

THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

Year in Review 2022

Department of Otolaryngology – Head and Neck Surgery

THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

Our Mission

The Ohio State Department of Otolaryngology – Head and Neck Surgery is guided by a mission to deliver exceptionally safe, high-quality, value-based care. We do this through a commitment to and focus on maintaining the highest standards in patient care and research. Our team has created a desirable patient care model that enables continued expansion of patient volume. Our large and diverse patient population also provides a rich environment for medical education.

The Department of Otolaryngology comprises 10 specialty areas:

- Allergy and Immunology
- Audiology
- Facial Plastic and Reconstructive Surgery
- General Adult and Pediatric Otolaryngology
- Head and Neck Oncology
- Laryngology
- Rhinology
- Skull Base Surgery
- Sleep Surgery

To learn more about the Department of Otolaryngology, visit medicine.osu.edu/departments/otolaryngology

Department of Otolaryngology - Head and Neck Surgery

Otology, Neurotology and Cranial Base Surgery



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Message from the chair



The Ohio State Department of Otolaryngology – Head and Neck Surgery had much to celebrate in FY22. We earned the No. 11 spot in the Blue Ridge Institute for Medical Research rankings; we were named the No. 5 otolaryngology residency program in the nation by Doximity Residency Navigator; and, once again, we were named among the top 20 ENT programs in the country by U.S. News & World Report. I'm grateful for these outstanding achievements and am excited to share these additional highlights.

Research and innovation

For the last five years, our team has worked to improve our research funding portfolio and become a national leader in the advancement of otolaryngology. I'm so pleased that our NIH funding increased to \$5.5 million in FY22, helping us jump 11 places and earn the No. 11 spot among ear, nose and throat programs in the 2021 Blue Ridge Institute for Medical Research rankings. This substantial funding increase was due in part to a second R01 grant for \$1.9 million earned by Kai Zhao, PhD, as well as a \$2.3 million R01 grant earned by Ruili Xie, PhD. I also attribute this achievement to our internal grant review committee, led by Shuman He, MD, PhD. This team ensures that our submissions are strong from the start, and their work is paying off. I thank each team member for their time and commitment.

Clinical practice

Clinical growth across our department has skyrocketed since 2021, due in part to our expansion efforts throughout central Ohio. This includes the addition of three new ENT clinic locations, as well as new faculty members specializing in allergy, head and neck oncology, laryngology, otology and rhinology.

To meet additional access demands in 2022, we proudly welcomed <u>Catherine Haring, MD</u>, to our Division of Head and Neck Oncology and <u>Chris Brooks, MD</u>, to our Division of Allergy and Immunology. We also expanded the clinical and educational footprint of our Division of Facial Plastic and Reconstructive Surgery, taking facial reanimation and aesthetic surgeries to a community-based, outpatient setting. We're actively recruiting research and clinical faculty members for our otology, allergy and general otolaryngology divisions, and hope to grow our vestibular offerings in FY24.

Education

Our residency program continues to grow in size and reputation, now in its fifth year of transition from four to five residents per year. The outcomes of this expansion have been tremendous, including helping us improve in the Doximity Residency Navigator survey results to rank No. 5 among all otolaryngology residency programs in the United States. I thank program director Brad deSilva, MD, for his unwavering guidance of these efforts, as well as his work to begin the application process that could allow us to expand to six residents per year. This addition, if approved, would make our residency program one of the largest and most comprehensive in the nation, and we're excited for those possibilities.

Leadership and recognition

In addition to their clinical and academic responsibilities, our faculty members remain committed to embracing leadership opportunities. I'm proud to announce that Matt Old, MD, was appointed the David E. Schuller, MD, and Carole Schuller Chair in Otolaryngology for our department. In addition, Meredith Lind, MD, was named education coordinator for the AAO-HNS; Minka Schofield, MD, was named chair of the Women in Otolaryngology section of the AAO-HNS; and Apoorva Ramaswamy, MD, was appointed cochair of the Diversity, Equity and Inclusion Committee for the Dysphagia Research Society. A complete list of our team's new leadership roles can be found on page 52 of this report.

I'd also like to extend congratulations to Edward Dodson, MD, who recently received the Distinguished Award for Humanitarian Service from the AAO-HNS. This prestigious award is given to an academy member who displays honesty, integrity, devotion to humanity and a self-giving spirit, which couldn't be more fitting of Dr. Dodson's personality. The work he's done and the lives he's changed through Project Ear is beyond commendable, and we're so lucky to call Dr. Dodson a friend and colleague.

Philanthropy and capital improvements

The Ohio State University has one of the most comprehensive health science campuses in the nation, and we continue to grow with more than \$3 billion planned for capital investments. In coming years, we'll have a new interdisciplinary health sciences center, an 820+ bed inpatient tower, new outpatient care centers and an interdisciplinary research building.

Philanthropic funding for the divisions of Head and Neck Oncology and Skull Base Surgery are also leading to many clinical and medical advancements, including 3D medical models to improve head and neck cancer care, additional research for adenoid cystic carcinomas and novel therapeutic vaccines and adoptive cell therapies for human papillomavirus-caused oropharyngeal cancers.

I hope that 2023 will be another productive year for us all. On behalf of the Department of Otolaryngology – Head and Neck Surgery, please enjoy our annual report.

Sincerely,

James Rocco, MD, PhD

Professor and Chair, Department of Otolaryngology – Head and Neck Surgery The Ohio State University College of Medicine The Mary E. and John W. Alford Research Chair in Head and Neck Cancer Director, Head and Neck Disease-Specific Research Group The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute

Research and Innovation

FY 2022 | By the Numbers

Total Awards: \$7,809,724 NIH Awards: \$5,554,153 Non-NIH Federal Awards: \$1,932,884 Other Awards: \$322,687



Active Grants: 29

NIH Grants: 20 (including 12 R01, 2 R21, U01, UG1, R56, R13, K08, K23)

Non-NIH Grants: 9

Active Clinical Trials: 38

Publications: 169

Novel blood test detects HPV-associated cancer DNA circulating in the bloodstream

Head and Neck Oncology team studying best ways to deploy, improve cancer blood test before, during and after treatment

The Head and Neck Oncology team at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) has deployed a novel blood test that detects circulating tumor DNA in 90% of patients with human papillomavirus (HPV)-associated oropharyngeal squamous cell carcinoma (OPSCC).

This innovative test uncovers cancer that can't be seen during an exam or surgery or with advanced imaging. The blood test delivers a powerful way to monitor the effectiveness of cancer treatments. It also improves long-term follow-up care for patients by detecting cancer recurrence earlier — before signs appear on imaging and clinical exam.

Now commercially available, the NavDx test from Naveris represents a big jumping-off point for innovations in patient care for HPV-related and other types of cancers, says James Rocco, MD, PhD, chair of the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine and director of the Head and Neck Disease-Specific Research Group at the OSUCCC – James.

"This opens a whole new realm of identifying recurrence early in the disease process when therapeutic intervention is more feasible," Dr. Rocco says. "Could this become a screening tool? Can we move a similar approach from HPV to other cancers?"

Research is underway at Ohio State to explore these possibilities.

Recruiting a research expert

The NavDx test takes a patient blood sample, spins it down and then examines the plasma for HPV-related DNA from oropharyngeal cancer cells. The test can distinguish between HPV tumor DNA and HPV infection, Dr. Rocco says.

Catherine Haring, MD, assistant professor in the Division of Head and Neck Oncology at the Ohio State College of Medicine, worked on developing an assay to detect HPV DNA while she was a resident at the University of Michigan. Dr. Haring says her early data and studies show that the blood test



accurately finds tumor DNA circulating in the bloodstream.

Ohio State took early notice of Dr. Haring's expertise and her published research about the HPV-circulating tumor DNA assay and its ability to predict treatment response in patients with oropharyngeal cancer.

"We were impressed with her clinical abilities and research potential and knew we wanted her to stay on our team," Dr. Rocco says of Dr. Haring, who completed a fellowship in head and neck surgical oncology and microvascular reconstruction at The Ohio State University Wexner Medical Center in 2022.

"The James is a world-renowned cancer center that offers the resources, technology and multidisciplinary mentorship to help me move the field of head and neck cancer research forward," Dr. Haring says. "Joining the Department of Otolaryngology – Head and Neck Surgery at Ohio State was an easy decision." "Our data have shown that the amount of HPV tumor DNA in the bloodstream directly correlates to the size of the tumor. High levels of HPV DNA often indicate that a larger tumor is present."

— Catherine Haring, MD

Detecting cancer with novel blood test

When the HPV virus causes cancer, it invades healthy cells and leaves its DNA in the cytoplasm of these cells. Some cells may carry thousands of copies of the HPV DNA while others may have just a few. Dr. Rocco compares it to the difference between a dim LED light bulb and a bright halogen light.

As infected cells replicate, they have the potential to convert into cancerous cells and tumors. As a tumor grows, cells release fragments of DNA into the blood stream.

"Our data have shown that the amount of HPV tumor DNA in the bloodstream directly correlates to the size of the tumor," Dr. Haring says. "High levels of HPV DNA often indicate that a larger tumor is present."

The NavDx test offers a minimally invasive approach to assess tumor burden before, during and after treatment. And changes in DNA levels over time may provide information as to how a patient is responding to treatment.



This blood-based biomarker can replace the need for invasive tissue biopsies of the throat that require surgery, Dr. Haring says.

How NavDx helped doctors locate a patient's cancer recurrence

The NavDx test was recently used to help a patient whose cancer returned after treatment. The patient was diagnosed with a basic tongue cancer and received radiation and chemotherapy. A positron emission tomography (PET)/computed tomography (CT) scan showed he was free of disease.

Dr. Rocco administered the NavDx test on the patient, which indicated high levels of HPV DNA in the blood. Despite a thorough office exam, and examination under anesthesia, the team was unable to detect residual tumor. Based on these findings, and after tumor board discussion, the head and neck team received insurance approval to perform a repeat PET/CT scan on the patient. The scan revealed likely metastasis to the liver as the source of circulating tumor DNA. The patient will undergo a liver biopsy and a treatment plan will be developed from there.

"This is new and exciting ground for us," Dr. Rocco says. "In the future, how rapidly cancer DNA levels drop during therapy may be predictive of who is likely to be cured or not. It may also identify which treatments

"In the future, how rapidly cancer DNA levels drop during therapy may be predictive of who is likely to be cured or not. This could also evolve into something we use to screen people at risk prior to cancer development." — James Rocco, MD, PhD

should be used in a specific patient. Finally, this could evolve into something we use to screen people at risk prior to cancer development."

Efficacy and screening possibilities

HPV-associated OPSCC occurs most often in white men between ages 45 and 65. The rate of diagnosis for this type of throat cancer in nonsmokers is on the rise, Dr. Haring says.

"These patients tend to have an improved prognosis compared to patients with smoking-related throat cancer," Dr. Haring says. "We want to be able to personalize treatment for these patients, avoiding unnecessary treatment and potential side effects."

In ideal situations, the new blood test will be used at the time of diagnosis, during treatment and after treatment to monitor changes in the levels of HPV DNA. If treatments are working, the level of HPV DNA in the blood should drop as the cancer is destroyed.

If those levels rise or remain steady, that data can be used to adjust treatments to look for a recurrence. This also opens the door to using the test as a screening tool, especially because it's a minimally invasive blood test.

"It offers early detection in asymptomatic patients, so we can predict who might develop cancer in the future," Dr. Haring says. "It has the potential to serve as a predictive biomarker."

Refinement and research

The Head and Neck Surgery team was immediately intrigued by NavDx's potential.

"For a small percentage of patients, we might know the cancer is there, but we don't know where it is," Dr. Rocco says. "The test tells us it is still there, but we can't localize it."

The most sensitive imaging available to detect cancer is the PET/CT scan. If that advanced imaging shows no evidence of disease but the NavDx test detects cancer DNA, what's the best course of action?

"We're trying to figure it out now," Dr. Rocco says. "This is unfolding in real time."

Doctors must decide if they should employ watchful waiting, schedule regular screenings or start systemic treatment.

Studies are underway to improve the test's performance status. Dr. Haring says the goal is to get the test to detect HPV cancer DNA in 100% of patients. When that happens, science will be closer to potentially using this blood test as a screening test for HPV cancer, in the same way a colonoscopy or mammogram is employed.

Kai Zhao, PhD, earns second R01 grant to continue the study of nasal obstruction and treatment



Kai Zhao, PhD, associate professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine, was recently awarded a National Institutes of Health Research Project Grant (R01) for

Kai Zhao, PhD

his continued work in identifying novel mechanisms and therapeutic approaches for nasal obstruction and olfactory losses.

About 13% of adults in the U.S. suffer from nasal sinus disease. Although nasal obstruction and smell loss are two of the major symptoms of the disease, there are no clinical tools to objectively evaluate the underlying causes of these symptoms, which limits the ability to treat them.

"The proposed study aims to develop novel clinical tools to better evaluate and relieve patients' nasal obstructive symptoms and to enable patients and clinicians to make more informed, personalized decisions regarding treatment strategy," Dr. Zhao says.

Dr. Zhao's research is a continuation of a previous R01 grant-supported study, where he demonstrated that nasal obstructions may not be caused by a blockage at all, but by a poor sensation of airflow through the trigeminal cool-sensitive (TRPM8) pathway.

"We found that if you direct more air to the impacted region, the patient will feel better," Dr. Zhao says. "We're now studying if this tool can predict potential problems and support future surgery."

This research looks to validate clinical tools for diagnosis and treatment to bring better patient outcomes.

"Dr. Zhao's work brings a unique perspective to managing nasal obstruction," says Bradley Otto, MD, clinical associate professor in the Department of Otolaryngology – Head and Neck Surgery at the Ohio State College of Medicine. "This research has a clear path where it can be translated to support patients experiencing these conditions."

In the next phase, the team will attempt to learn which of these sensory regions are most critical to sensing airflow. Dr. Zhao hopes that by better understanding the nasal regions and variations in sensation, they can better guide treatments for patients.

"This study is important because a lot of how we conduct clinical practice in nasal obstruction is solely by patient experience, not by measurement," Dr. Zhao says. "We want objective measures that can pinpoint diagnosis of what patients are reporting."



In particular, the research is targeting a coolsensing receptor in the mucosa of the nasal passage, which gives the sense of an open airway. Dr. Zhao compares the sensation to the feeling of going into a steam room and feeling like you can't breathe.

"We are trying to understand what the actual nasal obstruction is," Dr. Zhao says. "Typically, patients think it's a physical blockage that blocks our senses, but often it is not. By better understanding our senses, we can provide targeted therapy or surgery to improve these symptoms."

Dr. Zhao and his team are also working on a novel over-the-counter nasal aid that can relieve patient symptoms. "It's similar to earplugs," Dr. Zhao says. "Patients can put it in their nose, feel better and enhance their sense of smell. It's very patient-targeted therapy they can use at home."

The ability to develop this novel device is aided by close ties between researchers and clinicians at The Ohio State University Wexner Medical Center. "This research is very well supported by the department from a clinical perspective," Dr. Zhao says. "As a tertiary, academic health center, we have great access to patient populations, dedicated research resources and capacity to recruit patients in the clinical setting. It's unique for our department compared to other communities nationally."

"This is a collaborative effort within the department that highlights the strength of the team and our work together between clinicians and researchers," Dr. Otto says. "Our research space is right next to our clinical space, so patients can participate in research and go to the clinic in a way that's convenient for them."

In addition to his grant to study nasal obstruction, Dr. Zhao received a second R01 grant to study the impact of COVID-19 on sensory loss.

As a next step, Dr. Zhao hopes this research can lead to interventional clinical trials that will allow improved surgery outcomes for patients, which currently have inconsistent success.

"These research outcomes may validate novel clinical tools to better identify factors that directly impact obstructive symptoms and relieve those symptoms," Dr. Zhao says. "The goal is to assist patients and clinicians in planning effective, wellinformed, personalized treatment strategies, potentially saving millions of health care dollars annually while improving patient satisfaction."

Kris Jatana, MD, plays instrumental role in global efforts to reduce button battery-related injuries

In the fall of 2020, 16-month-old Reese Hamsmith swallowed a button battery. But no one saw her do it. When she developed cold-like symptoms, her family took her to a doctor, who prescribed medication for a suspected respiratory infection and sent her home.

Reese's family realized shortly after that a button battery was missing from their Texas home and learned Reese's symptoms matched those of button battery ingestion. They rushed her to the emergency department, and X-rays confirmed a battery was lodged in her esophagus, burning a hole.

For weeks, Reese remained hospitalized and underwent multiple surgeries. But sadly, in mid-December that year, Reese passed away.

Reese's mom, Trista,

prevent other families

was determined to

from going through

a similar experience.

With the help of Kris

FACS, clinical professor

Head and Neck Surgery

Jatana, MD, FAAP,

of Otolaryngology -

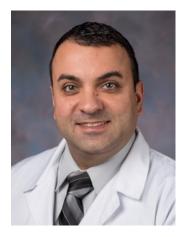
at The Ohio State

of Medicine and

University College

Nationwide Children's

Hospital, she did. In



Kris Jatana, MD, FAAP, FACS

August 2022, President Biden signed Reese's Law, bipartisan legislation that regulates button batteries and strengthens product safety standards. The law requires:

- Child-resistant button battery compartments on products that use the batteries
- Product warning labels
- Safer packaging for button batteries

In addition to directly providing button battery hazard information to members of U.S. Congress, Dr. Jatana was sought out as an expert consultant to the Australian Competition & Consumer Commission, which went on to pass similar product safety regulation in Australia.

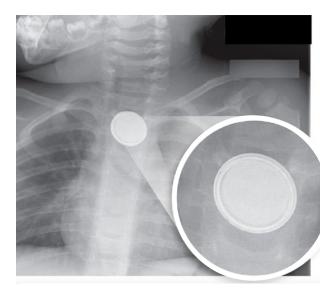
Long-term commitment

For Dr. Jatana, the passage of Reese's Law marked the culmination of a 12-year effort to expose the dangers of ingested button batteries and advocate for industry and regulatory changes. It was while completing his pediatric otolaryngology fellowship that he encountered his first severe button battery ingestion. An otherwise healthy 2-year-old child had swallowed a battery and developed bilateral vocal cord paralysis requiring tracheostomy tube placement.

It was a devastating injury and tragic for all involved because it didn't have to happen.

"I knew it was something that was preventable," Dr. Jatana says. From then on, he's worked to get several national safeguards in place.

In 2011, he was invited to address the U.S. Consumer Product Safety Commission to



An X-ray shows a button battery in the esophagus.

raise awareness of battery-related injuries in children. That led to the Button Battery Safety Act of 2011 that, unfortunately, didn't gain traction in Congress at that time.

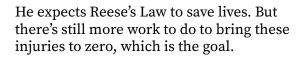
But Dr. Jatana went on to co-chair the National Button Battery Task Force in 2012, a position he's held ever since. In 2016, he was awarded the highly competitive Outstanding Service in Advocacy Award by the American Academy of Pediatrics. Dr. Jatana also led considerable research that's raised awareness of the risks and helped establish clinical practice guidelines to slow the rate of esophageal injury both before and after button battery ingestion — guidelines all otolaryngologists should be familiar with.

Understanding the problem

A study published in *Pediatrics* in September 2022, which Dr. Jatana co-authored, estimated that 7,000 battery-related pediatric emergency department visits occurred in the U.S. each year from 2010 to 2019.

The numbers more than doubled compared to those estimated in a previous study from 1990-2009. According to Dr. Jatana, accurate reporting of these incidents has been lacking.

"Nearly 85% of the visits were button battery-related, and an overwhelming majority of the injuries were in children younger than 6," Dr. Jatana says.



"It may not be perfect because we're not addressing the actual hazard itself," Dr. Jatana says. "It is absolutely important to reduce access to the battery; however, what we need is a safer battery technology that does not cause severe injury in the esophagus."

Teamwork

Dr. Jatana was part of a dedicated team that made Reese's Law happen, and his efforts to further reduce these types of ingestion injuries and improve patient care for children around the world will continue.

Other projects he's helped spearhead are:

- <u>The Global Injury Research Collaborative</u>, a nonprofit created to gather de-identified data from medical professionals pertaining to ingestion and choking hazards and support injury prevention research through a smartphone app.
- A novel noninvasive, radiation-free metal detector technology to screen for coins and button batteries in the esophagus.

Charles Elmaraghy, MD, FAAP, FACS, director of the Department of Pediatric Otolaryngology at Nationwide Children's Hospital and clinical professor in the Department of Otolaryngology – Head and Neck Surgery at the Ohio State College of Medicine, says Dr. Jatana's efforts demonstrate how doctors at Nationwide Children's Hospital advocate for children's safety and innovation in patient care.

- Based on Dr. Jatana's work, the hospital has implemented protocols to ensure children who ingest button batteries get the rapid care they need to limit severe injury and potentially save their life.
- "We've always prided ourselves on the fact that there's really no limit to what we'll do for our patients," Dr. Elmaraghy says. "This is a great example of that."

Ruili Xie, PhD, earns R01 grant to study novel noise-induced hearing loss mechanism

Ruili Xie, PhD, associate professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine, was recently awarded a five-year National Institutes of Health Research Project Grant (R01) for his continued work in auditory nerve synaptopathy and the mechanisms underlying noise-induced hearing loss, particularly in the elderly.

In noise-induced hearing loss, there's a disconnect between what happens in the ear and what gets translated to the brain.

"We know that noise preferentially damages some cells more than others in the ear," Dr. Xie says. "The questions we are evaluating are: How do such selective damages uniquely change the way the neural network functions in the brain during hearing loss? And what changes in the process are due to aging or hearing loss alone?"

Dr. Xie's work is unique because it aims to study the effect of noiseinduced hearing loss on the function and anatomical integrity of the cochlear nucleus specifically, using a combination of electrophysiology with immunohistochemistry on animal models.

"These methods have been used separately in the past but combining them helps us learn both morphology and physiology of specific cell types and how they are preferentially changed by aging and noise," Dr. Xie says. "It's a novel approach in the audiology field particularly."

The results of this research have the potential to improve current clinical interventions for hearing loss, including

"Dr. Xie's work is extremely innovative and is one step toward a better understanding of the detrimental effect of noise-induced hearing loss on the auditory system." — Shuman He, MD, PhD



improving performance for cochlear implants. For instance, understanding these mechanisms means the chance to optimize how cochlear implants can better stimulate the auditory nerve based on the changes in the cells of the cochlear nucleus.

Dr. Xie's previous research analyzed the synaptic properties of the auditory nerve terminals, and he was the first to evaluate how the synaptic changes associated with aging contribute to hearing loss. "Dr. Xie's work is extremely innovative and is one step toward a better understanding of the detrimental effect of noise-induced hearing loss on the auditory system," says Shuman He, MD, PhD, vice chair of Research in the Department of Otolaryngology – Head and Neck Surgery in the Ohio State College of Medicine. "I'm proud that our university provides faculty members with the extensive core research facilities and resources they need to achieve such groundbreaking work, and we're very excited to see where Dr. Xie's outcomes lead us."

High publication volume, improved clinical results: How Ohio State is supporting clinician-researchers

Research drives the

Ohio State University

College of Medicine

and The Ohio State

University Wexner

Medical Center,

our commitment

to research means

translating findings into clinical solutions

for patients. This work

is exemplified by the

of the Department of

and Neck Surgery.

Otolaryngology - Head

publication volume

advancement of

medicine. At The



James Rocco. MD. PhD



Shuman He. MD. PhD

"We've always been an academically oriented department, but the academic culture is expanding with new hires and new energy," says James Rocco, MD, PhD, professor and chair of the Department of Otolaryngology – Head and Neck Surgery. "We want to set up our clinicians and researchers for success. Our goal is that the only missing thing is a good question. The department tries to provide all the necessary resources to enable that research."

That academic culture has translated into 169 publications from the department in just 2022. This research spans the spectrum from basic science to clinical research, which produces projects that have both immediate and longterm impacts for patients. With Ohio State's comprehensive ear, nose and throat (ENT) team, comprising head and neck surgeons, facial plastics surgeons, laryngologists, allergists, neuro-otologists, audiologists, pediatricians and researchers with expertise in different ENT specialties, that research covers a broad range of relevant topics that support patient needs.

For instance, faculty have been heavily involved in developing:

- Clinical care guidelines for single-sided deafness
- Clinical practice protocols for patients with head and neck cancer
- · Pediatric airway treatment tools and pediatric safety standards, including the recent passing of Reese's Law
- · Ways to identify biomarkers for tailored head and neck cancer treatments

Driving the growth of research and publications is the model of a clinicianscientist, says Dr. Rocco.

"We've built a culture of participation as clinician-researchers at Ohio State,"

Dr. Rocco says. This emphasis has led to more grant funding for a broader portfolio of research. The publication volume is a natural result of that growth.

"We encourage our faculty to publish as much as they can. One strength of our department is the extensive collaboration between clinicians and researchers," says Shuman He, MD, PhD, vice chair of Research in the Department of Otolaryngology -Head and Neck Surgery. "We have a very collaborative culture and healthy peer engagement that reinforce that everyone is doing research and publishing."

This kind of publication growth takes deliberate effort. "We have invested a lot of resources, including permanent access to statistical support, to make the process easier for both clinicians, students and researchers to publish," Dr. Rocco says.

Department leadership also works to ensure clinicians and researchers have the incentives to be successful. For instance, the department implemented a system of "academic RVUs" to encourage writing and reviewing papers to ensure everyone is comfortable writing.

The academic culture means the Ohio State Wexner Medical Center is attracting more academically oriented residents and fellows, especially as the department's residency program and fellowships in neuro-otology, pediatrics, laryngology, head and neck oncologic surgery and facial plastic and reconstructive surgery have been added or expanded.

"Applicants who are looking for more research experience are prioritizing our programs that are historically known

for great surgical training. They have an expectation of receiving training in research while developing into skilled scientific writers," Dr. Rocco says.

"The residents have a lot of folks to work with who are good role models, and our students are developing one more tool to help them make patient care better," Dr. Rocco says. "The culture to be academically productive and advance the academic mission that supports patient care is getting stronger every day."

CLINICAL RESEARCH

OTOLARYNGOLOGY

Head and Neck Surge

CLINICAL PRACTICE

SCIENCE

RESEARCH

No.

Highlighted Publications FY22

In FY22, the Department of Otolaryngology – Head and Neck Surgery published 169 articles in industry-leading peer-review journals. Below are highlights of those publications.



Carr TF, **Kraft M**. Asthma and atopy in COVID-19 2021 updates. *J Allergy Clin Immunol*. 2022 Feb;149(2):562-564. doi: 10.1016/j.jaci.2021.12.762 Epub 2021 Dec 21. PMID: 34942236; PMCID: PMC8687714.

Buhl R, Bel E, Bourdin A, Dávila I, Douglass JA, FitzGerald JM, Jackson DJ, Lugogo NL, Matucci A, Pavord ID, Wechsler ME, **Kraft M**. Effective management of severe asthma with biologic medications in adult patients: A literature review and international expert opinion. *J Allergy Clin Immunol Pract*. 2022 Feb;10(2):422-432. doi: 10.1016/j.jaip.2021.10.059. Epub 2021 Nov 8. PMI 34763123.

Kraft MT, Mehyar LS, Prince BT, Reshmi SC, Abraham RS, Abu-Arja R. Immune reconstitution after hematopoietic stem cell transplantation in immunodeficiency-centromeric instability-facial anomalies syndrome type 1. *J Clin Immunol*. 2021 Jul;41(5):1089-1094. doi: 10.1007/s10875-021-00984-x. Epub 2021 Feb 5. PMID: 33544358; PMCID: PMC7862860.

Nyirjesy S, Osmundson P, **Matrka L**. Spontaneou regression of recurrent respiratory papillomatos with HPV vaccination: A case study. *J Voice*. 2022 Jul;36(4):587.e21-587.e25. doi: 10.1016/j. jvoice.2020.08.013. Epub 2020 Sep 3. PMID: 32891477.

Ren Y, Mehranpour P, Moshtaghi O, Schwartz MS Friedman RA. Opioid prescribing patterns after skull base surgery for vestibular schwannoma. *Otol Neurotol.* 2022 Jan 1;43(1):e116-e121. doi: 10.1097/MAO.00000000003349. PMID: 34889846

Sethia R, Freeman T, Mead K, Selhorst A, Vala K, Skoracki L, Adelman M, VanKoevering K, Kang SY, Ozer E, Agrawal A, Old MO, Carrau RL, Rocco JW, Seim NB. Patient-directed home drain removal in head and neck surgery. *Laryngoscope*. 2021 Nov;131(11):2471-2477. doi: 10.1002/lary.29556. Epub 2021 Apr 13. PMID: 33847392.

Agarwal R, Freeman TE, Li MM, Naik AN, Philips RW, Kang SY, Ozer E, Agrawal A, Carrau RL, Rocco JW, Old MO, Seim NB. Outcomes with culturedirected antibiotics following microvascular free tissue reconstruction for osteonecrosis of the jaw. *Oral Oncol.* 2022 Jul;130:105878. doi: 10.1016/j. oraloncology.2022.105878. Epub 2022 May 6. PMID: 35533510.

Li L, London NR Jr, Prevedello DM, **Carrau RL**. Anatomy of the sphenoidal spine and its implications in endoscopic endonasal surgery of the infratemporal fossa. *Head Neck*. 2022 Apr;44(4):835-843. doi: 10.1002/hed.26975. Epub 2022 Jan 11. PMID: 35014742.

Lin C, Olson MD, Huyett P, **Chio EG**. Implantation of the hypoglossal nerve stimulator via left-sided, 2-incision approach. *J Clin Sleep Med*. 2022 Apr 1;18(4):1219-1222. doi: 10.5664/jcsm.9856. PMID: 34964436; PMCID: PMC8974390.

Politano S, Morell F, Calamari K, **deSilva B, Matrka L**. Yield of imaging to evaluate unilateral vocal fold paralysis of unknown etiology. *Laryngoscope*. 2021 Aug;131(8):1840-1844. doi: 10.1002/lary.29152. Epub 2020 Oct 3. PMID: 33009830. **Ivancic R, Matrka L, Wiet G**, Puckett A, Haney J, **deSilva B**. Reduced asthma medication use after treatment of pediatric paradoxical vocal fold motion disorder. *Laryngoscope*. 2021 Jul;131(7):1639-1646. doi: 10.1002/lary.29283. Epub 2020 Dec 4. PMID: 33274767.

Haring CT, Dermody SM, Yalamanchi P, **Kang SY, Old MO**, Chad Brenner J, Spector ME, Rocco JW. The future of circulating tumor DNA as a biomarker in HPV related oropharyngeal squamous cell carcinoma. *Oral Oncol*. 2022 Mar;126:105776. doi: 10.1016/j.oraloncology.2022.105776. Epub 2022 Feb 17. PMID: 35183912.

Patel KB, Shabani S, Padhya T, Cao B, Wang X, Turner K, Nichols AC, **Kang SY, Rocco JW, Old M**. The impact of the Affordable Care Act on insurance coverage and stage among head and neck squamous cell carcinoma patients. *J Health Care Poor Underserved*. 2022;33(3):1322-1336. doi: 10.1353/hpu.2022.0115. PMID: 36245166.

Silverman DA, Parikh AS, Liu K, Zhan KY, Nimjee SM, Powers CJ, Youssef P, **Rocco JW, VanKoevering KK, Kang SY, Old MO, Seim NB**. Predictors of survival following carotid blowout syndrome. *Oral Oncol.* 2022 Feb;125:105723. doi: 10.1016/j. oraloncology.2022.105723. Epub 2022 Jan 18. PMID: 35063883.

Li MM, **Kang SY**. ASO author reflections: Stage 4 laryngeal cancer rising in the United States. *Ann Surg Oncol*. 2021 Nov;28(12):7310. doi: 10.1245/ s10434-021-10325-2. Epub 2021 Jul 15. PMID: 34263370.

2.	Malik J, Spector BM, Wu Z, Markley J, Zhao S, Otto BA , Farag AA, Zhao K . Evidence of nasal cooling and sensory impairments driving patient symptoms with septal deviation. <i>Laryngoscope</i> . 2022 Mar;132(3):509-517. doi: 10.1002/lary.29673. Epub 2021 Jun 14. PMID: 34125439; PMCID: PMC8669045.
v D:	Li MM, Mroz EA , Faquin WC, Lott-Limbach A, Rocco JW . ERa: A biomarker and treatment target for oropharyngeal cancer? <i>Oral</i> <i>Oncol</i> . 2022 Jan;124:105637. doi: 10.1016/j. oraloncology.2021.105637. Epub 2021 Nov 30. PMID: 34857487.
n l	Mody MD, Rocco JW , Yom SS, Haddad RI, Saba NF. Head and neck cancer. <i>Lancet</i> . 2021 Dec 18;398(10318):2289-2299. doi: 10.1016/S0140- 6736(21)01550-6. Epub 2021 Sep 22. PMID: 34562395.
ıs	Gao RW, Rooney D, Harvey R, Malloy KM, VanKoevering KK . To pack a nose: High-fidelity epistaxis simulation using 3D printing technology. <i>Laryngoscope</i> . 2022 Apr;132(4):747-753. doi: 10.1002/lary.29757. Epub 2021 Jul 17. PMID: 34272874.
ς,	Tan ZH, Dharmadhikari S, Liu L, Wolter G, Shontz KM, Reynolds SD, Johnson J, Breuer CK, Chiang T . Tracheal macrophages during regeneration and repair of long-segment airway defects. <i>Laryngoscope</i> . 2022 Apr;132(4):737-746. doi: 10.1002/lary.29698. Epub 2021 Jun 21. PMID: 34153127; PMCID: PMC8688581.
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RESEARCH AND INNOVATION

Continued from page 23

Bishop R, Sethia R, Allen D, Elmaraghy CA. Pediatric nasal septoplasty outcomes. Transl Pediatr. 2021 Nov;10(11):2883-2887. doi: 10.21037/ tp-21-359. PMID: 34976754; PMCID: PMC8649597.

Chao S, Gibbs H, Rhoades K, Mehrer C, Jacobs IN, Jatana KR. Button battery taping and disposal: Risk reduction strategies for the household setting. Int J Pediatr Otorhinolaryngol. 2022 Feb;153:111008. doi: 10.1016/j.ijporl.2021. 111008. Epub 2021 Dec 14. PMID: 34986444.

Cooper JN, Koppera S, Bliss AJ, Lind MN. Characteristics associated with caregiver willingness to consider tonsillectomy for a child's obstructive sleep disordered breathing: Findings from a survey of families in an urban primary care network. Int J Pediatr Otorhinolaryngol. 2022 Jul;158:111143. doi: 10.1016/j.ijporl.2022.111143. Epub 2022 Apr 14. PMID: 35552164.

Pattisapu P, Findlen UM, Lindsey SE.

Tympanostomy tubes or medical management for recurrent acute otitis media. N Engl J Med. 2021 Aug 26;385(9):860. doi: 10.1056/ NEJMc2109725. PMID: 34437790.

Andersen SAW, Varadarajan VV, Moberly AC, Hittle B, Powell KA, Wiet GJ. Patient-specific virtual temporal bone simulation based on clinical cone-beam computed tomography. Laryngoscope. 2021 Aug;131(8):1855-1862. doi: 10.1002/lary.29542. Epub 2021 Mar 29. PMID: 33780005.

Goodman SD, Bakaletz LO. Bacterial biofilms utilize an underlying extracellular DNA matrix structure that can be targeted for biofilm resolution. Microorganisms. 2022 Feb 18;10(2):466. doi: 10.3390/microorganisms10020466. PMID: 35208922; PMCID: PMC8878592.

Liu M, Liao MJ, Fisher CJ, Vicetti Miguel RD, **Cherpes TL**. Methodology to streamline flow cytometric-based detection of early stage Plasmodium parasitemia in mice. J Microbiol Methods. 2022 Apr;195:106439. doi: 10.1016/j. mimet.2022.106439. Epub 2022 Mar 4. PMID: 35248600; PMCID: PMC9007886.

Findlen UM, Benedict J, Agrawal S. Clinical practice patterns of fitting advanced device features in children with cochlear implants. J Speech Lang Hear Res. 2022 Feb 9;65(2):797-815. doi: 10.1044/2021_JSLHR-21-00168. Epub 2022 Jan 11. PMID: 35015974.

Skidmore J, Ramekers D, Colesa DJ, Schvartz-Leyzac KC, Pfingst BE, **He S**. A broadly applicable method for characterizing the slope of the electrically evoked compound action potential amplitude growth function. Ear Hear. 2022 Jan/Feb;43(1):150-164. doi: 10.1097/ AUD.000000000001084. PMID: 34241983; PMCID: PMC8674380.

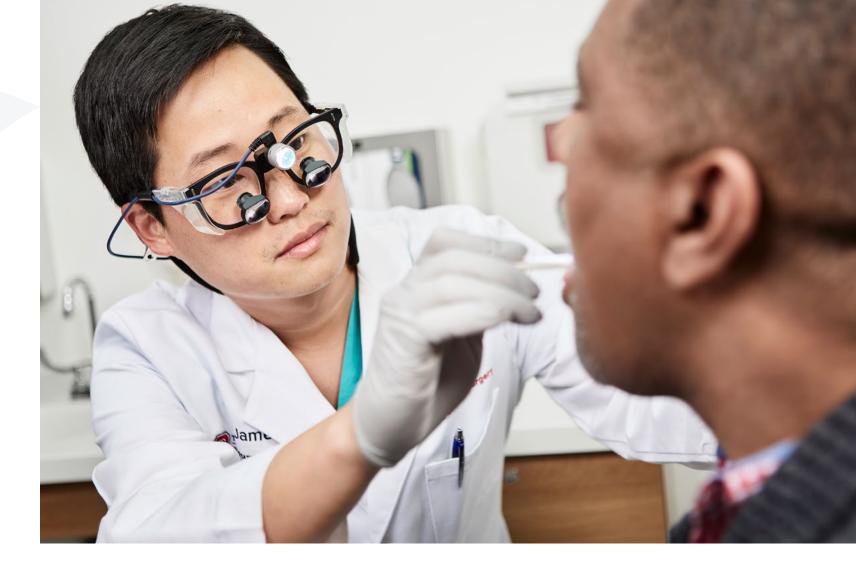
Kobel MJ, Wagner AR, Merfeld DM. Impact of gravity on the perception of linear motion. J *Neurophysiol.* 2021 Sep 1;126(3):875-887. doi: 10.1152/jn.00274.2021. Epub 2021 Jul 28.PMID: 34320866.

Wieland A, Patel MR, Cardenas MA, Eberhardt CS, Hudson WH, Obeng RC, Griffith CC, Wang X, Chen ZG, Kissick HT, Saba NF, Ahmed R. Defining HPV-specific B cell responses in patients with head and neck cancer. Nature. 2021 Sep;597(7875):274-278. doi: 10.1038/s41586-020-2931-3. Epub 2020 Nov 18. PMID: 33208941; PMCID: PMC9462833.

Zhang C, Wang M, Lin S, Xie R. Calretininexpressing synapses show improved synaptic efficacy with reduced asynchronous release during high-rate activity. J Neurosci. 2022 Mar 30;42(13):2729-2742. doi: 10.1523/ JNEUROSCI.1773-21.2022. Epub 2022 Feb 14. PMID: 35165172; PMCID: PMC8973423.

Wu Z, **Zhao K**. Impact of pulsation rate and viscosity on taste perception – Application of a porous medium model for human tongue surface. Comput Biol Med. 2021 Jul;134:104419. doi: 10.1016/j.compbiomed.2021.104419. Epub 2021 Apr 28. PMID: 33962089; PMCID: PMC8263469.

For a complete list of our FY22 publications, visit medicine.osu.edu/departments/otolaryngology/ research/publications.



Active Clinical Trials FY22

The Department of Otolaryngology - Head and Neck Surgery continues to be a national leader in the exploration of ear, nose and throat, head and neck cancer, and human communication disorders through our active clinical trials.

Allergy and Immunology

Casey Curtis, MD - Multicentre, Randomised, Double-Blind, Parallel-Group, Placebo-Controlled, 24-Week Phase 3 Study With an Open-Label Extension to Evaluate the Efficacy and Safety of Benralizumab in Patients with Hypereosinophilic Syndrome (HES)

General ENT

Eugene Chio, MD – Adherence and Outcome of Upper Airway Stimulation (UAS) for Obstructive Sleep Apnea (OSA) International Registry

Eugene Chio, MD – Multicenter Study to Assess the Safety and Effectiveness of the Genio[™] Dual-Sided Hypoglossal Nerve Stimulation System for the Treatment of Obstructive Sleep Apnea in Adult Subjects

RESEARCH AND INNOVATION

Continued from page 25

Head and Neck Oncology

Amit Agrawal, MD - Randomized Phase II/III Trial of Sentinel Lymph Node Biopsy Versus Elective Neck Dissection for Early-Stage Oral Cavity Cancer

Sujith Baliga, MD – A Phase II, Randomized, Double-Blind, Placebo-Controlled Trial to Evaluate the Safety and Efficacy of MIT-001 in Prevention of Oral Mucositis in Patients Receiving Concurrent Chemoradiotherapy for Previously Untreated Locally Advanced Head and Neck Squamous Cell Carcinoma (HNSCC)

Priyanka Bhateja, MD - A Phase II/III Randomized Study of Maintenance Nivolumab Versus Observation in Patients With Locally Advanced, Intermediate-Risk HPV-Positive OPSCC

Priyanka Bhateja, MD - The AIM-HN and SEQ-HN Study: A 2 Cohort, Non-Comparative, Pivotal Study Evaluating the Efficacy of Tipifarnib in Patients With Head and Neck Squamous Cell Carcinoma (HNSCC) With HRAS Mutations (AIM-HN) and the Impact of HRAS Mutations on Response to First Line Systemic Therapies for HNSCC (SEQ-HN)

Priyanka Bhateja, MD - Phase I Trial With Expansion Cohort of DNA-PK Inhibition and IMRT in Cisplatin-Ineligible Patients With Stage 3-4 Local-Regionally Advanced Head and Neck Squamous Cell Carcinoma (HNSCC)

Priyanka Bhateja, MD - A Phase II, Open-Label, Multi-Center Study of PDS0101 (R-DOTAP [Versamune[®]] + HPVmix) and Pembrolizumab (KEYTRUDA®) Combination Immunotherapy in Subjects With Recurrent and/or Metastatic Head and Neck Cancer and High-Risk Human Papillomavirus-16 (HPV16) Infection

Priyanka Bhateja, MD - An Open-Label, Phase I, First-in-Human, Dose Escalation and Expansion Study to Evaluate the Safety, Tolerability, Maximum Tolerated or Administered Dose, Pharmacokinetics, Pharmacodynamics and Tumor

Response Profile of the ILDR2 Function-Blocking Antibody Bapotulimab (BAY 1905254) in Patients With Advanced Solid Tumors

Priyanka Bhateja, MD – A Phase II Study of ALX148 in Combination With Pembrolizumab and Chemotherapy in Patients With Advanced Head and Neck Squamous Cell Carcinoma (Aspen-04)

Priyanka Bhateja, MD - A Phase II Study of ALX148 in Combination With Pembrolizumab in Patients With Advanced Head and Neck Squamous Cell Carcinoma (ASPEN-03)

Dukagjin Blakaj, MD, PhD – Randomized Phase II and Phase III Studies of Individualized Treatment for Nasopharyngeal Carcinoma Based on Biomarker Epstein Barr Virus (EBV) Deoxyribonucleic Acid (DNA)

Dukagjin Blakaj, MD, PhD - A Randomized Phase II/II Trial of De-Intensified Radiation Therapy for Patients With Early-Stage, P16-Positive, Non-Smoking-Associated Oropharyngeal Cancer

Dukagjin Blakaj, MD, PhD - Birinapant and Intensity-Modulated Re-Irradiation Therapy (IMRRT) for Locoregionally Recurrent Head and Neck Squamous Cell Carcinoma (HNSCC)

Dukagjin Blakaj, MD, PhD - HNSALV Trial: Combining Immunotherapy With Salvage Surgery and IORT for Treatment of Persistent/Recurrent Head and Neck Cancers

Dukagjin Blakaj, MD, PhD – Randomized Phase II/III Trial of Surgery and Postoperative Radiation Delivered With Concurrent Cisplatin Versus Docetaxel Versus Docetaxel and Cetuximab for High-Risk Squamous Cell Cancer of the Head and Neck

Dukagjin Blakaj, MD, PhD – Keystroke: A Randomized Phase II Study of Pembrolizumab (Keytruda) Plus Stereotactic Re-Irradiation Versus SBRT Alone for Locoregionally Recurrent or Second Primary Head and Neck Carcinoma

Marcelo Bonomi, MD – A Phase II Trial of the Efficacy and Safety of the Combination of Cemiplimab and Low-Dose Paclitaxel and Carboplatin in Patients With Recurrent/Metastatic Squamous Cell Carcinoma of the Head and Neck

Sachin Jhawar, MD - A Randomized, Double-Blind Placebo-Controlled, Phase III Study of Debio 1143 in Combination With Platinum-Based Chemotherapy and Standard Fractionation Intensity-Modulated Radiotherapy in Patients With Locally Advanced Squamous Cell Carcinoma of the Head and Neck, Suitable for Definitive Chemoradiotherapy (TrilynX)

Enver Ozer, MD - A Pilot Study Assessing Transoral Robotic Surgery (TORS) for Oral and Laryngopharyngeal Benign and Malignant Lesions Using the da Vinci Robotic Surgical System

James Rocco, MD, PhD - Phase II Randomized Trial of Adjuvant Radiotherapy With or Without Cisplatin for p53 Mutated, Surgically Resected Squamous Cell Carcinoma of the Head and Neck (SCCHN)

James Rocco, MD, PhD - De-Intensified Radiation Therapy With Chemotherapy (Cisplatin) or Immunotherapy (Nivolumab) in Treating Patients With Early-Stage, HPV-Positive, Non-Smoking-Associated Oropharyngeal Cancer

Sasha Valentin, DMD - Photobiomodulation Therapy Using the MuReva Phototherapy System to Demonstrate Safety and Reduce the Incidence of Oral Mucositis in Adult Patients With Head and Neck Cancer Receiving Concurrent Radiation and Chemotherapy

Laryngology

Brad deSilva, MD – Voice Outcomes Following Transcutaneous Steroid Injection for Vocal Fold Nodules Combined With Voice Therapy Compared to Voice Therapy Alone

Kyle VanKoevering, MD – Compassionate Use of a Custom Laryngectomy Tube in a Patient With Chronic Tracheal Stenosis

Otology, Neurotology and Cranial Base Surgery

Oliver Adunka, MD - Clinical Utility of Residual Hearing in the Cochlear Implant Ear

Oliver Adunka, MD - Cochlear Implantation During Vestibular Schwannoma Removal or During Labyrinthectomy Surgery for Treatment of Meniere's Disease

Oliver Adunka, MD - A Pivotal, Prospective, Multi-Centre, Randomize Control, Blinded Study Evaluating the Efficacy of a Dexamethasone-Eluting Slim Modiolar Electrode (CI632D) in the Reduction of Fribrosis as Compared to a Standard Slim Modiolar Electrode (CI632) in a Newly Implanted Adult Population With Bilateral, Post-Linguistic, Moderate to Profound Sensorineural Hearing Loss

Edward Dodson, MD – Regional Anesthesia for Otologic Surgery

Shuman He, MD, PhD - Auditory Neural Function in Implanted Patients With Usher Syndrome

Rhinology

Kai Zhao, PhD - 3D Printing to Improve Nasal Irrigation Outcomes

Kai Zhao, PhD – Olfactory Training for Patients With Olfactory Losses

Kai Zhao, PhD – Sinonasal Visualization and Quantification of the Effect of Oxymetazoline Nasal Spray

Active Research Funding FY22

NIH-Funded Research

Oliver Adunka, MD Clinical Utility of Residual Hea	08/01/2020 – 07/31/2025 ring in the Cochlear Implant Ear	NIH/NIDCD	U01DC018920
Lauren Bakaletz, PhD Determinants of H. influenzae	09/30/1999 – 03/31/2026 Virulence in Otitis Media	NIH/NIDCD	R01DC003915
Lauren Bakaletz, PhD International Symposia on Rec	06/04/2018 – 05/31/2023 ent Advances in Otitis Media	NIH/NIDCD	R13DC017389
Tendy Chiang, MD Kai Zhao, PhD Tissue-Engineered Trachea Cor	07/16/2021 – 06/30/2026 mposites for Long-Segment Airw	NIH/NHLBI ay Replacement	R01HL157039
Tendy Chiang, MD	07/14/2017 – 06/30/2022	NIH/NHLBI	K08HL138460
Mechanisms of Regeneration in	n Tissue-Engineered Tracheal Gr	afts	
Thomas Cherpes, MD, DVM	09/01/2018 – 05/31/2023	NIH/NIDCD	R01HD094634
Estrogen Reverses Progestin-M	Tediated Loss of Genital Mucosal	Barrier Function	
Shuman He, MD, PhD Encoding Temporal Fine Struct	03/01/2020 – 02/28/2025 ture for Cochlear Implants	NIH/NIDCD	R01DC018044
Shuman He, MD, PhD Music Appreciation After Coch	09/12/2019 – 08/31/2024 lear Implantation	NIH/NIDCD	R01DC018701
Shuman He, MD, PhD	04/01/2019 – 03/31/2024	NIH/NIDCD	R01DC017846
Neural Encoding and Auditory	Processing of Electrical Stimulat	ion in Pediatric Cochlear	Implant Users
Shuman He, MD, PhD	04/01/2021 – 03/31/2023	NIH/NIDCD	R21DC019458
Auditory Neural Function in In	nplanted Patients With Usher Syr	adrome	
Shuman He, MD, PhD	01/15/2018 – 06/30/2022	NIH/NIDCD	R01DC016038
Neural Encoding and Auditory	Perception in Cochlear Implant	Users	
Daniel Merfeld, PhD	09/01/2021 – 08/31/2026	NIH/NIA	R01AG073113
Towards Healthy Aging: Quantif	ying Vestibular Contributors to Ag	e-Related Changes in Balar	nce and Fall Risk
Daniel Merfeld, PhD	09/12/2020 – 09/11/2022	NIH/NIBIB	R01EB029818
Moving MRI: Imaging a Moving	g Body With a Moving MRI Magn	et	

The Department of Otolaryngology - Head and Neck Surgery continues to produce groundbreaking research funded by a number of national sources.

James Rocco, MD, PhD 03/28/2019 - 02/28/2025 NCI/NCTN OSU as a Network Lead Academic Participating Site for the NCI NCTN

Ruili Xie, PhD 09/19/2017 - 06/30/2022 NIH/NIDCD R56DC019093 Auditory Nerve Synaptopathy and the Central Mechanisms Underlying Noise-induced Hearing Loss

Ruili Xie, PhD 08/01/2021 - 07/31/2022 Cellular Mechanisms of Age-Related Hearing Loss

Non NIH-Funded Research

Oliver Adunka, MD, PI 08/15/2019 - 08/14/2022 DOD Cochlear Synaptopathy Using Electrocochleography

Maxwell Bergman, MD 07/01/2021 - 06/30/2022 CORE The Impact of Chondrocyte Viability on Tissue-Engineered Tracheal Grafts

CORE Sarah Nyirjesy, MD 07/01/2021 - 06/30/2022 Listening Effort in Cochlear Implant Users - Benefits From Bimodal Listening

Eugene Chio, MD, PI 06/22/2018 - 06/21/2021 Inspire Adherence and Outcome of Upper Airway Stimulation (UAS) for Obstructive Sleep Apnea (OSA) International Registry

Casey Curtis, MD, PI 02/08/2020 - 02/17/2024 AstraZeneca A Multicentre, Randomised, Double-Blind, Parallel-Group, Placebo-Controlled, 24-Week Phase 3 Study With an Open-Label Extension to Evaluate the Efficacy and Safety of Benralizumab in Patients with Hypereosinophilic Syndrome (HES)

Carrie Davenport, PhD PCORI 06/01/2022 - 05/31/2024 Building Capacity for Engaging Families in Early Hearing Detection and Intervention Research

Daniel Merfeld, PhD 05/01/2020 - 04/30/2023 Office of Naval Research Identifying Adverse Modes Via Human Machine Cybernetic Modeling

Daniel Merfeld, PhD 04/15/2019 - 04/14/2023 DOD Evaluating a Portable Virtual-Reality (VR) Balance Test as a Vestibular Assessment Screen

Daniel Merfeld, PhD 02/05/2022 - 02/04/2023 NAMRU-D Vestibular Impacts on Human Behavior, Sleep, and Performance

Department of Otolaryngology - Head and Neck Surgery

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NIH/NIDCD

R01DC016037



Providers:

30 (Ohio State) 13 (Nationwide Children's Hospital) **APPs: 15*** Audiologists: 34* **Total Encounters: 200,452* Total Surgeries: 12,690* Total wRVUs: 339,408* Cochlear Implants: 140* Sleep Apnea Surgical Implants: 97**

*Combined for Ohio State and Nationwide Children's Hospital

FY 2022 | By the Numbers

Ohio State expands plastic surgery division to provide tertiary care to more patients

The Division of Facial Plastic and Reconstructive Surgery at The Ohio State University Wexner Medical Center has expanded to take outpatient care to ambulatory care locations across central Ohio, with two new sites opening in the last year alone. The division is part of the Department of Otolaryngology - Head and Neck Surgery at The Ohio State University College of Medicine.

"We have an amazing team of clinical faculty who take the comprehensive care of an academic setting – including close collaboration with other divisions at Ohio State – to where our patients are," says James Rocco, MD, PhD, professor and chair of the Department of Otolaryngology - Head and Neck Surgery. "With this expansion, we bring great outcomes with easier patient access in a personalized, comfortable environment."

The division is expert in providing highquality care for patients while implementing translational research in three main areas: facial reanimation, gender-affirming care and aesthetic surgeries. Located at a tertiary care center, the division is equipped to manage both the depth and volume of complex and routine cases.

"This expansion has benefited patients because we provide the advanced care that doesn't normally come in a community, outpatient setting close to home," says

Division Director Leslie Kim, MD, clinical associate professor in the Department of Otolaryngology - Head and Neck Surgery. "We strive to provide the best evidencebased medicine and innovative approaches, which is the benefit of going to an academic health center. These ambulatory centers are the best of both worlds."

The department, which already boasts six fellowship programs for different specialties, is a top residency program destination for residents. That academic focus is expanding with the recent approval of a facial plastic and reconstructive surgery fellowship program, which will add to the expertise from both a clinical and research perspective.

This fellowship, directed by Dr. Kim and co-directed by community facial plastic surgeon Sumit Bapna, MD, will "offer fellows a unique opportunity to work both in private practice and academic medicine, enabling them to train in the full breadth of facial plastic surgery," Dr. Kim says.

Patients also benefit from translational research from a major research university, which implements consistent adaptation and innovation of new surgical techniques. The team is looking at different approaches to evaluate patient satisfaction, ease of recovery and quality-of-life outcomes, including perioperative pain control measures with multimodal approaches.



From left: Leslie Kim, MD, Ryan Nesemeier, MD, and Lisa Miller, APRN-CNP.

Facial reanimation

The Ohio State Wexner Medical Center is a leader in the region in facial paralysis reanimation treatment, with patients coming from across the country to receive care from Dr. Kim, who is just one of a few facial nerve specialists in the country.

Gender-affirming care

Ryan Nesemeier, MD, clinical assistant professor in the Department of Otolaryngology - Head and Neck Surgery, is working to grow the division's genderaffirming care practice into a center of excellence with multidisciplinary collaboration with urology, primary care and other areas. Dr. Nesemeier specializes in surgeries that feminize or masculinize the face and neck to help patients address gender dysphoria.

"Many of these surgeries are not covered by insurance," Dr. Kim says. "Dr. Nesemeier has been advocating for this coverage to better support gender-affirming treatments for patients coming from across the country for care."

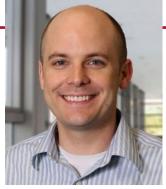
Aesthetic surgery

In addition to the two surgeons on the team, the division also includes a nurse practitioner. Lisa Miller, APRN-CNP, spent a decade working in dermatology and brings a unique expertise to the facial plastics team. The group collaborates to provide the full range of surgical and nonsurgical options to support patients.

"We have been able to grow a significant volume across the board on all surgeries, but especially cosmetic surgery," Dr. Kim says. "These surgeries are historically a challenge in academic centers. Ohio State has supported us in building out a cosmetic service line, and volume has exponentially grown."

With the expansion of the Ohio State Wexner Medical Center's ambulatory sites across the region, the department is also looking to add another surgeon in the next year to support the community-based approach and continued growth of the division's offerings.

Soon-to-be-offered intralymphatic immunotherapy a potential game changer for allergy patients



Casey Curtis, MD



Christopher Brooks, MD

"It won't be for everyone, but providing patients more options is always our goal," says Casey Curtis, MD, interim director of the Division of Allergy and Immunology in the Department of Otolaryngology - Head and Neck Surgery at the Ohio State Wexner Medical Center. "This gives us one more therapeutic tool to provide relief for our patients."

A newer type of

Wexner Medical

allergy treatment The

Ohio State University

mid-to-late 2023 may

dramatically shorten

hasten symptom relief

while reducing the risk

treatment time and

of anaphylaxis.

The treatment,

intralymphatic

immunotherapy,

has been studied for

decades, but it's been

gaining traction only

in a limited number

of allergy practices

around the country.

recently, being offered

Center plans to offer in

Increasing patient convenience

Traditional subcutaneous immunotherapy, while very effective, isn't always convenient. Patients must visit their allergist's office at least weekly for many months. This can be especially challenging for those who must travel great distances or have difficulty leaving work or school. Even with treatment, people don't get better quickly.

"A lot of times, symptom improvement doesn't happen for a year or two after starting treatment," says Christopher Brooks, MD, clinical assistant professor in the Department of Otolaryngology - Head and Neck Surgery at the Ohio State College of Medicine and one of the physicians who'll be offering intralymphatic immunotherapy. "Then, to get lasting relief, patients must continue periodic shots for four to five years. It's a very time-consuming therapy."

Intralymphatic immunotherapy requires just three allergen injections, which are delivered into an inguinal lymph node. The treatment is easier for patients and allows them to receive symptomatic relief in a fraction of the time.

An excellent safety profile

Physicians administer the injections with ultrasound guidance provided by a technician. One injection is given every four weeks for 12 weeks. Patients must remain in the office for observation after each injection, but because the injections are delivered directly into the lymph nodes, the doses are often smaller than those of traditional allergy shots. There is also less risk of severe complications, such as anaphylaxis.

Mild side effects, such as redness, swelling and mild discomfort at the injection site, are possible, but they also tend to be less severe than with subcutaneous therapy.

"The safety profile seems to be very good," Dr. Curtis says.

Intralymphatic immunotherapy can be offered for many types of environmental allergies and may be helpful for symptoms such as nasal and sinus difficulties, coughing and watery eyes. It may also help with asthma control. Typically, patients notice improvement shortly after their third injection.

The treatment is being studied for food allergies.

Expanding treatment options

The allergy team at Ohio State is partnering with Auni Allergy to offer this treatment, which includes proprietary allergen formulations. Auni Allergy was founded by Amber Patterson, MD, a world-renowned allergy and immunology expert and former allergy fellow of the Department of Otolaryngology - Head and Neck Surgery at the Ohio State Wexner Medical Center.

The treatment will be offered to adults, with qualifications allowing for an even larger pool of patients than exists today.

"Over time, we might feel comfortable giving this type of immunotherapy to patients who may otherwise not have been able to get traditional allergy shots," Dr. Brooks says.

While the injections will not be offered to children, there's hope that may be a future possibility.

"From an immune system standpoint, theoretically, it should be just as effective because children's immune systems are more malleable," Dr. Brooks says. "But it's still a newer therapy, so the trials don't have as much data yet for really young kids."

Innovative care

Because intralymphatic immunotherapy is not yet approved by the Food and Drug Administration, patients must pay out-ofpocket. Each treatment costs \$1,100, making the total for the three-injection series \$3,300.

"It's a lot of money, but for some people, it's worth it," Dr. Brooks says.

After adding the costs that a patient might pay for travel, medications, office visits for allergy symptoms and additional expenses over years for other treatments, the threeinjection method could actually save money.

While those with allergies are likely to benefit from the new treatment, their physicians may, too. When patients require fewer visits, doctors have more time and flexibility for those receiving other types of therapy.

Still, providing innovative patient care is what it's all about.

"Our physicians are really excited about offering new treatment modalities and continuing to provide the best and safest care for our patients," Dr. Curtis says.

Innovative dysphagia clinic incorporated into Ohio State's Head and Neck Cancer Program

On any given day, hundreds of patients with head and neck cancer receive treatment at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) — one of the highest patient volumes for head and neck cancer in the country.

Treating cancer is just the first step, though, because The Ohio State University Wexner Medical Center brings an institutional commitment to mitigating side effects from treatment and maximizing the quality of life for patients. That commitment includes treating dysphagia, or difficulty swallowing.

Apoorva Ramaswamy, MD, clinical assistant professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine, saw a need to support patients who'd received surgery or radiation to drive their cancer into remission and who, she found, displayed a propensity to develop esophageal dysmotility and other issues after treatment.

"As throat surgeons, we are well positioned for treating problems of the esophagus and other anatomy that is impacted by head and neck cancer treatment and which limits swallowing," Dr. Ramaswamy says. "These problems have often been neglected because we didn't realize they were there."

A dedicated space to treat dysphagia

As a laryngologist trained in throat surgery, Dr. Ramaswamy subspecialized in dysphagia before coming to the Ohio State Wexner Medical Center in 2021 and setting up the first dysphagia clinic in the country focused on care for head and neck cancer patients.

"The side effects of head and neck cancers and the treatments necessary to cure them often leave patients with long-term swallowing problems, which can severely impact their quality of life," says Matthew Old, MD, professor and director of the Head and Neck Cancer Program at the OSUCCC – James. "Having Dr. Ramaswamy and our team of speech and language pathologists solely dedicated to this issue is a differentiator for our program and benefit to our patients."

Research shows that dysphagia affects a significant portion of survivors of head and neck cancers. Up to 30% of patients develop aspiration pneumonia following treatment, and 30% of those patients will die within the first year after developing it.

Dr. Ramaswamy found that velopharyngeal insufficiency was a problem among this patient population. This disorder occurs when the palate, back of the throat and base of the tongue become dysfunctional, and there isn't enough pressure to push food into the esophagus, leading to aspiration, choking or nasal regurgitation.

The first-of-its-kind clinic brings a dedicated, multidisciplinary approach to treating swallowing disorders for survivors of head and neck cancers. In addition to Dr. Ramaswamy, the team in the clinic includes speech and swallowing pathologists, dietitians, physical therapists and social workers.

While other cancer centers treat dysphagia, the Ohio State Wexner Medical Center is unique in the volume and range of problems the clinic addresses. In just over a year of operating, the dysphagia clinic has had nearly 1,000 visits.

Conducting research at the source

Because dysphagia diagnosis and treatment haven't been deeply studied, research is an important part of the clinic's mission — an effort the high patient volume in the clinic has supported.

"So much of what treating these patients has uncovered is that there are problems we never recognized until we began focusing on these quality-of-life concerns," Dr. Ramaswamy says.

One research focus in the clinic is a better diagnostic test for velopharyngeal dysfunction. The current test (modified barium swallowing) only recognizes a third of cases, which is a challenge considering nearly a third of patients with head and neck cancer present with these issues. The clinic is also researching treatment efficacy, including outcomes reported by patients, to better understand how to objectively measure treatments' impact on the adult cancer population from a quality-of-life perspective.

The clinic is evaluating a combination of steroids and antibiotics to reduce swelling, pain and scarring from procedures. An initial presentation from 50 procedures showed that patients receiving this cocktail didn't experience these complications, which previously had often resulted in emergency department visits.

Building a patient-centered future

At this point, the clinic mainly treats dysphagia in patients who've completed cancer treatment, but eventually Dr. Ramaswamy would like to identify patients much earlier in the process to prevent speech and swallowing issues from ever developing.

"In a busy head and neck cancer center, this is a valuable practice, and there are a lot of patients we can medically and surgically treat," Dr. Ramaswamy says. "There are issues we've not been addressing as part of cancer treatment, and by focusing on them now, we can improve the quality of life for these patients."

Hearing aids are now available over the counter. *Are you prepared?*

moderate hearing loss.

The goal is to make it

easier for people with

hearing difficulties

to get hearing aids,

particularly those

reluctant to seek

in obtaining a

device.

who may have been

help because of the

challenges involved

personalized hearing





Oliver Adunka, MD



Melissa Schnitzspahn, AuD

"It's costly and it's time-consuming," says Oliver Adunka, MD, vice chair of Clinical Operations and director of the Division of Otology, Neurotology and Cranial Base Surgery in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine. "The idea was to help people financially but also to make the process less cumbersome."

Although some hearing professionals have concerns about what OTC products might mean for their practice, many believe easier access to hearing aids is, overall, a good thing. At this point, it's unclear exactly how the rule will affect patients and medical practices.

The change is drawing attention to hearing loss and encouraging questions.

"It gives us an opportunity to talk to people about the options that exist and what's appropriate and inappropriate for them," says Melissa Schnitzspahn, AuD, audiology manager and clinical audiologist at The Ohio State University Wexner Medical Center.

For some people, OTC hearing aids may be the best option. Still, there are questions about whether those the FDA rule is intended to help will actually seek out OTC hearing aids.

Another potential problem: People who do make an OTC purchase may not get the improvement that's possible with a prescription device. Without the service that comes with traditional hearing aids, patients may assume hearing aids are of no benefit to them.

Have a strategy

It will take time to see how OTC products affect the traditional hearing aid market. But having a strategy will help providers adapt. Dr. Adunka and Schnitzspahn offer these tips:

Consider selling OTC hearing aids

"View it as an opportunity to get more people in the door," Dr. Adunka says.

Whether people want an OTC hearing aid or help with one they've purchased elsewhere, you can recommend a hearing test to make sure they have a product that's right for them.

That might be an OTC or prescription hearing aid or even a cochlear implant. With expanded coverage for cochlear implants that the Centers for Medicare and Medicaid Services now offers, millions of people with more severe hearing loss qualify.

Currently, the Ohio State Wexner Medical Center doesn't sell OTC hearing aids, but it hasn't ruled out eventually carrying them.

"We've talked about it and continue to talk about it," Schnitzspahn says.

Create opportunities for conversation

Consider advertising your hearing aids. Events such as hearing screenings during Better Speech and Hearing Month in May and Audiology Awareness Month in October are also means to attract people to your practice — even those who may not recognize the extent of their hearing loss. These events become opportunities to talk about the tools you have to help.

Be educators

People may look primarily at price when opting for an OTC hearing aid. At several

38

hundred dollars, these devices are less expensive than traditional hearing aids, but they're not cheap. And people need to know that.

What's more, they need to know they don't get the service they would with a prescription hearing aid. OTC products may not have the same warranties, trial and return policies and product repair possibilities.

When considering these factors, people may decide a prescription hearing aid is their better option.

Always be learning

Products are likely to change, so it's important to stay on top of them. It's also important to monitor changes in your practice and how well patients hear with OTC products. That data doesn't currently exist. But when it does, it will help guide your way forward.

"We always need to be open and fluid and learning to keep a pulse on what's happening," Schnitzspahn says.

It's all about the patients

"The most important thing in all of this is getting patients the right treatment," Dr. Adunka says.

Schnitzspahn agrees.

"As physicians and audiologists, our mission is to provide whole person health care," she says. "We're making sure they're getting what's in their best interest in a safe and helpful way. I think that's our end goal."

Christopher Brooks, MD, joins the Division of Allergy and Immunology



For Christopher Brooks, MD, the Division of Allergy and Immunology at The Ohio State University Wexner Medical Center provides the perfect balance of compassionate patient care, research and opportunities to

help educate future doctors.

"There's an opportunity for me to get a little bit of everything here," Dr. Brooks says. "It's a mix of providing great patient care, taking care of complex conditions and being able to improve the quality of life for patients."

A native of Westerville, Ohio, Dr. Brooks completed an allergy and immunology fellowship with the Ohio State Department of Otolaryngology - Head and Neck Surgery in June 2022. He finished his pediatrics residency at the University of Minnesota and earned his medical degree from The Ohio State University College of Medicine. He's now a clinical assistant professor in the Department of Otolaryngology - Head and Neck Surgery.

"I missed the sense of community here," Dr. Books says. "I decided to remain as a faculty member after finishing my fellowship

because we have a great group of people and great collaboration."

Narrowing focus areas

Dr. Brooks is working to narrow his clinical areas of focus. His main interests are clinical immunology and intralymphatic immunotherapy, an emerging treatment for allergic rhinitis. It's like an allergy shot but is administered directly into a lymph node. The treatment is more efficient, requires fewer injections and lowers the risk of allergic reactions. Dr. Brooks and his colleagues are working to establish this care at the Ohio State Wexner Medical Center.

Complex adult allergy conditions, such as chronic hives or mast cell disease, also pique Dr. Brooks' interests.

"A lot of these patients need someone to take the time to talk with them about what's going on," Dr. Brooks says. "I listen to patients" stories and try to really understand what's happening."

Furthering research and education

There's much room for delivering advanced immunology care to adult patients, Dr. Brooks says. His research will focus on intralymphatic immunotherapy.

"There's really good clinical data in the research setting, but not as much in a realworld setting," Dr. Brooks says. "We'll be following patients to show its safety and effectiveness."

Dr. Brooks enjoys teaching and working with fellows, residents and medical students. He's passionate about using genetic testing for diagnosing immunologic disorders.

"When our patient care provides new data, we can share our knowledge with other providers and take a step toward improving care for everyone."

Catherine Haring, MD, joins the **Division of Head and Neck** Oncology

Catherine Haring, MD, graduated from George Washington University School of Medicine in 2016 and completed her residency in otolaryngology - head and neck surgery at the University of Michigan in 2021. She then completed a one-year fellowship in head and neck surgical oncology and microvascular reconstruction at The Ohio State University College of Medicine in June 2022.

The collaborative environment and opportunities for growth attracted Dr. Haring to remain with the Department of Otolaryngology - Head and Neck Surgery at Ohio State after completing her fellowship.

"Ohio State is the perfect place for me to begin my career as a surgeon-scientist. This institution possesses the resources, infrastructure and multidisciplinary mentorship to help me achieve my goals," Dr. Haring says.

Dr. Haring is an assistant professor within the Division of Head and Neck Oncology and is a member of the Translational Therapeutics Program at The Ohio State University Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Richard J. Solove Research Institute. Her clinical interests include head and neck cancer surgery and microvascular reconstruction.

Her research focuses on discovering new biological markers of head and neck cancer. Dr. Haring hopes to use these biomarker



tests to detect cancer at an earlier stage, better predict which tumors will respond to certain treatments and ultimately develop personalized treatment strategies.

"After witnessing family members suffer from cancer, I chose to dedicate my life to caring for cancer patients," Dr. Haring says. "It's a privilege to help patients and their families through the most difficult times."

As a resident at the University of Michigan, Dr. Haring helped develop a novel blood test to detect circulating tumor DNA in patients with human papillomavirus (HPV)associated oropharyngeal squamous cell carcinoma. Dr. Haring's research shows that this test can be used to predict treatment response and to detect cancer recurrences at an earlier stage.

"In the future, we hope that we will be able to use this test to personalize treatment for patients with HPV+ cancer, optimizing survival outcomes while also avoiding unnecessary treatment and potential treatment side effects," Dr. Haring says.

In addition to her clinical and research interests, Dr. Haring looks forward to helping to recruit and educate future leaders.

"I am fortunate to have many role models, mentors and sponsors," Dr. Haring says. "I hope that I can now serve in these roles for the next generation of students."

Education

FY 2022 | By the Numbers

Number of Fellows: 10 Number of Specialty Fellowships: 6 Allergy and Immunology Head and Neck Oncology Laryngology Neurotology **Pediatric Otolaryngology Skull Base Surgery**



Number of Residents: 24 62.5% male; 37.5% female

New otolaryngology resident-toresident mentorship program gives additional touchpoint to support patient care



housing and where to live. They can always reach out to their faculty mentor or program director, but this relationship is meant to be more peer-to-peer."

Dr. Sethia shared that when one resident had a challenging case in which a patient outcome didn't go as planned, their mentor resident provided comfort, guidance, reassurance and career support to help them learn from the experience.

"They'd gone through similar scenarios and were able to share that things get better," Dr. Sethia says. "Even though this was a challenging time, they were able to shed light on the bigger picture."

The program also naturally supports patient care and safety. "If a resident comes in and they've been shown the ropes, they're more likely to be successful in patient encounters from a safety and process improvement standpoint," Dr. deSilva says.

Supporting residents holistically

The mentorship program started in June 2022, when the new class of residents arrived on campus. It was particularly helpful this year since the academic health center had not hosted in-person interviews in two years, and it was the faculty's first time meeting the residents in person.



Brad deSilva, MD



communication and many other topics that don't come up in medical school. "New residents can feel like they're on an island," says Brad deSilva, MD, clinical associate professor and director of the residency program for the

The first year of residency

can feel overwhelming.

In addition to learning

how to be a doctor in a

clinical setting, residents

also need to learn where

the supply closet is, how to

navigate referrals, training

requirements, the rotation

schedule, cross-department

Rishi Sethia, MD

Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine.

Department of

The department is trying to eliminate that isolation by creating a novel mentorship program to support its most recent class of otolaryngology residents.

"Mentorship has been a hot topic in medicine over the last 10 years," says Rishi Sethia, MD, chief resident of the department. "There have been publications on promotion for academic physicians when they have sponsors and how mentorship can improve advancement and engagement."

Sharing a learned experience

The first-of-its-kind program, spearheaded by Drs. deSilva and Sethia, pairs each of the five incoming otolaryngology residents with third-year residents for a multi-year, structured mentorship program. Then, after two years, the mentees will become mentors to the new class of residents.

"It's beneficial to have someone who has been through the rigors of residency in a recent timeframe," Dr. Sethia says. "They've been through the challenges and benefits and can share those experiences with new residents."

The program includes a formalized curriculum with recommended structured conversations for quarterly meetings between mentor and mentee. The goal is for the junior residents to have a person to reach out to when they have questions.

Through the experience, Dr. deSilva hopes, junior residents can adapt more easily to becoming resident physicians. "It's a sort of buddy program where they can have someone to call to discuss topics like life in medicine, navigating relationships and even "Ohio State cares about mentorship, recognizes the benefits of it and puts resources toward supporting mentorship and wellness and social events," Dr. deSilva says. These events include a Super Bowl chili cookoff and an annual tailgate ahead of an Ohio State football game.

This novel mentorship program is an addition to existing faculty mentorship programs that are more common. It's also additive to a biannual meeting Dr. deSilva holds with each resident class. The tiered approach means residents have a faculty mentor with whom they can discuss career, fellowship and other strategic questions, and another person who can help with preparing for a case or answering a one-off question.

Growing the program

Initial feedback has been positive, and new residents seem enthused that there's a program in place with a formalized connection for them to have questions answered. Eventually, the pair hopes similar peer-to-peer mentoring will be present at otolaryngology programs across the country.

"By publishing our findings, we can provide a model that other institutions or departments can utilize," Dr. deSilva says.

"The resources required are minimal," Dr. Sethia adds, "but the impact is great."

Ohio State brings back live endoscopic surgery course for clinicians worldwide

After a two-year hiatus due to the COVID-19 pandemic, the Division of Skull Base Surgery at The Ohio State University Wexner Medical Center and The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) brought back its hands-on endoscopic surgery course with a new format.

"We've been training in all types of endoscopic approaches – whatever it takes to care for the patient. That includes treating the highest complexity cases," says Daniel Prevedello, MD, neurosurgeon and professor in the Department of Neurological Surgery at The Ohio State University College of Medicine. "There is a pioneering aspect of what we teach in endoscopic surgery, including what Ohio State brings as a multidisciplinary team. Physicians taking this course get the best experience to take back to their institutions."

The advent of endoscopic surgery in the 1990s meant the ability to support more patients with a minimally invasive approach. Unfortunately, many of these techniques, particularly advanced endoscopic procedures, are not taught during training.

"There can be a steep learning curve for these procedures," says Ricardo Carrau, MD, director of the Division of Skull Base Surgery at the OSUCCC - James and professor in the Ohio State Department of Otolaryngology -Head and Neck Surgery. "Many physicians never received this training in residency."





Daniel Prevedello, MD

Ricardo Carrau, MD

This course aims to correct that through a hands-on approach. The first day of the course takes place at the OSUCCC - James and includes lectures and live surgery. The second and third days take place at Ohio State's state-of-the-art Surgical Skills Lab, a venue that facilitates advanced cadaveric training.

Drs. Carrau and Prevedello have been leaders in endoscopic surgery for the treatment of skull-base and head and neck cancers over the past three decades. Dr. Carrau was among the first physicians in the world to pioneer these techniques in the 1990s and, along with Dr. Prevedello, has been teaching the course at Ohio State since 2011.

The course provides training in a controlled environment in anatomy and techniques and strategies for managing disease. Drs. Carrau and Prevedello emphasize that there are many ways of treating conditions, and these surgeries are one more tool in the toolbox.

"This course is one of many strategies to empower physicians to continue training and gain skills," Dr. Prevedello says. "Training, like using simulators to teach an endonasal approach, is more effective and safer for complex procedures."

To model these complexities, Kyle VanKoevering, MD, a skull-base surgeon and clinical assistant professor in the Department of Otolaryngology, developed models of difficult-to-emulate complications using 3D printing. Trainees also used models for catastrophic injury that would lead to massive bleeding – all in a controlled environment.

"As a cancer hospital, we have a culture of multidisciplinary cooperation, including More than 70 physicians attend the course speech and physical therapy, social work, every year, nearly half of whom come from case management and others, all working in outside the U.S. In 2022, 15 countries were the same hallway," Dr. Carrau says. "When represented at the training. it comes to cancer care, it's important to address these aspects immediately. Through While the course originated with endoscopic our course, we can teach others how to techniques, it's evolved beyond how to do the implement this comprehensive approach."

procedure.

The next session of the endoscopic surgery "We bring a comprehensive view," Dr. Carrau course is scheduled for May 18-20, 2023.



The endoscopic surgery course takes place at Ohio State's Surgical Skills Lab. The state-of-the-art space allows physicians to refine techniques and explore innovative procedures outside the OR.

says. "It's not just surgery, but a complete strategy of how to treat patients. We try to think outside the box for how to provide more hands-on training to participants."

As the course has evolved, Drs. Carrau and Prevedello have fine-tuned the content to teach more advanced concepts, including moving from an anatomy-based approach to a disease-oriented one. Some topics covered in recent courses include malignancies of the sinonasal tract and meningiomas of the skull base.

Meredith Lind, MD, named education coordinator for the AAO-HNSF

The American Academy of Otolaryngology-Head and Neck Surgery Foundation (AAO-HNSF) has named Meredith Lind, MD, clinical associate professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine, education coordinatorelect. The AAO-HNSF is the leading national organization for the specialty, with 12,000 members around the world.

"Education and training are important in keeping the practitioners of otolaryngology up-to-date and providing a forum for sharing evidence-based care practices," Dr. Lind says.

Dr. Lind is a pediatric otolaryngologist at Nationwide Children's Hospital and the associate director for the otolaryngology residency program and pediatric otolaryngology fellowship program at Ohio State. "One of the three main pillars of the AAO-HNSF is education," Dr. Lind says. "Within otolaryngology and especially academic practices, there's a lot of subspecialization. We have a unique opportunity to share this specialized knowledge with the physicians on the front lines with patients."

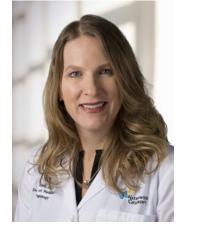
In the role of education coordinator, Dr. Lind will lead the development and execution of AAO-HNSF education strategy, including:

- Managing continuing professional development activities for physicians
- Developing new education products, including FLEX (flexible lifelong learning experience) products
- Addressing education needs for various stakeholders, including primary care, allied health, residency, fellowship and medical school trainees

During the four-year appointment, Dr. Lind will oversee nine education committees and the wide spectrum of products they produce — including a large, on-demand library of training materials.

Dr. Lind brings years of experience, having previously served as the chair of the Pediatric Otolaryngology Education Committee for the AAO-HNSF. She's been on the committee for six years, including three as the committee chair, and has developed continuing education content for practicing otolaryngologists, residents and learners.

At Ohio State, Dr. Lind also manages residents in their rotation and runs an annual pediatric otolaryngology boot camp for residents and fellows. Finally, she brings experience with adult education, including simulation activities — one of the areas the AAO-HNSF is looking to move forward in for supporting training.



"Education and training are important in keeping the practitioners of otolaryngology up to date and providing a forum for sharing evidencebased care practices."

— Meredith Lind, MD



"My goal is to continue to make the AAO-HNSF the primary place that otolaryngologists go for educational content, during medical school and throughout their careers," Dr. Lind says. "Coming from a great institution like Ohio State, where I've been active in education, gives me the background I need to support and engage with physician leaders of diverse backgrounds and sets me up for success in this role."

Our fellows

Allergy and Immunology



Christian Coletta, MD

Hometown: Cleveland, Ohio Undergraduate: The Ohio State University

Medical School: The University of Toledo College of Medicine and Life Sciences

Residency: Nationwide Children's Hospital/ The Ohio State University Wexner Medical Center



Courtney Cotter, DO Hometown: Grand Haven, Michigan

Undergraduate: Marquette University

Medical School: West Virginia School of Osteopathic Medicine Residency: Michigan State University



Rebecca Koenigsberg, DO

Hometown: Bryn Mawr, Pennsylvania Undergraduate: Pennsylvania State University

Medical School: Philadelphia College of Osteopathic Medicine

Residency: Indiana University School of Medicine



Kasey Lanier, MD

Hometown: Atlanta, Georgia Undergraduate: Wake Forest University Winston Graduate: University of Pennsylvania

Medical School: Mercer University School of Medicine **Residency:** Emory University

Head and Neck Oncologic Surgery





Hilary McCrary, MD, MPH Hometown: Moab, Utah **Undergraduate:** University of Arizona Graduate: University of Arizona Medical School: University of Arizona Residency: University of Utah

Laryngology



Hometown: Houston, Texas Undergraduate: Texas A&M University Residency: University of Kansas

Neurotology



Hometown: Buffalo, New York Undergraduate: College of William & Mary Medical School: University of Texas Southwestern Medical

School Residency: Mount Sinai Hospital

Pediatric Otolaryngology



Ma'in Al Shawabkeh, MD Hometown: Jordan **Undergraduate:** University of Jordan Medical School: University of Jordan

Residency: Doha, Qatar

Skull Base Surgery



Hometown: San Francisco, California

Basit Jawad, MD

Undergraduate: University of Houston-Downtown

Medical School: McGovern Medical School/University of Texas Medical School at Houston

Residency: Tulane University School of Medicine

Fellowship: University of Cincinnati College of Medicine

Amy Jacks, MD

Medical School: University of Texas Health Science Center at Houston

Vivian Kaul, MD

Our new residents



Rebecca Arch, MD

Hometown: Brentwood, Tennessee **Undergraduate:** Northwestern University Medical School: Northwestern University





Jack Birkenbeuel, MD, MBA

Hometown: Pasadena, California **Undergraduate:** University of California Medical School: University of California, Irvine's School of Medicine

Neil Mehta, MD

Hometown: Santa Rosa, California Undergraduate: University of California San Diego Medical School: Wayne State University



Shambavi Rao, MD

Hometown: Marlboro, New Jersey **Undergraduate:** Emory University Medical School: Wake Forest School of Medicine



Sarah Sussman, MD

Hometown: Augusta, Georgia **Undergraduate:** University of Georgia Medical School: Medical College of Georgia

Leadership and Recognition

Select awards and distinguished achievements

- Oliver Adunka, MD, received an Executive Master of Business Administration (EMBA) degree from The Ohio State University. He was also named associate editor for JAMA Otolaryngology – Head & Neck Surgery.
- Thomas Cherpes, MD, DVM, completed the Association of American Veterinary Colleges Leadership Academy.
- **Eugene Chio, MD**, has completed 500 Inspire implants since he started offering the sleep surgery method at The Ohio State University Wexner Medical Center in 2018.
- **Ursula Findlen, PhD**, was elected to the board of directors of the American Academy of Audiology.

- **Kris Jatana, MD**, received the Clinical Excellence Award from Nationwide Children's Hospital for reducing opioids in the health care system's patient population, as well as in the community.
- Leslie Kim, MD, was named chair of the Women in Facial Plastic Surgery Committee for the American Academy of Facial Plastic and Reconstructive Surgery.
- Apoorva Ramaswamy, MD, was appointed co-chair of the Diversity, Equity and Inclusion Committee for the Dysphagia Research Society.
- **Minka Schofield, MD**, was named chair of the Women in Otolaryngology section of the American Academy of Otolaryngology – Head and Neck Surgery. She also received the AAO-

HNS Distinguished Service Award and was awarded the AAO-HNS Committee of Excellence Award for the Program Advisory Committee.

- **Kyle VanKoevering, MD**, was named director of the Skull Base and Ablative Head and Neck Surgery Fellowship Program at The Ohio State University College of Medicine.
- Kara Wada, MD, obtained certification from the American Board of Lifestyle Medicine.
- **Patrick Walz, MD**, was named a committee member of the Epic Pediatric Otolaryngology Steering Board.
- These faculty members of the Department of Otolaryngology – Head and Neck Surgery received promotions in 2022: Tendy Chiang, MD, was



promoted to associate professor; James Ruda, MD, was promoted to clinical associate professor; and Ruili Xie, PhD, was promoted to associate professor.

 These physicians from the Department of Otolaryngology – Head and Neck Surgery were named Castle Connolly Top Doctors for 2022: Oliver Adunka, MD; Amit Agrawal, MD; Ricardo Carrau, MD; Brad deSilva, MD; Tendy Chiang, MD; Edward Dodson, MD; Charles Elmaraghy, MD; L. Arick Forrest, MD; Jonathan Grischkan, MD; Kris Jatana, MD; Meredith Lind, MD; Laura Matrka, MD; Matthew Old, MD; Bradley Otto, MD; Enver Ozer, MD; James Rocco, MD, PhD; James Ruda, MD; Kara Wada, MD; Patrick Walz; and Gregory Wiet, MD.

Edward Dodson, MD, receives AAO-HNS Distinguished Award for Humanitarian Service

Accolade recognizes nearly 30 years of service to poor and underserved residents of the Dominican Republic

In recognition for his work with Project Ear, a nonprofit organization he started, Edward Dodson, MD, otologist in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center, received the Distinguished Award for Humanitarian Service from the American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) at the organization's annual meeting in September 2022.

This prestigious award honors academy members who, among other things, have "a love and devotion to humanity," "a selfgiving spirit" and a willingness to offer



their professional skills "freely and without desire for personal gain or aggrandizement." The person selected for the award is "an outstanding example and model to emulate for a life dedicated to a nobler, more righteous, and more productive way for the human to live as an individual on this earth," per the AAO-HNS award qualifications.

Dr. Dodson, who's also a clinical professor at The Ohio State University College of Medicine, is highly deserving of the award, according to James Rocco, MD, PhD, chair of the Department of Otolaryngology – Head and Neck Surgery.

"By sharing his time and skills with the people of the Dominican Republic, where Project Ear helps people suffering from ear disease and hearing loss, Dr. Dodson is providing access to specialty care that most people there couldn't get otherwise. And he's improving lives. That's the essence of being a physician.

"A lot of people talk the talk," Dr. Rocco says. "Ed walks the walk."

Dedication from day one

It was October 1995 when Dr. Dodson made his first medical mission to the Dominican Republic with his mentor, Paul Lambert, MD, who organized the trip. Then a fellow,

Edward Dodson, MD, (back row, fourth from left) is shown with colleagues during Project Ear's recent mission trip to the Dominican Republic. "That day I met a man who would become my big brother." "Dr. Dodson is someone to be admired and respected for his passion, his abilities and his big heart." — Roberto Batista Genao, MD

Dr. Dodson met Roberto Batista Genao, MD, who'd just completed an otolaryngology residency in the country and was eager to work with the group and learn from them. They formed an instant bond, and Dr. Batista has been an integral part of each of Dr. Dodson's trips since.

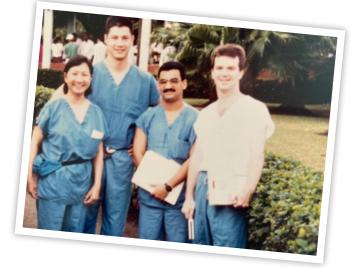
"That day I met a man who would become my big brother," Dr. Batista says of the first encounter with his colleague and friend. "Dr. Dodson is someone to be admired and respected for his passion, his abilities and his big heart."

From the very first trip, Dr. Dodson recognized the importance of his work in the Dominican Republic, and he shed tears when the time arrived to depart the country. "I really didn't want to leave," he says. "But more importantly, I knew I wanted to go back."

And go back he did – nearly 60 times to home so many weeks over the years. All of date. He and the volunteer teams that them make Project Ear possible. accompany him have performed more than 1,200 otologic surgeries, 1,500 ear exams, 700 According to Dr. Rocco, Dr. Dodson is a screening audiograms and 300 hearing aid prime example of what's best about the Ohio fittings. Along the way, he's helped train new State Wexner Medical Center staff beyond residents in the country so they can make their traditional clinical, educational and a difference, as well. It's been life-changing research missions. He truly cares about work for patients and Project Ear volunteers people. alike.

Team effort, team recognition

Dr. Dodson remains humble about all he's accomplished. And he's quick to share credit.



"This really isn't about me," he says. "I received the award as part of a group." Others who deserve recognition, according to Dr. Dodson, include, Dr. Lambert, who started the trips; Dr. Batista, who does all the patient screening and follow-up care; the physicians, medical students, staff members and volunteers who travel with him to perform services; and the mission hospital where they treat patients. Even the cook, cleaners and transportation aides who tend to his team's needs in the Dominican Republic are essential to the trips' success.

Dr. Dodson also thanks the medical staff members, who collect unused supplies for his trips; his colleagues at the Ohio State Wexner Medical Center, who cover for him when he's gone; and his family, who have graciously allowed him to be gone from home so many weeks over the years. All of them make Project Ear possible.

"Here at home, patients love him, and residents adore him. And Ed is an excellent surgeon — he does some of our most complicated cases," Dr. Rocco says. "But he hasn't forgotten how to be a doctor."

Matthew Old, MD, named David E. Schuller, MD, and Carole Schuller Chair in Otolaryngology

Being named the David E. Schuller, MD, and Carole Schuller Chair in Otolaryngology in July 2022 raised the bar for Matthew Old, MD.

"I don't take this honor as a pat on the back," Dr. Old says. "I see this as a challenge of something for me to live up to."

Dr. Schuller, who retired in 2015 from The Ohio State University Wexner Medical Center, is confident Dr. Old is the real deal. Dr. Schuller says Dr. Old is academically productive, a superb educator and a skilled surgeon with an impressive fount of knowledge.

"It's a challenging task to be academically productive and involved in the care of people who are desperately ill with a serious illness," Dr. Schuller says. "Matt has all of those attributes, and he's an empathic person."

In addition to being a professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine, Dr. Old also serves as the director of the Division of Head and Neck Cancer and the medical director of Head and Neck Oncology at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James). He manages large teams across multiple departments to provide an array of care and treatments for patients with head and neck malignancies.

Invaluable compassion and insight

Dr. Schuller's 44 years of service and more than 20 years of leadership made an integral impact on Ohio State and the Department of Otolaryngology – Head and Neck Surgery. He previously served as chair of the department for 21 years, director of the Comprehensive Cancer Center for 10 years and CEO of The James for 20 years before being named vice president of medical center expansion and outreach at the Ohio State Wexner Medical Center.

When the new cancer hospital opened in 2014, Dr. Schuller led a team that was awarded a \$100 million grant for the hospital's Radiation Oncology Center.

Dr. Schuller's compassion for others is legendary. He continues to mentor Dr. Old and many others and stays connected to the department. Dr. Schuller remains thankful to Richard and LaDonna Solove for their "total commitment to our cancer program."

"It's a challenging task to be academically productive and involved in the care of people who are desperately ill with a serious illness, Matt has all of those attributes, and he's an empathic person." — David Schuller, MD



From left: Dr. David and Carole Schuller, Dr. Matt and Molly Old, and Lynne and John Old.

The Soloves funded the Schuller Chair and set a dynamic example of how to deploy resources and wisdom to make a difference in health care.

"Now that I am in retirement, it is personally gratifying to see how the department continues to charge forward in all areas of our specialty," Dr. Schuller says.

Leading by example

The appointment reminds Dr. Old of the many ways Dr. Schuller supported his mentees and the others he surrounded himself with.

"One of the most important things about the chair is that Dr. Schuller really led by example," Dr. Old says. "His biggest attribute was elevating everyone around him and helping them achieve greater things."

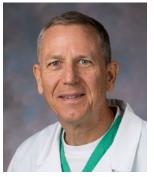
Dr. Old hopes to continue doing the same and assist all around him to navigate current and future challenges and develop into the future leaders of the profession. "I am very fortunate to be surrounded by amazing and talented individuals who are constantly elevating each other to provide the best and latest cutting-edge care and support for the patients and team," Dr. Old says.

The chair is named for Dr. Schuller and his wife because "it wasn't only the clinical team, but his family and friends and particularly Carole who supported Dr. Schuller in his work," Dr. Old says. "We can't forget that the family and friends around us are all part of this team."

He adds that he strives to live up to the expectations of his wife Molly and their four boys and to help them achieve their goals in life as much as they provide the support for him to do the same. Dr. Old says they all view each other as a close team in this journey together. Molly Old is a critical head and neck cancer team member, Dr. Schuller says. She leads the division's Pelotonia team and is heavily involved in the community as a volunteer and teacher.

Gregory Wiet, MD, receives 2022 Career Contribution Award from Nationwide Children's Hospital

In appreciation of his work to advance the hospital's mission, operations and medical staff, Gregory Wiet, MD, FACS, FAAP, professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine, received a Career Contribution Award from Nationwide Children's Hospital at a ceremony in September 2022.



Dr. Wiet serves as program director of the Pediatric Otolaryngology Fellowship Program at Nationwide Children's Hospital and chair of the Promotion and Tenure Committee in the Department of Otolaryngology - Head and Neck Surgery at Ohio State.

This accolade, bestowed on only three recipients in 2022, is presented to physicians who "have exemplified themselves through a lifetime of commitment to maintaining the highest quality of health care and service." It also recognizes those who have played a significant role in helping Nationwide Children's Hospital build its reputation as a leader in pediatric care locally, regionally and nationally.

"I felt very honored," Dr. Wiet says of the recognition, "especially when I saw the others who won the award this year. Being in their company is meaningful to me."

Dr. Wiet has a long history at Nationwide Children's Hospital. It was while completing his residency at The Ohio State University

Wexner Medical Center that he became interested in caring for kids. Spring rotations at Nationwide Children's Hospital were always uplifting, he says. His experience led to a pediatric otolaryngology fellowship, and thereafter, a return to Nationwide Children's Hospital, where he served as director of the Department of Pediatric Otolaryngology for six years, laying the foundation for what the department has become.

"The level of care here is top-notch," he says. That fact, along with the hospital's commitment to the community and families of all financial means, are big reasons why he's remained at Nationwide Children's Hospital. There's a commitment to excellence in patient care and academics and a true esprit de corps that makes working at the hospital a pleasure, he says.

It's all about the kids

Today, in addition to providing patient care and conducting research, Dr. Wiet enjoys teaching and mentoring fellows, residents and students, many of whom have become his partners. He has held several leadership positions with national organizations, including the American Board of Otolaryngology - Head and Neck Surgery, for which he currently serves as a director.

Professionally, everything he does is for the children. "It's quite a rewarding career," Dr. Wiet says. "You make a real difference in kids', and subsequently their parents', lives."

Minka Schofield, **MD, named 2022 Bowen Woman** of Excellence

Advocating for others and serving as a mentor are key elements in the career of Minka Schofield, MD, director of the Division of General Otolaryngology at The Ohio State University Wexner Medical Center and clinical associate professor in the Department of Otolaryngology - Head and Neck Surgery at The Ohio State University College of Medicine. It's these attributes that also led her to receive the 2022 Clotilde D. Bowen Women of Excellence award from the Ohio State College of Medicine.

The Bowen award honors the life of Clotilde Bowen, MD, who became the first African American woman to graduate from the Ohio State College of Medicine, in 1947. She went on to become the first female physician to serve in the U.S. Army, the first female commander of a military hospital and the first African American woman to be appointed chief of psychiatry at two Veterans Administration hospitals and two Army medical centers.

After retiring from the military in 1996, Dr. Bowen worked with The Joint Commission and at various Veterans Affairs clinics. She also held a number of teaching positions throughout her career, retiring in 2008.

The award selection committee says Dr. Schofield embodies the qualities that Dr. Bowen so wonderfully displayed, including selfless compassion for all people.



"Dr. Schofield has been my mentor since I was a senior in high school," one nomination reads. "She not only guided me throughout applying to college and med school but continues to stay invested in me as a future physician. She is a true inspiration, especially as a woman of color in surgery."

Throughout her career, Dr. Schofield has experienced the importance of having support, mentorship and guidance from others, many of whom didn't look like her. That's one of the reasons she wanted to work in academic medicine: to model what someone can achieve.

"The chance to work with medical students, residents and fellows keeps faculty on our toes and pushes us further," says Dr. Schofield, who's also vice chair of Diversity, Equity and Inclusion for the Department of Otolaryngology – Head and Neck Surgery. "The environment provides continual growth and has allowed me to evolve as an academician and clinician in ways I didn't previously envision."

When she thinks of the many students and residents she's worked with, Dr. Schofield remembers the long shots or those who needed greater guidance.

"I look back and think, 'wow.' It's the importance of having someone there who believes in you. And when I see them blossoming and doing what they want, it's so rewarding for me to know that I played a role in their life's success."

James Rocco, MD, PhD, receives FAME Outstanding Mentor Award for Professors

James Rocco, MD, PhD, is the first faculty member from the Department of Otolaryngology – Head and Neck Surgery to receive The Ohio State University College of Medicine's Center for Faculty Advancement, Mentoring and Engagement (FAME) Outstanding Mentor Award for Professors.

The FAME professor mentoring award honors someone who provides outstanding support, encouragement, and career and professional development to others outside of a formal leadership role.

"Dr. Rocco lives all the qualities FAME honors every day," says Ricardo Carrau, MD, a department colleague and the associate dean for FAME.

Encouragement to "make new mistakes"

The award surprised Dr. Rocco, chair of the Department of Otolaryngology – Head and Neck Surgery, even though he sees himself as being very involved in the careers of faculty within and outside his department.

"When I was an otolaryngology resident, I had a chair who I thought was exceptional at this," Dr. Rocco says of his time at Johns Hopkins Hospital. "It had a strong impact on me and impressed upon me that this was something I should do a lot of when I got to that point in my career."

Mentorship is ingrained in medical education and practice, Dr. Rocco says. Medical students learn from residents, residents learn from fellows, fellows learn from one another and other faculty. Physicians and surgeons collaborate constantly to remain at the forefront of leading-edge care.

He takes those same techniques outside the operating room and clinic and applies them to career development.

"I like to help people plan their careers and think about the different pieces they need and how to put them together in a sequential way that achieves their goal," Dr. Rocco says. "I get to fix or help prevent all the mistakes that I made early in my career. It's very satisfying."

He embraces the "make new mistakes" philosophy. Just as surgeons learn how to avoid certain mistakes from colleagues at morbidity and mortality conferences, Dr. Rocco encourages residents, fellows and young faculty to avoid repeating classic career mistakes but to push the envelope,

"He has an urge to help others shine. One of his greatest qualities is that he's always looking for the win-win solution." — Ricardo Carrau, MD

knowing new mistakes may be made as they pursue their goals.

"Many don't understand how skilled and knowledgeable they are in this kind of focused thinking," Dr. Rocco says. "I reinforce that for them. I push them to achieve more than me, to be free and creative and take chances."

Helping others shine

Dr. Rocco wanted to be a head and neck surgeon and pursue molecular genetics research in head and neck cancer. At Johns Hopkins, he found the support he needed in his mentor, Dr. Charles Cummings.

"He didn't tell people what to do. He helped them hone their talents and lowered barriers to their success," Dr. Rocco says. "I have taken that on as a mantra."

Dr. Carrau says Dr. Rocco exudes the best leadership qualities.

"He has an urge to help others shine," Dr. Carrau says. "One of his greatest qualities is that he's always looking for the win-win solution. He is the master at coming up with a way to make the pie bigger, so everyone gets more of what they want, including professional development and goals. It's a unique skill that transfers very well from administration to mentorship."

When Dr. Rocco recruits fellows and faculty, he sees it as a partnership. He buys into their vision and ensures that Ohio State has what they need to grow.

His undergraduate training in engineering provides the organized thinking that his mentees benefit from.

"There is a lot of structured debris in my brain about how to think about things," Dr. Rocco says. "When I counsel people, I see



their successes, I consider their goals and I focus on the potential barriers they might face. I want them to keep going, so I look at the strategies they can use to get past those barriers."

Learning to listen

While Dr. Rocco is being honored for teaching others, he says he's learned much from those he mentors. He wishes he had been a better listener when he was younger.

He understands now how much adults can learn from a story if they listen well. This impacts how he tries to reach people. Some may say he's repetitive, but he does that on purpose — to ensure the message gets through.

Dr. Rocco also knows his advice must be useful. So, he makes a point to check in with his mentees regularly. He follows up to see what the outcome of a certain situation was and if his guidance yielded positive results.

This approach shows that he's invested in his mentees. It also illustrates to the mentees that the work they put in pays off.

"I think I understand why my old chairman really liked mentoring," Dr. Rocco says. "It's a very sweet thing."

Bryan Martin, DO, inducted into Ohio Veterans Hall of Fame

Bryan Martin, DO, is one of 20 people inducted into the 2022 Ohio Veterans Hall of Fame class by the Ohio Department of Veterans Services, the Ohio Veterans Hall of Fame Executive Committee and the Ohio Veterans Hall of Fame Foundation. A Professor Emeritus of Internal Medicine in the Ohio State College of Medicine, he was honored during a ceremony that took place in November.

The recognition is "a significant honor" for work outside his military service, Dr. Martin says.

Dr. Martin left the Army on a Friday in 2008 and started working at The Ohio State University Wexner Medical Center the next Monday.

His last military assignment was at Walter Reed Army Medical Center in Washington, D.C. While there, he served as chair of the Department of Allergy and Immunology; director of the National Capital Consortium's Allergy and Immunology Fellowship Program; specialty consultant to the Army surgeon general for Allergy, Immunology and Immunizations; and founding associate director of the national Vaccine Healthcare Centers Network.

At Ohio State, Dr. Martin was integral in launching an allergy and immunology fellowship partnership program between the health care system and Nationwide Children's Hospital. He quickly was promoted to associate dean for Graduate Medical Education, the designated institutional official, and the associate medical director of University Hospital. During his tenure, Dr. Martin coordinated graduate medical education programs for 850 residents and fellows and more than 800 medical students.

He says he traded a huge federal government for a very large state organization.

"I very much enjoyed bringing what the Army gave me and using it here at Ohio State," Dr. Martin says. "There are some real similarities."

A challenging military career

Dr. Martin joined the Army in 1972 after graduating high school. In 1979, he was accepted into medical school. The Army's Health Professions Scholarship Program made it possible.



"I very much enjoyed bringing what the Army gave me and using it here at Ohio State. There are some real similarities." — Bryan Martin, DO



"I was convinced I would stay in the military four years and then get out," Dr. Martin says.

Instead, he retired as a colonel 28 years later.

"The Army is an organization of smart people trying very hard to do a quality job," he says.

Dr. Martin was stationed in Germany, Saudi Arabia and Iraq. He served in the 2nd Armored Division and was a medical troop commander for the Third Army, which was active in the 1991 Gulf War and the coalition occupation of Iraq.

"Taking some 400 people into a war zone and bringing them back home is a very interesting and challenging thing to do," Dr. Martin says.

For him, the military proved to be rewarding work.

"For someone who is willing to work a little harder than normal, there is plenty of additional training to take advantage of."

Active in organized medicine

Dr. Martin is highly involved in his clinical specialties of allergy and immunology. He's a past president of the American College of Allergy, Asthma, and Immunology and chair of the International Collaboration in Asthma, Allergy and Immunology.

In 2023, he becomes president of the World Allergy Organization (WAO). In January, he'll attend the Pan-Arab Society of Allergy, Asthma and Immunology meeting in Dubai.

Part of his work involves the WAO's emerging societies program, which provides hands-on allergy and immunology training to family physicians, internal medicine physicians and pediatricians. Physicians in places like Cuba, Iran, Moscow, Peru and Syria learn how to recognize and treat allergic diseases.

Dr. Martin will spend six years on the WAO's executive committee. As of now, he's no longer seeing patients, but that could change. And while his plans after the WAO assignment are unknown, whatever Dr. Martin does next "will be something fun."



"Just knowing they are seen and heard and believed is powerful in making the doctor-patient relationship stronger." — Kara Wada, MD

Kara Wada, MD, speaks to the patient experience at TEDx Talk

Kara Wada, MD, knows what it's like to struggle to get the care she needs — to wait for authorizations and fiercely advocate for herself. Enduring the frustrating and confusing process of getting a Sjögren's syndrome diagnosis led Dr. Wada to a realization: If navigating the health care system was overwhelming for her — an allergy and immunology specialist in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center — imagine how powerless patients without a physician advocate must feel.

Dr. Wada crystallized her ideas in a presentation at the October TEDx DeSoto conference "Beyond All Limits." She was one of 14 speakers at the independently organized Texas TED event, attended by 150 people and viewed by many more virtually.

Three strategies for successfully navigating the health care system

While the health care system seems built to overwhelm, there are ways to harness the nuances. Dr. Wada shares these tips: **Learn to own your story.** Patients should know their medical history and medical records. "When patients ensure their medical record reflects what they are experiencing, they can better communicate with doctors," Dr. Wada says.

Take the pressure off through preparation.

Patients can prepare for appointments by jotting down key points. Taking a friend or family member can calm anxiety and ensure all topics are addressed, Dr. Wada says. Patients can ask in advance how long their appointment will be, so they know what to expect.

Get comfortable with being uncomfortable.

Whether a patient seeks a diagnosis or care for a chronic illness, they should take control, Dr. Wada says. It's OK for patients to advocate for themselves, push for what they need and make sure they're heard.

How does this look at an appointment? Dr. Wada says a patient in her 70s arrived armed with a written summary of her health history and notes on what she needed from her care. She provided a timeline of treatments for chronic sinus conditions and a list of medications.

How physicians can better support patients

Physicians can do their part during patient appointments, too.

Actively listen. Especially when caring for medically complex or difficult patients, hear what patients are saying, Dr. Wada says. Then provide honest answers. If you can't give a scientific reason for the symptoms, express that you understand the patient's experience is not normal for them.

"Just knowing they are seen and heard and believed is powerful in making the doctorpatient relationship stronger," she says.



Set boundaries. When you first meet a patient, share how much time you can spend with them. This keeps you on schedule and sets patient expectations. Outline the process for follow-up care. Let patients know who'll contact them and how they can contact you if needed.

Rethink complicated situations. Dr. Wada cites organizational psychologist and author Adam Grant, who recommends we stay humble, have a healthy sense of skepticism and approach the world with curiosity.

"We live in a time when we know the most about the human body, but we are still learning," Dr. Wada says. "It's OK to let people know we don't have all the answers."

Philanthropy

Philanthropic support for research and education has made a difference for patients with head and neck cancer

Clinical research and advanced medical education have been critical to developing new treatments and surgeries to increase the survival rate for head and neck cancers. Thanks to philanthropic support, the Division of Head and Neck Oncology in the Department of Otolaryngology - Head and Neck Surgery at The Ohio State University Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC - James) has been at the forefront of these efforts. Here are some of the many transformative gifts that are making a difference in our patients' lives.

New professorships

This year, Dr. John Olsen and Christine Olsen made two donations to the department: a \$1 million gift to create a professorship within the Department of Otolaryngology - Head and Neck Surgery and another \$1 million gift to create a professorship within the Department of Radiation Oncology. Dr. Olsen is a retired chair of the Ohio State Department of Radiology and a grateful patient of Ohio State's head and neck oncology group. The Olsens were moved to make the donation based on the care Dr. Olsen received from Amit Agrawal, MD, and John Grecula, MD.

papillomaviruses and oropharyngeal Adenoid cystic carcinoma research cancers. His work is funded by Pelotonia, a three-day fundraising event that includes Santino Carnevale lost his father to adenoid cycling, entertainment and volunteerism. cystic carcinoma when he was 4 years old. At Since its founding in 2008, Pelotonia has age 9, Santino decided to help other patients raised more than \$258 million for cancer with cancer and their families, and since research. then, he's raised more than \$135,000 for head and neck cancer research at Ohio State. It started with a lemonade stand and bake sale. Every gift saves lives Now, seven years later, Santino hosts many other fundraising events and initiatives to The Multidisciplinary Head and Neck Cancer support the Head and Neck Cancer Strategic Fund is also critical for training and assisting Initiative Fund in his father's name. In 2022, researchers in collecting crucial data for the Central Ohio Association of Fundraising grants. This fund consists of smaller gifts Professionals honored him with the from the community and supports head Outstanding Youth in Philanthropy Award. and neck oncology research, education, But Santino isn't slowing down, because clinical programs and related activities such more research is needed. as multidisciplinary or novel approaches to therapeutics, robotics and reconstruction.

Santino's fund has made it possible for researchers to build an extensive database of crucial patient information and clinical trials, resulting in very interesting results from nontraditional drugs. Researchers are now harvesting adenoid cystic tumors and testing the efficacy of diabetes medications like metformin on these rare tumors.

"Adenoid cystic carcinoma is a very rare tumor, but we see a large volume of patients with these tumors at Ohio State," says Matthew Old, MD, director of the Head and Neck Cancer Program and director of the Division of Head and Neck Oncology at the OSUCCC - James. "Santino's support allows us to do the type of research that is difficult to do anywhere else. As a result, we have several active bench-to-bedside studies that directly benefit patients at Ohio State."

Immunological research

Andreas Wieland, PhD, assistant professor of Otolaryngology - Head and Neck Surgery in the Division of Head and Neck Oncology, is studying how novel immunotherapeutic interventions, including therapeutic vaccines, immune checkpoint blockades and adoptive cell therapies, impact human

"When you are dealing with cancers that are considered rare, like head or neck tumors, and with national research funding being tough, it makes philanthropy even more important to carry out our mission of finding a cure and a better way to treat these cancers," Dr. Old says.

He offers the example of former patient Terry Keegan who developed squamous cell carcinoma of the head and neck more than 14 years ago. Even after surgery, radiation and chemotherapy, his cancer stubbornly kept reappearing. But Terry wouldn't give up, and neither would his Ohio State doctors. Terry signed up for multiple clinical trials, including the department's first immunotherapy drug trials. He defied the odds and is now cancer-free. His recovery is also being used to inform and improve Dr. Wieland's immunotherapy research.

Terry is a shining example of how philanthropic efforts are driving head and neck cancer research at Ohio State, helping to enrich and prolong patients' lives with powerful innovation, new medications and treatments.

Team Head and Neck hosts annual tennis tournament fundraiser for Pelotonia

Every year, members of the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University College of Medicine ride as a team in the annual Pelotonia fundraiser, a weekend-long bike ride that raises millions of dollars for cancer research



Laura Matrka, MD



Hannah Kuhar, MD

at Ohio State. For the last 15 years, department faculty and staff who would rather swing a tennis racket have supported their fellow riders on Team Head and Neck through the Pelotonia Open Department of Otolaryngology Tennis Tournament. This year was no different, although the ubiquitous Ohio weather certainly had a say in when the event was scheduled.

Planned for early summer but moved to September due to rain — the 15th annual tennis tournament was as crazy, chaotic and fun as ever. The tennis was subpar (as usual), the brackets were busted early (as usual) and a general air of Team Head and Neck solidarity was high (as usual).

"It's a low-key, lowbrow tournament, meant for real players and for those who just want to support Team Head and Neck," says Laura Matrka, MD, clinical associate professor in the Department of Otolaryngology – Head and Neck Surgery and event organizer. "The day is designed to allow participants to play the best pick-up games at their own level. Then, toward the end of the morning, there are some great matches that everyone stays to watch. Sometimes, the kids of the faculty come in and whoop on the adults."

Thousands of dollars raised

For players and supporters alike, clinical associate professor Eugene Chio, MD, has designed and hand-printed an official tournament T-shirt to commemorate every single tourney. One hundred percent of the proceeds from the shirt sales and the tournament fees go directly to either Team Head and Neck, another Pelotonia peloton of the player's choice or Project Ear, a humanitarian organization founded by faculty member Ed Dodson, MD, to advance surgical training in the Dominican Republic and provide subspecialty surgical care to its residents. He leads multiple service trips there every year.

Meredith Lind, MD, FAAP, FACS, clinical associate professor in the Department of Otolaryngology – Head and Neck Surgery who's based at Nationwide Children's Hospital, also donates a full breakfast for the players, and Dr. Chio covers all the T-shirt material costs himself so that 100% of the amount raised at the tournament goes directly to cancer research, just as the Pelotonia fundraiser itself does.



Staff members of the Department of Otolaryngology – Head and Neck Surgery take to the tennis courts annually to show off their (subpar) skills and raise funds for cancer research.

The tournament typically draws 35 to 50 players from across the medical center and raises roughly \$5,000 each year.

"It's a great way to contribute to a worthy cause without having to ride a bike for a long distance," Dr. Matrka says. "And staff who want to support without playing buy and proudly wear the T-shirts."

15 years of history meets new perspectives

Dr. Matrka has participated in and planned the tennis tournament since its inception in 2007. She started the event with colleague and head and neck surgeon Enver Ozer, MD, while she was a resident with the department. This year, Dr. Matrka credits most of the organization of the tournament to current resident Hannah Kuhar, MD. "Dr. Kuhar deserves the biggest shoutout," Dr. Matrka says. "My assistant Joe Cleary used to do much of the work, and with Dr. Kuhar's help, we kept it going. She also beat me handily at our match during the tournament even though she was quite pregnant."

"The experience was a joy to plan and to collaborate with Dr. Matrka," Dr. Kuhar says. "We definitely couldn't have done it without everyone pitching in."

The next Pelotonia three-day cycling event will take place Aug. 4-6, 2023. Funds from the event benefit cancer research at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute.

PHILANTHROPY

Funding 3D medical models to improve head and neck cancer care

New 3D medical model printing technology, funded by gifts from donors Scott and Amy McComb, has the potential to improve care for patients across the entire spectrum at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James).

"It's not easy to get conventional research funding for this type of macroscopic translational research," says Kyle VanKoevering, MD, director of the Medical Modeling, Materials and Manufacturing (M4) Lab at The Ohio State University and head and neck surgeon at the OSUCCC - James. "Without the McCombs' philanthropy, we'd only have access to small grants and our



Amy and Scott McComb

progress would have never happened with the same speed."

Amy and Scott McComb started giving to medical causes at Ohio State in 2016. Scott serves as chairman, president and chief executive officer at Heartland Bank in Whitehall, Ohio.

The catalyst? Friends invited them to join a Buckeye Cruise for Cancer. They were struck by what they learned and the survivor stories. The avid Buckeye fans decided that night to start giving toward cancer research.

"We wanted something to sink our teeth into and that would get our kids involved," Amy says. "We hope they'll continue it once we're not here."

The McCombs established the McComb Family Cancer Research Fund with an initial \$250,000 gift over five years to support innovative research and technology. Each year, they distribute grants from that fund to projects that can move research and cancer treatment forward.

The couple are passionate about supporting efforts that are new and innovative and providing seed funding to help launch large initiatives.

"We like early-developing technologies and research that helps others understand and buy in," Scott says.

As part of their first gift, the McCombs worked with two immunotherapy researchers. The experience was so great that they decided to make a second \$250,000 gift for another five years. That's when they were introduced to Dr. VanKoevering and the M4 Lab.

"On the cancer medical side, the surgeons sometimes get into quandaries where they can't quite figure out a solution," Amy says. "In the M4 Lab, the engineers can come in, help diagnose the issue and come up with alternatives in a whole different light."

Building models to improve outcomes



For nearly a decade, Dr. VanKoevering has worked to marry engineering and medicine. His passion grew after joining the Ohio State Department of Otolaryngology - Head and Neck Surgery in 2020 and partnering with the Ohio State College of Engineering's Center for Design and Manufacturing Excellence. Together,

Kyle VanKoevering, MD

they've harnessed existing 3D printing resources to provide personalized medicine to patients in real time.

Grants from the McCombs' fund were used to purchase two \$60,000 scanners that can create detailed images of a patient's head, neck and jaw. These images help pinpoint the exact location of cancer. Traction and momentum around the scanner opened opportunities for Dr. VanKoevering to expand even more. He went to the OSUCCC



- James with plans of adding a multicolor, multimaterial printer on-site at the hospital.
- The James found space for a consultation lab to showcase the 3D medical modeling and give surgeons and patients direct access to the service. The McCombs authorized spending \$100,000 for the multicolor printer.

In just a few months, the lab was organized, staffed and open. In fact, it's already been used to print several multicomponent complex models for patients.

"That is where the impact is made," Dr. VanKoevering says. "The 3D models help us see that little nuance we might miss otherwise. It can help us plan to position the patient differently or make an incision in another location."

> The end results can be highly impactful. In the future, Dr. VanKoevering would like to use the 3D models in other medical specialties, including cardiothoracic surgery, orthopedics, plastic surgery, pulmonology, pediatric surgery and radiology.



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The Department of Otolaryngology – Head and Neck Surgery is dedicated to improving lives through research and education. Our efforts have led to many advancements, including an improved understanding of language development in children with hearing loss and groundbreaking findings in the underlying factors contributing to head and neck cancer.

YOUR SUPPORT IS VITAL TO WHAT WE DO.

If you're interested in supporting our ongoing efforts, consider giving to the Schuller Endowment Fund. Honoring our former department chair, David E. Schuller, MD, the fund provides resources for research initiatives, helps us recruit the best scientists and enables important patient care improvements. For more details, go to **give.osu.edu/supportENT**.

