Slade Winchester: Taking the bite out of sleep apnea

Slade Winchester’s wife was concerned. She suspected he had sleep apnea and worried about its effect on his health. Winchester was skeptical, but he decided to allay her fears by doing a sleep study. It turned out that not only was Michelle Winchester right, she was very right—Slade was diagnosed with a serious case of sleep apnea in 2015.

A sleep disorder that causes breathing to stop and start repeatedly, sleep apnea is especially dangerous when left untreated. Moderate to severe sleep apnea greatly increases risks for cardiovascular disease, stroke, and premature death, explains Dr. Jennifer Hsia, MD, an otolaryngologist and sleep surgeon at the University of Minnesota who treated Winchester.

People with sleep apnea wake up constantly throughout the night as they stop breathing. This reduces oxygen levels, increases blood pressure, and causes spikes in adrenaline, which all put stress on the cardiovascular system, Hsia adds.

Winchester started using a device to help keep his airway open, called a continuous positive airway pressure (CPAP) machine. But the six months Winchester used the CPAP machine were pretty miserable. “I really struggled with it. It felt really claustrophobic and it was very hard for me to sleep with it on,” Winchester says. Plus, he travels frequently for work, and it added a layer of difficulty to bring along his CPAP.

So Winchester stopped using the machine altogether and tried easing his condition by sleeping on his side. Then a colleague in New York heard a radio ad for Inspire, an implantable medical device that targets sleep apnea with a tongue nerve stimulator. Winchester researched Inspire and looked for a local physician who works with the device.

He found Hsia, an assistant professor of otolaryngology who was the first physician in the Twin Cities to successfully implant the Inspire system. She has successfully used the device with sleep apnea patients for about three years.

First Winchester went through testing to make sure he has the right kind of sleep apnea for Inspire.
**Notes From the Chair**

The seasons are turning, and like spring, growth and change are a constant. On the university campus, we’ve been watching a brand new, 28 floor apartment/retail complex going up across the street from PWB. For those of you who haven’t visited recently, it would be hard to recognize the medical campus. The VFW and Masonic Memorial buildings are scheduled for demolition, and in its place will be a new Health Sciences Education Center for the Academic Health Center. The University of Minnesota Medical Center has begun an $111M addition and renovation as well, with new OR’s, extending onto the emergency room parking space. It’s a constant reminder that we are growing, and that great news.

The annual Paparella Lectureship will be April 30 with Andrea Vambutas, MD, FACS, from the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell. In mid-June, our resident/fellow graduation day will feature Marion Couch, MD, PhD, Professor and Chair from the Indiana University School of Medicine. We look forward to scientific research presentations from our PGY-4’s, and fun-filled remembrances from our PGY-5 graduating class. The traditional evening program will be at the Metropolitan Club and Ballroom in Golden Valley. Our Oral Head and Neck Cancer Survivors’ awareness conference will be Saturday morning, May 12 at the McNamara Alumni Center, and we are in the process of planning a similar program for vestibular patients. These two patient conferences are built around supporting and educating our patients and their families and caregivers, and have always been very well received.

We are looking forward to a beautiful spring, with warm weather and baseball. Thank you for your interest in, and support of, our department.

**Frank Ondrey, MD, PhD:**

Pursuing the Holy Grail of medicine: preventing cancer

Frank Ondrey, MD, PhD, has devoted his career to twin goals. He aims to help head and neck cancer patients beat their disease and discover treatments that prevent at-risk people from getting cancer in the first place or having their cancer reoccur.

An associate professor of otolaryngology—head and neck surgery, Ondrey is on a quest to understand the chemical and molecular properties of cancer and bring therapies out of the lab and clinical trials to patients.

“The progress for head and neck cancer treatments has lagged behind improving cure rates for other solid tumor malignancies like breast and colon cancer. If one wants to look at how you make an impact with better cancer treatments it is to find new cancer preventions, have better screening to find these cancers earlier, prevent tobacco use,” Ondrey says. “If you find cancers at an earlier stage they won’t kill as many people.”

Research has long been a passion for Ondrey. He completed MD and PhD studies at Rush Medical College in Chicago and was an NIH grant fellow during his otolaryngology residency at University of Minnesota even before going to the National Institutes of Health (NIH) for a fellowship in head and neck cancer clinical trials and while studying genetic mechanisms that control head and neck cancer growth. He treated patients at the NIH Clinical center for three years.

Ondrey returned to Minnesota in 1998, attracted by numerous national studies that were being spearheaded by the University and its multidisciplinary approach to caring for patients. For the first decade Ondrey had a joint appointment between the Masonic Cancer Center and the Department of Otolaryngology so he could start his head and neck cancer clinic and get his cancer prevention research up and running. By 2002, Ondrey had a steady stream of grant and clinical trial support from the National Cancer Institute for his molecular oncology program.

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Ondrey’s lab has been involved with numerous clinical trials focused on preventing head and neck cancer. Experiments with two classes of diabetes and nonsteroidal drugs in cell lines and animal models led to four clinical trials for people who are at risk for cancer reoccurrence. The aim is to slow the progression of oral cancers or prevent them from returning, much in the way that tamoxifen effectively works to prevent breast cancer.

“The challenge is developing safe cancer prevention drugs that can be taken for a long time and don’t have side effects” Ondrey says. “This is a centerpiece and sort of a “holy grail” for cancer prevention and it’s extremely difficult.”

Despite the challenge, Ondrey has had significant success, including two clinical trials launched at the University of Minnesota. Their results spawned multi-institutional clinical trials funded by the National Cancer Institute.

Ondrey also is proud of the University’s 40 year history on the multidisciplinary treatment for patients with head and neck cancer. This approach involves surgeons, oncologists, radiologists, dentists, speech and language pathologists, nutritionists, and many other specialists who meet regularly to coordinate patient care and improve outcomes.

The head and neck surgeons and the Ondrey team consult on about 1,000 people a year involved in the active surveillance program for head and neck cancer patients. Many have precancerous lesions in their mouth or throat, or have had previous mouth or throat cancers.

“This is the main reason I’ve always loved this place. We have a high level of expertise and a high cure rate,” he says. “We’ve established that multidisciplinary care improves care for any kind of head and neck cancer, regardless of anatomic site or tissue type.”

And by bringing new therapies to the table, Ondrey hopes to continue his life’s work of conquering head and neck cancers.

Winchester-Continued from Page 1

called obstructive sleep apnea, it’s where the tongue falls over the throat and restricts breathing. Then it took six months to convince his insurance company to cover the device—with the Inspire company leading the way through that process.

In 2016, Hsia performed Winchester’s outpatient surgery at the new M Health Clinic and Surgery Center to implant the Inspire device. It includes a battery generator similar to a cardiac pacemaker implanted in the chest, with two thin lead wires that monitor breathing and gently stimulate the hypoglossal tongue nerve. Combined, these components prevent the tongue from falling back over the airway and keep airway muscles open so that oxygen can circulate better.

About a month after surgery, Hsia activated Winchester’s device. Now he uses a remote control to turn on the Inspire before bed; it starts working after 30 minutes to give people time to fall asleep. Winchester uses the same remote to turn the device off when he wakes up.

Three months after his surgery, Winchester was reassessed at the Fairview Sleep Center. His new sleep study showed that Inspire prevents Winchester from having sleep apnea. He’s thrilled that it has worked so well and grateful that he found Hsia to help him. Using Inspire has been so seamless that Winchester travels easily for work with his remote control and even took it on a backpacking trip, something he couldn’t do with a traditional CPAP.

He and his wife are relieved that Winchester’s sleep apnea is no longer untreated. “It’s the perfect product for me—it’s very convenient, easy, and comfortable,” Winchester says. “I’m a happy customer of the product and I had a great experience at the U of M with Dr. Hsia and the team that installed it for me.”

For her part, Hsia is pleased that Winchester now sleeps normally, with very mild sleep apnea. She considers his surgery a success. “The most important thing is that Slade is happy and feels like it’s changed his life,” she says. “That’s the most meaningful thing for me.”
James Cohen, MD, PhD: Building a legacy through teaching in academic medicine

James Cohen, MD, PhD, has found the management of head and neck cancer patients to be tremendously challenging and gratifying over the last 35 years, but his greatest professional fulfillment has come from his experiences teaching young physicians in this environment. Building strong training programs for budding otolaryngologists has been his life’s work, and Oregon Health Sciences University (OHSU) in Portland has been his home for this.

He came to OHSU in 1988 from University of Minnesota, where he was a faculty member, working at Hennepin County Medical Center and the VA Medical Center. Previously, Cohen completed his otolaryngology—head and neck surgery residency and doctorate in otolaryngology at the University of Minnesota. He subsequently did a fellowship in head and neck surgical oncology at the MD Anderson Hospital and Tumor Institute in Houston.

OHSU beckoned with the opportunity to build a dedicated head and neck cancer division within the otolaryngology department. A key component of this work involved fostering a strong training program for otolaryngology residents. “My career has been focused around trying to build clinical environments where critical thinking and education are priorities” Cohen says. “I’ve been fortunate to be able to do that here.”

His tenure at OHSU has been well-rounded, including a stint as an associate dean of the medical school, building a multidisciplinary head and neck cancer unit, developing a thyroid/parathyroid tumor program and over the years recruiting excellent people to join him, who are now training the next generation of leaders.

About ten years ago, Cohen took on the challenge of rebuilding OHSU’s resident rotation at the adjacent Portland VA Medical Center. It had been neglected over the years, and Cohen was eager to rebuild it as a focused surgical training service that could take full advantage of the unique clinical training environment that only the VA can offer. As service chief and assistant chief of surgery Cohen refocused the rotation to give residents the time and ability, through carefully supervised graduated responsibility, to learn as they care for patients as their own, the best preparation for the challenges and decisions they would subsequently face in practice.

“It has been a privilege to be able to work with bright, motivated young people and help them develop a disciplined mindset about how to look after patients and think about clinical problems” Cohen says. “Our legacy in the long run has as much to do with that than any of the day to day clinical issues that we individually deal with. If you can help someone become a better physician, the overall potential of that impact is much higher.”

Cohen is starting to wind down his career to spend more time with his grandchildren and is eyeing the public school system as the next teaching environment where he might volunteer.

It’s been a dream fulfilled to spend his career in academic medicine. “I’ve always felt it was a higher calling. If you can take full advantage of the potential of a university in the practice of medicine, you can do a tremendous amount of good in many arenas along the way,” Cohen says. “I was exposed to that at the University of Minnesota—clinical care, investigation, teaching and always, always questioning of the status quo. It was an exciting place to be and something that I wanted to emulate and recreate along the way.”
Affiliate Faculty Derek Schmidt:
For the joy of treating patients and teaching

Derek Schmidt, MD, had just completed his residency at the University of Minnesota when he joined HealthPartners Medical Group and Regions Hospital in St. Paul in anticipation to lead its otolaryngology practice. It wasn’t easy being the only HealthPartners dedicated ear, nose, and throat physician. He was motivated to build an otolaryngology specialty clinic that treats people of all ages while teaching the next generation of doctors.

Since those early days in 2004, Schmidt grew the Health Partners group to 12 otolaryngologists who cover all aspects of the specialty. He has served as department chair for more than a decade, working tirelessly to develop both a strong practice and top-notch rotation for medical students, residents, and physician assistant students.

“Training is so satisfying,” says Schmidt, an assistant professor of otolaryngology–head and neck surgery. “The joy it provides to see a resident develop their clinical and surgical skills over the five years they are residents—it is amazing to watch and so fun.”

Schmidt has made it a point to recruit other physicians who love training residents as much as he does. That turned Regions—one of the University’s six residency rotations—into a place where alumni frequently join the staff. “Resident education is one of their mainstays and one of their passions,” he says. “We really make it a priority.”

In addition to building a robust otolaryngology clinic at Regions, Schmidt is proud of the supportive relationship his team cultivates with the general plastic surgeons on staff. Instead of competing, the two departments work collegially and cooperatively on patients’ cases and even share call responsibilities.

A general otolaryngologist, Schmidt focuses on pediatrics and surgery for adults’ thyroid/parathyroid disorders and salivary gland issues. He never knows what age a patient is walking through the door. In fact, Schmidt recently treated both an 8-week-old baby and a 102-year-old woman on the same day, a diversity of patients that he enjoys. For every patient Schmidt and his colleagues treat, they aim to provide high-quality, patient-centered care.

“We make it about the patient and we take good care of them” he says. “I think we’re all pretty easy to relate to, and patients feel like they are in a clinic where their provider is a clinician first.”

One thing patients often relate to is Schmidt’s personal transformation. Overweight and with a family history of hypertension and diabetes, Schmidt knew he needed to take action. So he started running three miles several times a week early in the morning. He also made small but meaningful changes to his diet and lost about 60 pounds over six years.

Now when patients who are overweight or have sleep apnea come in, Schmidt talks with them about getting healthier, using his own story as an example. He also likes teaching medical students and residents about how to handle a stressful job. “I tell them to strike a work/life balance because they need to take care of themselves so they can take care of others,” he says.

In everything Schmidt does professionally—whether it’s teaching, administering a department, or treating patients—he draws inspiration from his role model, the late George Adams, MD, and seeks to emulate him. With so many U of M Medical School and resident alumni in Regions’ otolaryngology department, Schmidt has surrounded himself with physicians who share common approaches, grounded in the University’s values.
Zohara Cohen, PhD:
A well-informed resource for researchers

Zohara Cohen, Ph.D., knows the ins and outs of research, having been steeped in health informatics and biomedical research in some form or another for nearly 25 years. The newest co-research manager in the Department of Otolaryngology–Head and Neck Surgery, Cohen enjoys sharing her varied expertise with researchers to help make their projects more productive, effective, and well-funded.

Cohen joined the department this fall after spending five years in the University’s Institute for Health Informatics. She launched its Informatics Consulting Service, which helps researchers gain access to Electronic Health Record data. After working to set up systems, policies, and procedures, Cohen then consulted with researchers on extracting data from records and turning it into more usable formats.

When Otolaryngology Department Chairman Bevan Yueh, MD, sought to set up a new head and neck cancer registry, complete with user-friendly reports, he knew Cohen’s experience would be a good fit. And for her part, Cohen wanted the opportunity to partner more closely with researchers on their work.

Now Cohen co-manages clinical research studies and assists researchers with submitting grants, regulatory compliance, budget management, and clinical trial operations, as well as data management and analytics. She serves as a liaison to the University’s informatics team and prepares data for statistical analyses.

“Overall I’m trying to make researchers more productive with their research and bring in more grants, and when they bring in grant money to have the research be productive, with a meaningful impact on health” Cohen says. She admires researchers in the Department, many of whom are focused on patient outcomes and quality of life, and believes that her skills in mining patient data are a good match for their work.

A mechanical engineer, Cohen earned bachelor’s, master’s, and doctorate degrees from Columbia University with a research focus on orthopedic biomechanics. Next Cohen spent nearly a decade at the National Institutes of Health, where she started with a post-doc fellowship doing research in medical imaging analysis.

While living in Washington, D.C., Cohen caught the policy bug and landed an AAAS science and technology fellowship to learn more about science policy. Cohen got steeped in the world of grant-making, eventually landing a full-time job at the NIH managing a portfolio of research grants in her area of medical imaging analysis. With many grants focused on neuroimaging informatics, she took the lead on establishing an NIH-funded clearinghouse for neuroimaging informatics tools and data management.

When her husband was offered a tenure-track position at the University of Minnesota, Cohen brought all of that experience and knowledge to the U. With a deep understanding of research, grant funding and operations, informatics, and data management, Cohen is a powerful resource for researchers.

It’s rewarding for Cohen to work more closely with researchers while helping them get more out of their work.

“It feels satisfying to know I have this expertise to offer in navigating the federal funding system and the use of clinical data,” she says. “Here, I can build rapport with them and understand their research projects and what they need. I get to pay close attention to the questions people are asking.”
June 2 is the annual Lions D-Feet Hearing Loss Walk held in Chaska, MN at the MN Landscape Arboretum, an excellent chance to get outside for a family friendly fun event, enjoy beautiful Minnesota and be part of a great cause. The money raised goes toward The Lions Children’s Hearing Center, Lions Children’s Hearing and ENT Clinic, Lions Professorship, ongoing hearing loss and prevention research, and obtaining diagnostic Equipment.

Please consider joining by going to:
https://secure.qgiv.com/event/team/815556

Join us in changing lives

A gift in your will or trust fuels the life-changing work being done at the University of Minnesota Department of Otolaryngology. To learn more about making an impact far into the future, please contact Nathan Brown, our partner at the U of M Foundation at: brow3146@umn.edu or 612-624-3499.
Mark Your Calendar

April 18-22, 2018
COSM
Washington, DC

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

Saturday, May 12, 2018
Minnesota Head & Neck Cancer Survivors Conference
McNamara Alumni Center

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

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