on patient satisfaction.

According to Dr. Jamal, the aim of the Business of Medicine curriculum is to foster better-rounded perspectives for the residents. In the short term, it enables them to begin defining their career expectations with a more accurate grasp of their opportunities. But the program’s full impression likely won’t be felt until they embark on their careers, and appreciate the deluge of new concerns beyond medicine.
The physicians at the Temple Head & Neck Institute strive to continuously monitor and improve their care quality and outcomes. To this end, the faculty is actively involved in developing and implementing meaningful otolaryngology quality and outcome measures. When developing potential new outcome measures, the following criteria are considered:

1. The measure should monitor a modifiable outcome.
2. The measure should monitor a clinically significant outcome.
3. Monitoring the measure should ultimately result in improvement of patient outcomes.
4. Data collection associated with monitoring the measure should not present an excessive work burden, recognizing that faculty and staff work effort is a finite resource.
5. Monitoring the outcome measure should lead to a positive and desirable change in physician behavior, rather than a maladaptive behavior change.
6. Any unintended consequences of monitoring a particular outcome measure should be identified.
7. Monitoring the outcome measure should not be used for physician shaming, reducing payment for physician service, or any other purpose, except for improvement of health outcomes.

The Temple Head & Neck Institute developed a Quality Measure Incubator that evaluates potential new quality measures by running them through several stages of vetting and field testing. A number of quality measures are currently at different stages of development. If a measure meets the above criteria and is shown to be helpful in improving patient outcomes, it is then adopted for long-term monitoring. All faculty, residents, allied health professionals, staff and even patients are welcome to submit potential quality measures to the Incubator.
Searching for Clarity in the Treatment of Spontaneous CSF Leaks

A recent study co-authored by Caitlin McLean, MD, Assistant Professor and Director of Rhinology in Temple’s Department of Otolaryngology—Head and Neck Surgery, attempted to evaluate treatment outcomes in spontaneous cerebrospinal fluid (CSF) rhinorrhea in an effort to standardize treatment.

Drainage of CSF, which normally surrounds the brain, can occur due to a hole or tear in the dura and the bone separating the brain from the nose and sinuses. The drainage into the nose creates a number of problems, including a nasal drip from one side—which may be the only symptom of a CSF leak.

“Accidental trauma used to account for the majority of CSF leaks, but there’s been a recent, appreciable increase in spontaneous leaks,” says Dr. McLean. More recent reports have noted spontaneous CSF leaks to be the most common cause of CSF rhinorrhea. Although the exact cause of spontaneous CSF rhinorrhea is not known, emerging evidence suggests that defects in the skull base may develop as a result of elevated intracranial pressures, or idiopathic intracranial hypertension (IIH).

An estimated 100,000 Americans have IIH, and the number is rising as more people become obese or overweight, according to the National Eye Institute. Though intracranial hypertension can stem from a number of causes, obesity—defined as a body mass index (BMI) greater than 30—is a major risk factor. The incidence increases as the gap between the patient’s actual and ideal weight grows.

With persistent intracranial hypertension, pressure exerted on the anterior skull base can weaken the bone and produce a hole, causing a leak. A part of the brain can even protrude through the skull into the nose or sinuses (encephalocele). The diagnosis of IIH in patients with spontaneous CSF leaks is typically made a few weeks after surgical repair of the CSF leak when symptoms and signs of elevated intracranial pressure (ICP) appear.

Clinical signs of IIH include headache and visual symptoms, such as brief “black outs” or “gray outs” of vision, double vision, or ringing in the ears. “Yet most patients in our study only had headaches since the leak likely provided a release valve of the increased ICP,” says Dr. McLean.

The diagnosis of CSF rhinorrhoea may be delayed, as persistent nasal drainage can be mistaken for allergy or sinusitis. “I recently saw a patient who started to cry with relief when I confirmed her diagnosis,” Dr. McLean says. “She had seen multiple providers over the past year and was repeatedly treated with allergy medications without improvement. She was so grateful to finally have a diagnosis.”

The treatment of spontaneous CSF leaks can be complicated by elevated ICP, which can make repair more difficult and require adjuvant therapies, such as lumbar drains, acetazolamide and ventriculoperitoneal (VP) shunts. Not all patients with spontaneous CSF leaks have IIH, nor do all patients with IIH develop spontaneous CSF leaks. “Our study sought to elucidate factors in leak recurrence and peri-operative considerations that could impact clinical management,” says Dr. McLean.

Long-term success for repair and post-operative management of spontaneous CSF rhinorrhea requires consideration of a distinct pathophysiology, likely due to elevated ICP. The study suggests overall high success rates for endoscopic CSF leak repair, though many require adjunct acetazolamide, with a smaller subset requiring VP shunting. It can be useful to monitor post-surgical opening pressures and conduct neuro-ophthalmologic evaluation to rule out adjunct visual abnormalities. “The next step is to confirm our findings in a larger patient cohort in a multicenter prospective clinical trial,” Dr. McLean says.

Evaluation and intervention for elevated ICP in spontaneous CSF leaks is associated with improved success rates following primary endoscopic repair. It is important to consider the possibility of elevated ICP in patients with spontaneous CSF leaks so that the clinician can: 1) collaborate with neurology and neuro-ophthalmology to identify this potential cause and sequelae in this group, and 2) counsel patients on potential increased risk of leak recurrence.
As Need Grows, a New Fellowship Emerges

To meet a growing demand for surgeons with advanced oncologic head and neck experience, Temple’s Department of Otolaryngology—Head and Neck Surgery has launched the Fox Chase/Temple Head and Neck Oncologic Fellowship, which will begin in 2019.

Fox Chase has had numerous surgical oncology fellows through the years, but no specific head and neck surgery fellowship. “Dedicated community otolaryngologists find it challenging to deliver care to complex head and neck cancer patients, given the time and resources required. Often, they send these patients to tertiary care centers,” says Fellowship Director Miriam Lango, MD, FACS. “The pace of change is just incredible right now. Treatment has become much more complicated. Some of the things we’re doing today didn’t even exist just a couple of years ago.”

The Fox Chase/Temple fellowship is representative of a larger trend. Dr. Lango, who completed a head and neck fellowship at the Hospital of the University of Pennsylvania, was one of the first in her residency to pursue such training. “Most of my co-residents thought they could do cancer surgery in private practice,” she says. “But, then, there was an incredible shift in the thinking. In a lot of academic hospitals today, you won’t even be considered for a formal faculty position if you don’t have a fellowship.”

“Our goal is for our fellows to acquire advanced oncologic head and neck surgery training within a multidisciplinary comprehensive cancer care setting,” she adds.

Community Outreach

Temple is proud of its commitment to the health and wellness of the community. For the fourth year in a row, the Temple Head & Neck Institute offered free head and neck cancer screenings as part of Oral, Head and Neck Cancer Awareness Week (April 8–15). Screenings were held on the campuses of Fox Chase Cancer Center, Temple University Hospital and Jeanes Hospital. This year’s event attracted a record 453 participants, including employees and local residents. Screenings were conducted by volunteer physicians and staff from the Temple Head & Neck Institute.
Calling on Alumni in the Name of a Temporal Bone Lab

Jeffrey Bedrosian, MD, was recently named Chair of the newly formed Chevalier Q. Jackson Society, a group of Temple Otolaryngology—Head and Neck Surgery alumni dedicated to supporting the education of residents, including the development of a temporal bone surgical dissection lab at Temple.

Jackson, the society’s namesake, is regarded as one of the leading figures in the early advancement of laryngology. After completing his residency at Temple in 2011, Dr. Bedrosian was an advanced rhinology and skull base surgery fellow at Weill Cornell Medicine under Vijay Anand, MD. From there, he practiced as an otolaryngology surgeon at Maine Medical Center in Portland until he returned to Pennsylvania in 2016—he’s a Perkasie native—and joined Specialty Physician Associates in the Lehigh Valley.

Having a temporal bone surgical dissection lab on campus would turn Temple into a hub for residents and otolaryngologists across the city, Dr. Bedrosian says. The latest developments in advanced ear, temporal bone and skull base surgical techniques could be taught there through didactic sessions, expert-led discussions and lectures and hands-on temporal bone dissection.

“The more we can enhance the residents’ experience, the better our ability to continue to attract high-quality residents,” Dr. Bedrosian says. “And the longer we’re able to accomplish that, the greater the Otolaryngology—Head and Neck Surgery department’s reputation will grow. It’s a significant investment, but the return could be even more meaningful to Temple.”

Supporting the Temple Head & Neck Institute

Gifts to support the Temple Head & Neck Institute directly impact our faculty, residents, staff and patients. You may make your tax-deductible gifts in support of the Institute by returning the enclosed envelope, or online at giving.temple.edu/otolaryngology