



THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

## Department of Otolaryngology – Head and Neck Surgery

Year in Review | Winter 2019



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER



The Department of  
Otolaryngology – Head and  
Neck Surgery is composed of  
10 specialty divisions:

- Allergy and Immunology Care
- Audiology
- Facial Plastic and Reconstructive Surgery
- General Adult and Pediatric Otolaryngology
- Head and Neck Cancer
- Otology, Neurotology and Cranial Base Surgery
- Sinus Care
- Skull Base Surgery
- Sleep Surgery
- Voice and Swallowing Disorders



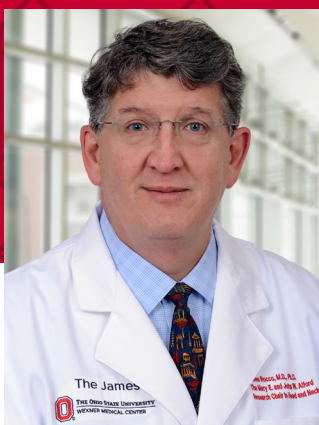




## Our Mission

The Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center is guided by a mission to deliver exceptionally safe, high-quality and value-based care to our patients. We have been honorably recognized by *U.S. News & World Report* as the fourth best ENT department in the nation and the best ENT program in the state of Ohio. It is our commitment to quality that has made this possible, as well as our focus on maintaining the highest standards in patient care and research.

The department has created a desirable patient care model that has enabled continued expansion of patient volume. Our focus is on providing the best possible patient care in an excellent teaching environment. This large and diverse patient population also provides a rich environment for graduate medical education and research.



## Message from the Chair

It has been a very productive and active year in the Department of Otolaryngology – Head and Neck Surgery marked by continued growth. The medical center was once again named the “Best Hospital” in central Ohio, while our department was ranked fourth in the nation and first in Ohio by *U.S. News & World Report*. This recognition, determined in part by our colleagues, is a testament to our entire team’s dedication and exceptional talent in advancing medicine through research, education and patient care.

One of our top priorities continues to be recruiting extraordinary clinical and research talent. To expand our expertise and meet increased clinical volume, Brandon Kim, MD, and Spencer Lindsey, MD, joined our clinical faculty in Laryngology and Pediatric Otolaryngology, respectively. Shuman He, MD, PhD (hearing loss and cochlear implants), Ruili Xie, PhD (neural mechanisms of age-related and noise-induced hearing loss), and Christin Ray, PhD, SLP (speech therapy rehabilitation after cochlear implantation), also joined our growing Otology research faculty. Consequently, our departmental faculty has grown to 46 clinicians and scientists, and we expanded our research funding portfolio by more than 11 percent between FY17 and FY18.

Our residency program also continues to improve its strong reputation, matching all four residents from our top seven candidates, receiving a record number of applicants, and further increasing our national ranking.

As you will read, several of our faculty have been recognized with national awards and appointments this year. Of special note, Aaron Moberly, MD, was inducted into the prestigious Triological Society’s Harris P. Mosher Society; Kris Jatana, MD, and his research colleagues received the American Broncho-Esophagological Association (ABEA) Broyles Maloney Award; and Oliver Adunka, MD, Princess Ogbogu, MD, Meredith Lind, MD, Kris Jatana, MD, and Matt Old, MD, were named or elected into leadership positions on prestigious committees throughout the country.



We offer our utmost thanks to John Taggart, MD, alumni resident of the Department of Otolaryngology – Head and Neck Surgery, and his wife, Carol, who provided a generous endowed gift to our department. We also thank Joan's Foundation for their years of philanthropic support toward the Joan Bisesi Fund for Head and Neck Cancer Research, which reached \$1 million this year. In addition, we extend gratitude to David E. Schuller, MD, emeritus faculty and former chair of the department, who received Ohio State's esteemed Distinguished Service Award for his contributions and outstanding service to the university during his 40-year career.

My first year as chair has been remarkable. I expect 2019 to be a year of further growth and success with the introduction and evolution of several departmental ventures and advancements, including: a new alliance between Ohio State Wexner Medical Center and the Mercy Health System, the eConsult service, which will soon form the basis for strategies to develop new referral patterns and our national vestibular center, which will form the foundation of a much-needed clinical resource with unique research opportunities. The creation of a Head and Neck Biobank within the Total Cancer Care/ORIEN network will also provide new local and national opportunities for research.

I am truly honored to serve this department and look forward to guiding us in our advancement of the academic mission. I hope you enjoy our newsletter.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Rocco', with a stylized flourish at the end.

James W. Rocco, MD, PhD  
Professor and Chair, Department of Otolaryngology – Head and Neck Surgery  
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 Department of Otolaryngology –  
Head and Neck Surgery

**Ranked No. 4** in the country and  
**No. 1** in Ohio by *U.S. News & World Report*





## Table of Contents

Message from the Chair.....	4
Leading Vestibular Researcher Receives \$2 Million DOD Grant.....	8
New Lab Seeks to Decode Head and Neck Tumors.....	10
Speech-Language Pathologist Advances Auditory Training for Adult Cochlear Implant Users .....	12
Novel ENT Mentorship Program Offers Earlier Exposure for Students.....	14
Ohio State Provides Leadership to Improve Early Intervention for Deaf and Hard of Hearing Children.....	16
Trip to Haiti Provides Learning on Both Sides .....	19
Donut Run Fundraiser Supports Groundbreaking Tumor Research .....	20
Ohio State Alumnus Makes Generous Bequest to Support ENT Advances .....	22
Awards and Recognition.....	24
Distinguished Achievements.....	27
Welcome New Team Members .....	28
New House Staff – Fellows .....	32
New House Staff – Residents .....	33
Leadership Appointments .....	34
Clinical Trials .....	38
Research Funding.....	40
Highlighted Publications .....	42



## Leading Vestibular Researcher Receives \$2 Million DOD Grant

### *Virtual Reality Goggles Being Evaluated for Injured Soldiers*

One of the nation's leading researchers in vestibular disorders, Daniel Merfeld, PhD, has been awarded a four-year, \$2 million grant from the U.S. Department of Defense (DOD) to test a screening tool for vestibular disorders.

Dr. Merfeld, who is professor and vice chair of research in The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery, will soon begin his study “Evaluating a Portable Virtual-Reality (VR) Balance Test as a Vestibular Assessment Screen.” He also serves as senior vestibular scientist at the Naval Medical Research Unit-Dayton.

He envisions medical personnel eventually using the screening tool in war zones for on-site evaluations of soldiers with balance dysfunction from blast injuries and other casualties. The simple balance screening might also help physicians determine fall risk and whether clinical vestibular diagnostic testing, including vestibular threshold testing, is warranted.



**Dan Merfeld, PhD, is evolving the tools available for vestibular testing, inventing a portable device that will be used to screen and evaluate soldiers off-site experiencing balance dysfunction from blast injuries and other casualties.**

### **A Portable Screening Tool**

“Our prototype is a head-mounted set of goggles with LED display developed by Charles River Analytics, who are partners in this effort,” Dr. Merfeld says. The person being screened will stand while wearing the goggles, creating a consistent, reproducible 3D VR scene.

He says the virtual scene is likely to be something uncluttered, like the wall of a room, with a table and a picture on the wall. The test will evaluate all of the contributors to balance: vision, motion and orientation of the head, and kinesthesia. Researchers will test an individual with eyes open and eyes closed, as well as while standing on foam or a firm surface. Then, researchers will manipulate the VR scene to help tease apart sensory contributions.

The research study will quantify the correlation between vestibular function and balance in 100 healthy civilians, 100 healthy military personnel and additional participants with mild traumatic brain injury. They will be divided across age groups from 18 to 80 years old.

### **Possibilities for Civilian Use**

With the portability of the goggles, Dr. Merfeld sees potential for a number of applications in civilian life as well. “If this is successful, we could do screenings on bigger populations to help evaluate athletes with possible concussion symptoms on a sideline, to intervene for schoolchildren suffering hidden (i.e., unknown) vestibular or balance issues, or to reduce falls in nursing homes or hospitals.”

He points out that estimates of deaths each year due to falls from vestibular dysfunction range anywhere from 48,000 to 152,000. The upper range would make these vestibular-related injuries the third leading cause of death in the United States, following heart disease and cancer. Even at the lowest estimate of 48,000, it would be the 10th leading cause of death.

Dr. Merfeld continues, “We screen vision and hearing often, but we don’t do anything for vestibular function until someone complains of symptoms. This could be a screening test to help determine who should be tested by a vestibular specialist to help improve quality of life. It’s long been known that imbalance is highly correlated with age. We also could go to nursing homes with this screening to help determine which people are most likely to fall.”

He has secured National Institutes of Health funding for vestibular studies in the civilian sector that he believes will be complementary to this latest study with the DOD.

Dr. Merfeld is also leading an effort to organize a National Vestibular Meeting to be held in Dayton, Ohio, in May 2019. For more information about the meeting, please visit [go.osu.edu/VORmeeting](http://go.osu.edu/VORmeeting).



## New Lab Seeks to Decode Head and Neck Tumors

### ***MATH Biomarker Based on DNA Sequencing Tool May Lead to More Precise Treatment Regimens***

A Head and Neck Tumor Heterogeneity (HNTH) Laboratory, established at Ohio State in 2018, is studying the genetic makeup of tumor cells using patient-derived tumor models with living cancer cells. The goal is to better understand how intratumor heterogeneity develops, how to overcome its therapeutic challenges and how it might be turned into better targeted therapy.

Lab founder James Rocco, MD, PhD, FACS, professor and chair of Ohio State's Department of Otolaryngology – Head and Neck Surgery, in collaboration with Ed Mroz, PhD, Ohio State research associate professor, has developed mutant allele tumor heterogeneity (MATH), a tool based on next-generation sequencing that measures genetic changes in a cancer cell tumor. Most of the tumors they study are head and neck squamous cell carcinomas originating in various subsites in the head and neck region. These include primary and recurrent tumors.



Dr. Rocco explains the significance of intratumor heterogeneity, saying, “In two retrospective studies, we determined that in tumors where most of the cells have the same genetic changes, those tumors tend to respond very well to different types of therapy, whether it’s surgery, radiation or chemotherapy. On the other hand, if individual cancer cells within a tumor are genetically different from each other, suggesting they exhibit high intratumor heterogeneity and consequently a high MATH score, those tumors tend to not respond well to therapy.”

Present data suggest that MATH values may help make difficult choices about the best regimen for an individual patient, in particular whether further treatment is needed following surgery and whether adding chemotherapy to radiation following surgery will provide survival benefits. Prospective clinical studies are planned to validate these applications.

***“This measure of intratumor heterogeneity based on genetic sequencing is really good at predicting who should and should not get radiation therapy after surgery.” Dr. James Rocco***

The implications for cancer treatment are far-reaching. Typically, patients whose oral cancers are resected with clean margins won’t receive additional therapy. But if the MATH analysis shows a great deal of genetic variation in tumor cells, that would warrant radiation therapy as an extra precaution. He notes that tumors with a lot of genetic variation aren’t likely to respond well to adjuvant chemotherapy.

He adds, “The long-term goal is to understand what causes intratumor heterogeneity. If we can understand that, we can start to target it clinically to make a high-heterogeneity tumor act like a low-heterogeneity tumor.”

### **Contributing to a Bigger Picture**

The HNTH Lab works closely with Ohio State’s Total Cancer Care® (TCC) Program, which is a founding member of the Oncology Research Information Exchange Network (ORIEN). Established in 2014 by The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute and Moffitt Cancer Center in Tampa, Florida, ORIEN is working to develop more precise ways to prevent, detect, diagnose and treat cancer.

ORIEN’s 18 members in North America use a single protocol, Total Cancer Care (TCC), when consenting new patients. TCC tracks clinical, molecular and epidemiological data throughout each patient’s lifetime. Partners have access to one of the world’s largest clinically annotated cancer tissue repositories and data. This allows them to share de-identified data so they can accelerate the development of targeted treatments and more quickly match eligible patients to clinical trials. Thus far, around 200,000 patients have consented to donate their tissue to ORIEN.

Director of the Head and Neck Tumor Heterogeneity Laboratory Bhavna Kumar, MS, explains that most patients give consent both to TCC/ORIEN and to HNTH for use of their tissue samples and clinical records. She notes, “TCC presently collects only frozen or preserved tissue specimens, which kills the cancer cells and makes some important types of studies impossible. We develop patient-derived tumor models from head and neck cancer patients in ways that keep cancer cells alive for these other types of studies. We provide excess tissue, cells, tumors or other samples to TCC for inclusion in the ORIEN network.”



## Speech-Language Pathologist Advances Auditory Training for Adult Cochlear Implant Users

***Christin Ray, PhD, CCC-SLP, Joins Neurotology Team to Establish Comprehensive Aural Rehabilitation Clinic***

Helping adults with cochlear implants (CIs) maximize their ability to hear and understand again is at the core of what Christin Ray, PhD, CCC-SLP, aims to accomplish in her new role as assistant professor-clinical in The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery.

Dr. Ray, a speech-language pathologist (SLP), guides Ohio State Wexner Medical Center's newly established Comprehensive Aural Rehabilitation Clinic for adult CI users. Since 2016, she has participated in research to establish a better understanding of aural rehabilitation and how it can benefit adults who have CIs.

She has co-authored several papers and presented at national conferences on the topic hoping that the clinical care model she and her colleagues are developing becomes standard practice across the country.



*“Working in an academic medical center surrounded by incredible talent and colleagues invested in collaboration, teaching and learning really enhanced my own passion for the same things.” Dr. Christin Ray*

### Playing a Unique Role

Ohio State neurotologist Aaron Moberly, MD, Dr. Ray’s colleague and research co-investigator, explains the importance of her role: “As a speech-language pathologist, Dr. Ray brings a clinical skill set unique to SLPs, assisting patients with hearing loss to develop learning strategies to acclimate to the novel auditory input provided by their cochlear implants.”

Dr. Ray notes that an SLP has traditionally been included in pediatric CI use because children often haven’t learned language by the time of implantation. In the adult world, however, “auditory training rehabilitation is most often carried out by an audiologist in conjunction with self-guided auditory training techniques with limited or no involvement of an SLP.”

The new Aural Rehabilitation Clinic is built on the understanding that adult adaptations to cochlear implants are widely variable and that intervention by an SLP can be critical to the overall success of a patient working to regain speech recognition skills and communicate effectively in their everyday lives.

“There is so much more to a successful implant than simply the surgery and turning the implant on,” says Mark Inman, chief operating officer and administrator for the Department of Otolaryngology – Head and Neck Surgery. “How one adapts to the implant, how they interpret the sound, and ultimately process the sound is the measure of success. Dr. Ray’s intervention will improve these results.”

Dr. Ray sees patients preoperatively and postoperatively. She provides structured, individualized auditory training, helping individuals acclimate their brains to speech sounds for improved communication. She addresses patients’ individual weaknesses and guides them as they work toward their own goals for communication.

A native of central Ohio, Dr. Ray received her master’s degree in speech and hearing science from The Ohio State University. From there, Dr. Ray worked for four years in Ohio State’s Department of Otolaryngology – Head and Neck Surgery.

“Working in an academic medical center surrounded by incredible talent and colleagues invested in collaboration, teaching and learning enhanced my own passion for the same things,” Dr. Ray says. “I was inspired to go back and get my PhD [at Ohio State] and subsequently have been lucky to return to the department, where exceptional patient care is driven by a culture that encourages strategic and divergent thinking among a highly motivated and capable team of professionals.”

She adds, “I’m drawn to collaborative, innovative projects and continuous improvement. This is a great opportunity for all of those things!”



## Novel ENT Mentorship Program Offers Earlier Exposure for Students

### *First-Year Course Elective Boosts Clinical, Professional Experience*

It began with a concern by two first-year medical students, Rishi Sethia and Cameron Sheehan. They believed exposure to the specialty of otolaryngology wasn't early enough, considering increasingly competitive residency programs.

They theorized earlier exposure and earlier access to otolaryngologists would translate into better-prepared, more confident otolaryngology residency applicants.

In 2014, the two students shared their ideas with Charles Elmaraghy, MD, associate professor at The Ohio State University Department of Otolaryngology – Head and Neck Surgery and director of Pediatric Otolaryngology at Nationwide Children's Hospital. That's how Ohio State's new ENT Mentorship Program was born.

Drs. Sethia and Sheehan subsequently became co-founders of the new program and two of the first students to participate. Dr. Elmaraghy, program co-director, credits them and strong faculty engagement with program success.

“The critical part was getting Rishi and Cameron’s input and not developing the program in a vacuum,” he explains.

**Students selecting this Year 1 elective benefit from:**

- Otolaryngology clinical experience during preclinical years
- Earlier networking and research opportunities
- Early, long-term mentorship between students and otolaryngologists, enhancing career advising, professionalism and residency application support

Dr. Elmaraghy says the Mentorship Program already has made a difference.

“By the time they [the first class] were third-year medical students, they were more confident with their clinical skills and building rapport with other healthcare team members,” he says. The elective includes monthly lectures, hands-on clinic and operating room experience, and an oral presentation.

The program goes beyond clinical exposure, however.

“It’s helped them understand very early the role physicians play on the healthcare team,” Dr. Elmaraghy continues. “At some point, you have to transform yourself from a student to a medical doctor, and there’s a big difference in that.”

Dr. Sethia couldn’t agree more. “There’s a lot about being a physician that’s beyond the clinical – etiquette and professionalism, interacting with families and colleagues.”

## **Building Rapport**

Now a first-year otolaryngology resident at Ohio State, Dr. Sethia also notes the value of faculty support he received during the highly competitive residency application process. “The program creates a pathway for establishing a longitudinal relationship early in a student’s medical career,” he says.

Dr. Sheehan was matched into otolaryngology residency at Baylor College of Medicine. “The relationships made with our mentors are not only important in our professional development, but crucial in navigating the complex match process,” Dr. Sheehan says.

Garth Essig Jr., MD, assistant professor and general otolaryngologist at Ohio State, co-leads the program with Dr. Elmaraghy and affirms the benefits of more consistent interaction with students.

“When students formally rotate with us, we often don’t get to work with them for a significant length of time,” he explains. “This program gives us continuity and lets us get to know students on a personal level.”

He continues, “I think it’s fair to say they are better applicants – no matter the field they choose – and physicians for having participated in this program.”

Program success may extend beyond individual student benefit. In 2018, 12 of 12 students from Ohio State successfully matched into otolaryngology residency – the highest match results ever for otolaryngology.

“We speculate there may be a correlation with the implementation of this program to the sharp increase in ENT applications and successful matches,” Dr. Sethia says.

To learn more, contact Dr. Elmaraghy at [Charles.Elmaraghy@nationwidechildrens.org](mailto:Charles.Elmaraghy@nationwidechildrens.org).





## Ohio State Provides Leadership to Improve Early Intervention for Deaf and Hard of Hearing Children

For families with a child who is deaf or hard of hearing, there can be significant barriers and challenges to getting effective early intervention (EI). About a third of newborns in Ohio who fail the hospital hearing screening do not get a diagnosis within the first three years. And significantly fewer than half of children with hearing loss across the state get EI.

A grassroots effort to improve access to resources for families of children who are deaf or hard of hearing has resulted in a statewide coalition in Ohio that's gaining momentum. It's called the Children's Hearing and Language Development Resource Network (CHLDRN) of Ohio.

Among those leading the effort are cognitive psychologist and associate professor in The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery Derek Houston, PhD; Ohio State otolaryngology postdoctoral researcher Jessa Reed, PhD; pediatric otolaryngologist Prashant Malhotra, MD, from Ohio State and Nationwide Children's Hospital in Columbus; and audiologist Gina Hounam, PhD, also from Nationwide Children's.

Dr. Houston is passionate about this effort, saying, "If you have children who receive good, proper early intervention, the sky is the limit to what they can develop to be as adults. Anything is possible. Getting EI wrong can mean a lifetime of needing special services and limitations of life opportunities."

*“The best thing about this coalition is that it has truly brought together like-minded parents and professionals of all backgrounds with one goal in mind. And even as we continue to work toward that goal, I believe deaf and hard-of-hearing children and their families have already benefited because our state is more connected and more collaborative with this project ongoing.” Dr. Gina Hounam*

Members of the Ohio State Department of Otolaryngology and Nationwide Children’s are collaborating with a number of stakeholders across the state to establish a model early-intervention system. Parents, otolaryngologists, speech-language pathologists, early interventionists, state agency leaders, audiologists, social workers and teachers of the deaf all are involved in the effort.

The group came together when early hearing detection and intervention services shifted from the Ohio Department of Health to the state’s Department of Disabilities. The change resulted in fewer families receiving early intervention services directly from hearing loss specialists.

“This alarmed the pediatric healthcare community and motivated us to act,” says Dr. Malhotra.

## **Defining Gaps and Barriers**

To help fund the coalition’s efforts, Dr. Houston and other members wrote a grant proposal through Ohio State Wexner Medical Center to request a community collaborative grant from the Oberkotter Foundation, a national organization committed to helping all children who are deaf or hard of hearing reach their full potential. The foundation awarded \$99,000 for the group to engage in a discovery phase to identify the barriers families were facing to getting good intervention.

“We held focus group sessions in five different regions and distributed online surveys,” Dr. Houston says.

They confirmed that fewer than half of children diagnosed with deafness or hearing loss were enrolled in early intervention. They learned that families were often confused about resources available to them and did not know next steps to take.

Dr. Houston explains, “More than 90 percent of deaf children are born to normal hearing parents. This will be their first experience ever with hearing loss. They don’t know what to do.”

### **Priorities for change that emerged during this discovery phase included:**

- 1) Establishing a system that allows parents to connect with other parents. This may include creating a model for training parent mentors to deliver or share information with other parents in an unbiased way.**
- 2) Creating a guide or system that will improve parents’ and professionals’ knowledge about options and resources available in their region.**

Action committees are currently developing proposals and identifying potential funding to make these discoveries happen.

Dr. Houston says, “Part of the solution to better EI is the process itself of working together to make specific improvements. We want to make incremental changes and build on those successes for a long-term effort.”

*Continued on page 18*

*Continued from page 17*

## **The Importance of Early Intervention**

One philosophical barrier to early intervention Dr. Houston notes is that “many people don’t appreciate the urgency and timeliness of EI. A lot of research shows that early intervention has to start before six months.”

He says during a child’s first three months of life, important decisions must be made about whether a child should have cochlear implant surgery or get hearing aids. If a parent wants a child to learn spoken language, early access to sound is important. Whether and when to introduce signing is another important consideration.

An early interventionist with specialized knowledge about hearing loss can prove invaluable for coaching the family through decisions and building skills in the home to create an optimal language environment. The specialist can lay the foundation for spoken language, sign language or a combination of the two. Coaching includes helping parents develop interaction skills that form the foundation of language. Dr. Houston says it’s important to integrate the skills in the family’s home as part of their daily routines.

He emphasizes that professionals – from hospital personnel to primary care providers – have a key role in engaging and persuading parents to take action. He says that well-meaning hospital staff who deliver the news to parents that their newborn hasn’t passed a hearing screening may downplay it by noting the number of false positives for the test.

He continues, “Parents have an adorable baby who is doing what’s expected for a newborn, and the urgency may not be apparent. It takes people with experience and knowledge to help guide parents through the process.”

Dr. Malhotra also notes, “Because parents of children with hearing loss can be guided by many people outside of the hospital and clinic walls, it is critical for us to engage this larger community to ensure that these influences reflect current thinking and high expectations.”

Helping parents navigate through a complex early intervention system is a primary goal for the coalition.

“If we invest early on, this is one of the best investments our policymakers could make,” Dr. Houston says.

He’s enthusiastic about the ability of like-minded stakeholders willing to come together: “There’s power in numbers. Having a great community of people to work with gives us a sense of optimism that we can make a difference. We’d like to make a positive impact across the whole state and country.”

Dr. Hounam agrees, “The best thing about this coalition is that it has truly brought together like-minded parents and professionals of all backgrounds with one goal in mind. And even as we continue to work toward that goal, I believe deaf and hard-of-hearing children and their families have already benefited because our state is more connected and more collaborative with this project ongoing.”



# Trip to Haiti Provides Learning on Both Sides

## *Four-Day Course Offers Instruction in Advanced Sinus Surgery Techniques*

Traveling with a team of ENT surgeons, nurses and scrub techs, otolaryngologist Alexander Farag, MD, arrived in Port-au-Prince, Haiti, in March 2018 to present a four-day course on advanced sinus surgery techniques. Laden with suitcases filled with operating room equipment and supplies, the team traveled on bumpy, unpaved roads for 45 minutes to reach the hospital.

St. Camille Hospital, just eight miles from the airport, is located in a missionary compound, with a separate clinic and two operating rooms. The surgical team lived there for four days with no air conditioning and slept under mosquito nets.

Between one-hour lectures, the American team worked side by side with Haitian otolaryngologists through clinic and surgical cases. Dr. Farag notes that physicians in Haiti have to be judicious with their scarce resources. “We taught them to deliver sustainable care, optimizing their resources with inexpensive techniques like warming a saline bag in the hot sun,” Dr. Farag explains.

“ENT in Haiti is mostly nonsurgical. They use a speculum and a headlight for sinus procedures. We started with rudimentary techniques to help them do safe surgery. For example, managing polyps, managing asthma, surgically creating an airway, and evaluating what else is going on with the whole patient.”

The American team covered routine pathology, including when to use antibiotics. “We reinforced basic principles and gave them building blocks: being safe, thinking about indications for surgery, and instructing them on looking at CT scans. We did a cleft palate and removed some tumors. We assisted them in managing those patients, enabling a gradual transition and building confidence.”

### Contributing to Global Health Care

Dr. Farag previously participated in a medical mission trip to Vietnam and plans to make a trip to Moldova in Eastern Europe in spring 2019. He was recruited by organizers of the Haiti trip from Thomas Jefferson University Hospital in Philadelphia, where he completed his fellowship in rhinology and skull base surgery.

Thomas Jefferson Hospital has been working with local otolaryngologists in Haiti over the past few years to build a head and neck cancer hospital and radiation suite. Dr. Farag appreciates the value of bringing together physicians from different cultures. “We live in a global society, and health care is becoming more universal,” he says.

He notes that working in a country with limited resources “makes you a better surgeon and forces you to do more with less. It takes as much or more innovation to practice there as to practice here. We can learn from them, and they can learn from us.”

Dr. Farag also supports the idea of having physicians from other countries come to the United States.

“I’ve had great mentors who have taken me down this path,” he says. “It changes the way you look at the world.”



*Alex Farag, MD, reviews a patient's CT scan with a surgical team at St. Camille Hospital in Port-au-Prince, Haiti.*



## Donut Run Fundraiser Supports Groundbreaking Tumor Research

In October 2018, 1,400 runners turned out for the 5th annual Columbus Donut Run in downtown Columbus. Featuring free pastries, music and people dressed up in giant donut costumes, the run raised close to \$30,000.

While it might sound like all fun and games, the event actually serves a bigger purpose: the Columbus Donut Run is the highest-profile event for the Joan's Foundation, a fundraising arm created in 2002 by friends and family members of Joan Bisesi, who passed away from oral cancer at age 34.

### Supporting Head and Neck Cancer Research

Since its inception, the family-friendly Donut Run has been responsible for contributing thousands of dollars directly to head and neck cancer research at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute. This year, the event turned a major milestone, helping the Joan Bisesi Fund for Head and Neck Cancer Research top the \$1 million dollar mark.

## Contributions from Joan's Fund annually provide necessary research resources, most recently being used to establish a Head and Neck Tumor Heterogeneity (HNTH) Laboratory at Ohio State in 2018.

Contributions from Joan's Fund annually provide necessary research resources, most recently being used to establish a Head and Neck Tumor Heterogeneity (HNTH) Laboratory at Ohio State in 2018. (See in-depth story on page 10.) The lab is studying the genetic makeup of tumor cells using patient-derived tumor models with living cancer cells. They are finding that tumors where most of the cells have the same genetic changes tend to respond very well to different types of therapy. High intratumor heterogeneity tumors tend to not respond well to therapy. Researchers want to understand how intratumor heterogeneity develops, how to overcome its therapeutic challenges and how it might be turned into better targeted therapy.

Joan's Fund also has helped finance pursuit of a novel clinical strategy based on oncolytic viruses – naturally occurring viruses that are modified to target only cancer cells and spare all other tissues in the body. Research indicates this therapy, which combines an oncolytic herpes virus with a Food and Drug Administration-approved drug called bortezomib, has significant potential to make an impact in head and neck cancers.

James Rocco, MD, emphasizes the importance of private funding for research in an era when less than 10 percent of applicants receive funding from the National Institutes of Health (NIH). "The NIH wants mature projects," he says. "If we have resources like Joan's Fund to get projects up and running, it makes a big difference."

### A Community Effort

A partnership with Columbus Running Company has streamlined much of the logistical management of the popular Donut Run. Volunteers gather before the race to package thousands of donuts baked fresh by area bakers and distribute during and after the race.

The event draws the Columbus running community as well as people who knew Joan personally. Many faculty and staff from OSUCCC – The James also run to honor Joan's memory.

"It was an honor to be part of a passionate team furthering the mission of Joan's family to raise awareness and funds for head and neck cancer research," says Bhavna Kumar, researcher at OSUCCC – The James and board member of the Joan's Foundation. "Cancer research has led to significant advances in prevention, detection, treatment and quality of life of patients, but a lot more needs to be done. The scientists and clinicians at Ohio State are working hard every day to make sure that happens."

Ohio State employee and race liaison Gaila Konneker adds, "Teamwork, visibility and a lot of flexibility were key factors in making the 5th Annual Columbus Donut Run a success. Words truly cannot describe how awe inspiring and mesmerizing it was to see participants smiling, dancing, posing for pictures and munching on donuts, all in support of raising money for head and neck cancer research."





## Ohio State Alumnus Makes Generous Bequest to Support ENT Advances

For John Taggart, MD, a bequest to The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery is a gift from the heart.

As a Class of 1966 graduate of The Ohio State University College of Medicine and a graduate of Ohio State's otolaryngology residency program, he feels grateful to the physicians who prepared him for “a great career in ENT.”

To express this gratitude, Dr. Taggart and his wife, Carol, recently made a generous pledge in their estate and designated it the John P. Taggart, MD, and Ms. Carol Taggart Endowment Fund for Otolaryngology.

“We’re always very appreciative and thankful for alumni who make these donations,” says James Rocco, MD, PhD, FACS, professor and chair of the Department of Otolaryngology – Head and Neck Surgery. “This seed money for new projects can initiate a whole line of research that, in turn, will impact the quality of care and outcomes patients have down the road at Ohio State and possibly nationally and internationally.”

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*“This seed money for new projects can initiate a whole line of research that, in turn, will impact the quality of care and outcomes patients have down the road at Ohio State and possibly nationally and internationally.” Dr. James Rocco*



### **Honoring Their Ohio Roots**

Although Dr. Taggart has lived and practiced medicine in central Florida for more than four decades, “I still consider myself an Ohioan,” he says. He grew up in northern Ohio. He and Carol, who have been married for 53 years, met at Ohio Northern University.

During their years in Columbus, she worked as a pharmacist while he pursued his medical education. They married after his first year of medical school.

Dr. Taggart relates that during the Vietnam War era, every physician served in the military for two years.

“I completed my residency first and then went into the Navy,” he recalls. “They sent me to the Orlando training base the year Disney World opened. It was a small town then.”

When Dr. Taggart finished his stint with the Navy, the couple decided to stay in Orlando.

“With my Ohio State degree, I was welcomed into the medical community,” he says. As the area grew, his solo practice increased to 12 doctors and four locations. The Taggarts are now retired and have one daughter, a son-in-law and a granddaughter who live in central Florida.

They have enjoyed the temperate climate and lakes of the region, which have afforded Dr. Taggart a perfect setting to pursue his passion of speedboat racing.

“My father was a famous boat racer,” he recounts. “In the 1950s, he drove the fastest boat in the world. After I’d been in practice a few years, I became interested in racing inboard hydroplane boats myself.”

Racing on controlled lakes, he says he can get up to 150 miles per hour. He once set records but is now content to do vintage racing events. Every race boat he’s owned has been called “The Buckeye Kid,” in honor of his home state and his alma mater.

Dr. Taggart has made financial contributions to Ohio State’s medical school and otolaryngology department since 1979. He feels good knowing that his estate will one day benefit the work of an otolaryngology department that is ranked fourth in the nation. “I feel proud to be part of this tradition,” he says.

# Awards and Recognition

## Kris Jatana, MD, and Research Team Receive Broyles Maloney Award



Kris Jatana, MD, and his research colleagues recently won the 2018 Broyles Maloney Award from the American Broncho-Esophagological Association (ABEA) for their research on interventions to reduce the severity of esophageal button battery injuries.

Dr. Jatana is associate professor of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center and director of Pediatric Otolaryngology Quality Improvement at Nationwide Children’s Hospital.

Dr. Jatana was co-principal investigator on the study, working with researchers at Children’s Hospital of Philadelphia. They demonstrated that feeding a child honey or sucralfate (Carafate®) after swallowing a button battery helps create a barrier to protect the esophageal tissue from harsh alkaline levels. This viscous liquid reduces the tissue-damaging effect of the battery, until the battery can be removed.

More than 3,000 children are treated in U.S. emergency departments each year after swallowing button batteries, which can rapidly cause serious injury or even death. The award-winning thesis, titled “pH-Neutralizing Esophageal Irrigations as a Novel Mitigation Strategy for Button Battery Injury,” was published in *Laryngoscope* in June 2018.

“The findings of our study were put immediately into clinical practice, incorporated into the latest National Capital Poison Center guidelines for management of button battery ingestions,” says Dr. Jatana.

The Broyles Maloney Award is given annually for an outstanding manuscript or thesis in endoscopy, bronchology, esophagology, laryngology and related science. For additional information on the latest National Capital Poison Center Button Battery Triage and Treatment Guidelines, visit [poison.org/battery/guideline](http://poison.org/battery/guideline).



# Moberly Wins Triological Society's Prestigious Mosher Award

Neurotologist Aaron Moberly, MD, has received the prestigious Harris P. Mosher Award from otolaryngology's elite Triological Society. Dr. Moberly is assistant professor and Neurotology Fellowship director in the Department of Otolaryngology – Head and Neck Surgery at Ohio State.

Named after the renowned 20th century Harvard-educated otolaryngologist, the Mosher Award is presented annually to the physician with the most outstanding clinical research thesis submitted to the society.

Dr. Moberly's winning thesis, titled "How Does Aging Affect Recognition of Spectrally Degraded Speech?" will soon be published as a supplement in the journal *Laryngoscope*. In this study, Dr. Moberly explored the effects of advancing age on speech recognition abilities of adults with cochlear implants as well as normal-hearing adults listening to degraded speech.

Findings suggested that aging contributes to poorer speech recognition outcomes as a result of both poorer auditory abilities with advancing age, as well as poorer cognitive functions associated with the aging process.

These findings are relevant to patient care because they support the idea that poor cochlear implant outcomes may be due to a combination of poor auditory processing as well as declines in cognitive functions, suggesting potential areas for targeted training or rehabilitation.

"It is an honor to be recognized with the Mosher Award among many outstanding clinical thesis submissions this year," says Dr. Moberly, who became an active fellow of the Triological Society in 2018 after the society accepted his thesis.

Dr. Moberly's other research interests include understanding variability in speech recognition among adult cochlear implant users and using these findings to apply novel rehabilitation interventions for adults with cochlear implants. He also seeks to develop novel computer-assisted image analysis approaches to support otoscopy exams.



*Aaron Moberly, MD, became an active fellow of the honorable Triological Society in 2018.*

# Awards and Recognition

- **Oliver Adunka, MD; Dan Merfeld, PhD; and John Oas, MD** – selected by the College of Medicine’s Communication and Collaboration Committee and the Small Grant Awards Selection Committee as a recipient of a 2018 Small Grant Award (\$15,000) for their project to “Establish a Vestibular Board”
- **Oliver Adunka, MD** – elected American Cochlear Implant Alliance (ACIA) treasurer for 2018
- **Ricardo Carrau, MD** – elected president-elect of the Board of Directors for the North American Skull Base Society (NASBS) and will serve as president in 2020
- **Ricardo Carrau, MD** – inducted into the inaugural class of the Mazzaferri-Ellison Society of Master Clinicians at The Ohio State University College of Medicine
- **Irina Castellanos, PhD** – serving as a STEP mentor during the 2018-2019 academic year. Nominated by colleagues, students and administrators from across the university based on outstanding contributions to undergraduate education and student development at Ohio State
- **Named Castle Connolly Top Doctors for 2018:**  
*Allergy & Immunology:* **Charity Fox, MD; Princess Ogbogu, MD**  
*Otolaryngology:* **Oliver Adunka, MD; Amit Agrawal, MD; Ricardo Carrau, MD; Brad deSilva, MD; Edward Dodson, MD; Garth Essig, MD; L. Arick Forrest, MD; Matthew Old, MD; Bradley Otto, MD; Enver Ozer, MD; James Rocco, MD, PhD**
- **Garth Essig Jr., MD** – named to American Health Council’s 2018 “Best in Medicine” list
- **Kris Jatana, MD** – chair, Pediatric Otolaryngology Specialty Advisory Committee. National Surgical Quality and Improvement Program Pediatric, American College of Surgeons
- **Eric Mason, MD (PGY-3 resident)** – awarded a two-year, \$10,000 NCH Clinical and Translational Research Intramural (CTRI) grant for the proposal entitled “Evaluating the utility of computational fluid dynamics in laryngotracheal stenosis.” This prestigious intramural award is typically awarded to faculty and fellows. Mentor Tendy Chiang, MD
- **Aaron Moberly, MD** – received the Biomedical Research Mentor of the Year Award, Landacre Research Honor Society, The Ohio State University
- **Princess Ogbogu, MD** – elected to the American Board of Allergy and Immunology (ABAI) Board of Directors. Her term began Jan. 1, 2019, and extends through Dec. 31, 2021
- Named among the top 10 percent of providers nationally for patient satisfaction:  
**Amit Agrawal, MD; Ricardo Carrau, MD; L. Arick Forrest, MD; Stephen Kang, MD; Leslie Kim, MD; Laura Matrka, MD; Stephen Nogan, MD; Princess Ogbogu, MD; Matthew Old, MD; Bradley Otto, MD; Enver Ozer, MD; Rekha Raveendran, MD; Kara Wada, MD**

# Distinguished Achievements

- **James Rocco, MD, PhD** – serving as Division Chair of Research for the American Head and Neck Society (AHNS) with appointments on the Foundation Board and Executive Committee
- **James Rocco, MD, PhD** – invited by The American Head and Neck Society (AHNS) to lead the Planning Committee of the 2019 AACR-AHNS Head and Neck Cancer Conference: Optimizing Survival and Quality of Life through Basic, Clinical, and Translational Research, to take place in Austin, Texas, on April 29-30, 2019
- **Kevin Zhan, MD** – elected to the governing council for the American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) Section for Residents and Fellows-in-Training (SRF)
- **Kai Zhao, PhD** – “How We Smell” video documenting how air travels through the human nose currently being showcased by the NIH for public education ([nidcd.nih.gov/health/how-we-smell-video](https://nidcd.nih.gov/health/how-we-smell-video))
- **Ohio State Otolaryngology Residency Program** – ranked seventh in the nation by Doximity

**Eugene Chio, MD:** Worked with his surgical team to implant the program’s 50th Inspire® upper airway stimulation device for people with moderate to severe obstructive sleep apnea. Dr. Chio, director of The Ohio State Wexner Medical Center Sleep Surgery Program, and his team use the surgical solution to help restore restful sleep for people who have trouble using a continuous positive airway pressure (CPAP) machine. The program is third nationally in volume of Inspire cases.

**David Schuller, MD:** Received The Ohio State University Distinguished Service Award in 2018 for extensive contributions to the university, medical college and medical center. This includes development and expansion of Ohio State’s Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute.

**Stephen Nogan, MD:** Named to *Columbus Business First* “40 Under 40” list for his impact on his profession and his community. The facial plastic and reconstructive surgeon performs facial skin cancer reconstruction, facial trauma surgery and cosmetic surgery. On a local level, he has volunteered with the Mid-Ohio Foodbank and opioid crisis efforts. Internationally, he has volunteered with 11 medical mission teams in three countries.

**Gregory Wiet, MD:** Invited to participate in a Working Group by the American Board of Otolaryngology – Head and Neck Surgery. The group will develop an examination process, structure and questions for subcertification in Complex Pediatric Otolaryngology.

**Aaron Moberly, MD:** Received the 2017 Editor’s Award from the editor-in-chief of the Hearing section of the *Journal of Speech, Language and Hearing Research* for the paper “Speech Recognition in Adults with Cochlear Implants: The Effects of Working Memory, Phonological Sensitivity, and Aging,” which was published in April 2017. The award recognizes an impactful work that meets the highest quality standards in research design and presentation.

**Kris Jatana, MD; Charles Elmaraghy, MD; Brenda Ruth RN, CWON; Nolan Seim, MD; Stephanie Lemle, MBA:** Received the top research award for Best Podium Award/First Place in Pediatrics at the Fourth International Tracheostomy Symposium and Global Tracheostomy Collaborative meeting in Dallas, Texas. Their presentation, “A Multidisciplinary Team Approach for Prevention of Post-Operative Pediatric Tracheostomy-Related Pressure Wounds,” was selected from among nearly 90 overall submissions.



# Welcome New Team Members

## Cochlear Implant Researcher Shuman He, MD, PhD, Joins Faculty

Shuman He, MD, PhD, has been newly appointed as associate professor with the Ohio State Department of Otolaryngology – Head and Neck Surgery. Formerly, she served as director of the Human Auditory Electrophysiology Laboratory for Boys Town National Research Hospital in Omaha, Nebraska.

Dr. He's current research focuses on cochlear implant (CI) users. She has submitted a paper for publication detailing a protocol for assessing how well the cochlear nerve responds to electrical signals delivered by the cochlear implant in children with cochlear nerve deficiency (CND).

"For the first time ever, we'll be able to gather this information from children with CND – a clinically challenging patient population – in a clinical setting. This test has substantial clinical significance and will be used worldwide," Dr. He says.

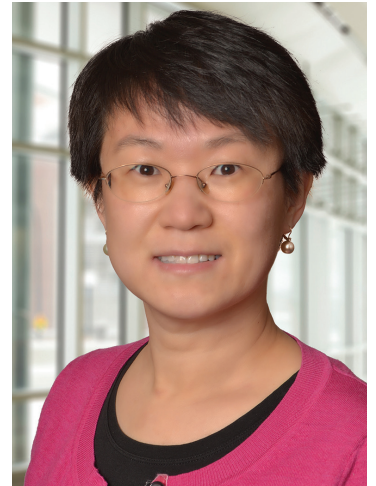
The protocol is based on an understanding of neural encoding and processing of electrical stimulation in both the cochlear nerve and the central auditory system. It will help CND children who have a cochlear implant to achieve maximal potential in speech and language development by optimizing their CI settings. Dr. He recently submitted an R01 grant (her second) focusing on children with CND, which scored in the 11th percentile.

Her research team also is studying the neurophysiologic basis of speech perception deficits in cochlear implant users 65 and older. She has an R01 research grant from the National Institutes of Health to study neural encoding and auditory perception in this group.

Dr. He brings a special expertise to the department, says James Rocco, MD, PhD, FACS, chair of the Department of Otolaryngology – Head and Neck Surgery.

"She's a bundle of positive energy who has mentored our junior faculty, been an active participant in our Grant Review Committee, and worked to develop the research program for our postdocs and fellows."

Dr. He completed her medical degree and residency in Shandong Province, China. She holds a PhD in speech and hearing sciences from the University of Iowa. She did postdoctoral work in psychoacoustics and auditory electrophysiology at the University of North Carolina at Chapel Hill.



## Welcome New Team Members

### Brandon Kim, MD, Joins Laryngology Team

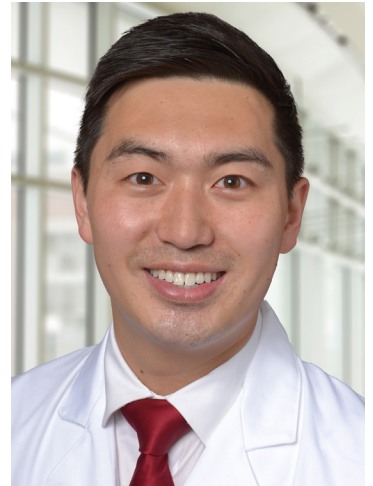
Brandon Kim, MD, has joined The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery as a clinical assistant professor of laryngology.

“I chose Ohio State for its great national departmental reputation and its world-class resources,” he says.

Dr. Kim’s clinical and research interests include professional voice, airway surgery and swallowing disorders.

He sees laryngology as a specialty that helps people improve the quality of their lives and perform functions important to their humanity. “It’s very rewarding to help people to breathe comfortably, talk with one another, and share meals with family and friends. These are all important functions for what it means to be a person.”

Dr. Kim recently completed a laryngology fellowship at the University of Southern California Keck School of Medicine. Before that, he completed his residency in Otolaryngology – Head and Neck Surgery at Emory University School of Medicine in Atlanta. He earned his medical degree at the University of California, Los Angeles.



### Scientist Ruili Xie, PhD, Brings Groundbreaking Research to Ohio State

Ruili Xie, PhD, has been appointed assistant professor in The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery.

Dr. Xie and his research team are working to gain better understanding of the neural mechanisms of age-related and noise-induced hearing loss. They were the first to reveal that deficits in the physiological function of the auditory nerve central synapses contribute to age-related hearing loss. Their Research Project Grant (R01) is funded by the National Institutes of Health through 2022.

Dr. Xie continues to study synaptic transmission during brain aging and how the changes of synaptic function contribute to neurodegenerative diseases.

“Dr. Xie’s research opens a new line of basic science in our Otology Division. His recruitment was critical for expanding the scope of our research,” says James Rocco, MD, PhD, FACS, chair of the Department of Otolaryngology – Head and Neck Surgery.

“He and his team are doing animal work that allows them to look at damage that happens to the inner ear on a single cell level. His work will serve as the basis for developing improved noise-protecting drugs and mechanisms.”

Dr. Xie has a bachelor’s degree in biochemistry and molecular biology from Peking University in Beijing, China. He has a master’s degree in molecular genetics from the Institute of Genetics, Chinese Academy of Science, also in Beijing. He completed doctoral studies in neuroscience at the University of Texas at Austin. In addition, he pursued postdoctoral neuroscience work at the University of North Carolina at Chapel Hill. He comes to Ohio State Wexner Medical Center from the University of Toledo in Ohio, where he worked in the Department of Neurosciences.





### Spencer Lindsey, MD, Returns to Roots to Become Pediatric Otolaryngologist

Spencer Lindsey, MD, has joined Nationwide Children's Hospital in Columbus as a pediatric otolaryngologist. He is excited for the opportunity to build a general clinical practice and has particular interest in chronic middle ear disease.

The move is a homecoming for Dr. Lindsey, who completed much of his academic training in Columbus and whose family lives in the area.

"It was a big draw to stay local and be close to my parents and siblings," he says.

Equally important are his respect for the collegial atmosphere, excellent reputation and many research opportunities at both Nationwide Children's and The Ohio State University Wexner Medical Center, where he is an assistant clinical professor with Ohio State's Department of Otolaryngology – Head and Neck Surgery.

Dr. Lindsey says, "Everyone is focused on the same goal of delivering great care to kids. There are many people here I consider to be mentors."

He earned his medical degree at The Ohio State University College of Medicine. After medical school, Dr. Lindsey completed residency training at Georgetown University Hospital in Washington, D.C. He then returned to Columbus to do fellowship work in pediatric otolaryngology at Nationwide Children's Hospital.



# New House Staff – Fellows



*Allergy and Immunology*

**Basil Kahwash, MD**

**Hometown:** New Albany, Ohio

**Undergraduate:** Kenyon College

**Medical School:** University of Toledo College of Medicine

**Residency:** Indiana University School of Medicine



*Allergy and Immunology*

**Jennifer Yonkof, MD**

**Hometown:** Toledo, Ohio

**Undergraduate:** Miami University

**Medical School:** University of Toledo College of Medicine

**Residency:** Rainbow Babies and Children's Hospital, University Hospitals Cleveland Medical Center



*Head and Neck Oncologic Surgery*

**Sidharth Puram, MD, PhD**

**Hometown:** Edina, Minnesota

**Undergraduate:** Massachusetts Institute of Technology

**Medical School:** Harvard Medical School

**General Surgery**

**Internship:** Massachusetts General Hospital

**Residency:** Harvard Medical School



*Laryngology*

**Fernando Morell, MD**

**Hometown:** Caguas, Puerto Rico

**Undergraduate:** University of Dayton

**Medical School:** Universidad Central del Caribe School of Medicine

**Residency:** Universidad de Puerto Rico, Recinto de Ciencias Médicas



*Pediatric ENT*

**Vikrum Thimmappa, MD**

**Hometown:** Columbus, OH

**Undergrad:** Columbia University

**Medical School:** Case Western Reserve University

**General Surgery**

**Internship:** Dartmouth Hitchcock Medical Center

**Residency:** University of Tennessee Health Science Center



*Skull Base Surgery*

**Nyall London, MD, PhD**

**Hometown:** Moorpark, California

**Undergraduate:** Brigham Young University

**Medical School:** University of Utah

**PhD:** University of Utah

**Residency:** Johns Hopkins School of Medicine

# New House Staff – Residents



**Ashley Heilingoetter, MD**

**Hometown:** Chicago, Illinois

**Undergraduate:** Illinois Wesleyan University – BA in Biology

**Masters:** University of Michigan – MPH with focus in Human Nutrition

**Medical School:** Rush University



**Masanari Kato, MD**

**Hometown:** Irvington, New York

**Undergraduate:** Carnegie Mellon University, Carnegie Institute of Technology – BS in Chemical Engineering

**Medical School:** Stony Brook University School of Medicine

**Clinical Research**

**Fellowship:** Medical University of South Carolina, Department of Otolaryngology – Head and Neck Surgery



**Michael Li, MD**

**Hometown:** Davis, California

**Undergraduate:** The University of California at Berkeley – BA in Integrative Biology

**Medical School:** The Ohio State University College of Medicine



**Rishabh Sethia, MD**

**Hometown:** Chicago, Illinois

**Undergraduate:** Indiana University – BS in Biology (summa cum laude)

**Medical School:** The Ohio State University College of Medicine



# Leadership Appointments

## Division of Head and Neck Oncology Gets New Director

***Matthew Old, MD, FACS, steps in to advance cancer care***



Matthew Old, MD, FACS, associate professor in The Ohio State University Wexner Medical Center Department of Otolaryngology – Head and Neck Surgery, has been named director of the Division of Head and Neck Oncology at The Ohio State

University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute. He’s also been appointed medical director for the Head and Neck Cancer service Line.

Dr. Old brings a wealth of experience to these leadership roles. He joined The Ohio State University College of Medicine nearly 10 years ago as assistant professor and has served on numerous medical center committees, including the Talent Steering Group, Communication and Collaboration Committee, and The James Utilization Management Committee. He’s currently co-director of The James operating rooms and co-chair of the Physician Faculty Engagement and Workplace of Choice committees.

Dr. Old credits the mentorship and influence of others as having best prepared him for his new appointments.

“It’s being part of a great department that embodies transparency, trust and a strong work ethic, as well as the mentorship of Dr. Ted Teknos and Dr. James Rocco,” he says, referring to the leaders whom he succeeded.

Dr. Old believes that the combination of a high case volume, a productive translational research team and a robust clinical trials pipeline will continue to improve the “already outstanding quality and value” of the head and neck cancer care the division provides.

Dr. Old currently serves on the Head and Neck Education Committee of the American Academy of Otolaryngology and chairs the Education Division of the Reconstructive Section of the American Head and Neck Society. He also created and co-directs the annual North America Microvascular Free Flap Boot Camp for current fellows.

“The combined strength of these attributes is fertile ground for us in furthering head and neck cancer treatment throughout the Midwest, the nation and the world,” he asserts.



## Leadership Appointments

### Princess Ogbogu, MD, Joins ACGME Milestones 2.0 Working Group



Princess Ogbogu, MD, has accepted an invitation to join a working group of peers to develop milestones for evaluating participants in accredited allergy and immunology graduate medical education programs across the country.

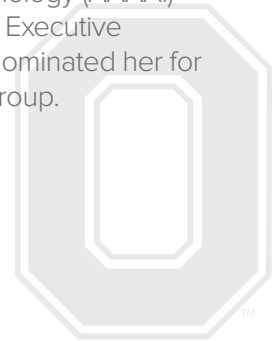
The work is part of Milestones 2.0, a review and revision of the Accreditation Council for Graduate Medical Education (ACGME) Milestones program.

“I hope to assist the group in creating meaningful milestones that help advance the quality of resident and fellow education and positively impact patient care,” Dr. Ogbogu says.

At The Ohio State University Wexner Medical Center, she serves as associate professor of medicine and director of the Allergy/Immunology Division of the Department of Otolaryngology – Head and Neck Surgery. She is also the co-director of the Allergy/Immunology Fellowship Program at Ohio State Wexner Medical Center.

During her one-year assignment on the working group, she and other members are reviewing the framework for assessing competency in six key areas: patient care, medical knowledge, interpersonal and communication skills, practice-based learning and improvement, systems-based practice and professionalism.

Dr. Ogbogu also serves as the internal medicine councilor for the American Academy of Allergy, Asthma and Immunology (AAAAI) Program Director's Assembly Executive Committee. This committee nominated her for the Milestones 2.0 working group.



### Oliver Adunka, MD, Named Chair for AAO-HNS Hearing Committee

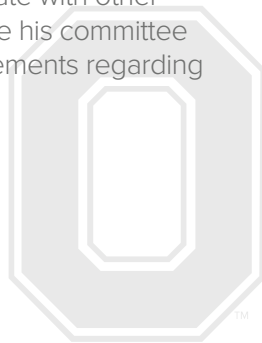


Oliver Adunka, MD, is serving a two-year term through fall 2019 as chair of the Hearing Committee for the American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS). He is a professor, vice chairman for Clinical Operations

and director of the Division of Otology/Neurotology/Cranial Base Surgery at The Ohio State University Wexner Medical Center.

In his role as chair, Dr. Adunka hopes to favorably impact the hearing healthcare landscape. Under his leadership, the Hearing Committee will study, create, assemble and coordinate hearing information of particular interest to the specialty of otolaryngology – head and neck surgery.

Dr. Adunka will define potential problems and solutions for hearing health care, interface with AAO leadership and collaborate with other committees. He also will guide his committee as they work on position statements regarding issues that impact hearing.



### Chair-Elect Meredith Lind, MD, Anticipates New Role on Pediatric Otolaryngology Education Committee



As chair-elect for the Pediatric Otolaryngology Education Committee for the American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS), Meredith Lind, MD, is eager to oversee development of educational materials

for otolaryngologists and other medical providers. She has been a member of the committee for three years, and “it has been one of my more rewarding experiences as a member of AAO,” she says.

Dr. Lind is vice president of Nationwide Children’s Hospital Medical Staff and assistant professor in the Department of Otolaryngology – Head and Neck Surgery at Ohio State.

She will become chair of the Pediatric Otolaryngology Education Committee in fall 2019. Dr. Lind will lead efforts to create content for online courses and podcasts. In addition, her committee will produce clinical practice guidelines, faculty development modules and questions used in review courses and the Academic Bowl competition at the annual AAO-HNS fall meeting.

“I think it is important for us as otolaryngologists to help contribute to the educational content available to practitioners of our specialty, as well as those who provide primary care, and ancillary healthcare providers.” Dr. Lind says. “With this chairmanship, I am able to make an impact at the national level.”



## Leadership Appointments

### Kris Jatana, MD, Represents Pediatric Otolaryngology in American College of Surgeons Quality Improvement Initiative



Kris Jatana, MD, has been appointed chair in Pediatric Otolaryngology for the American College of Surgeons (ACS) National Surgical Quality Improvement Program Pediatric (NSQIPP) Data Committee. He is an associate professor

of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center and director of Pediatric Otolaryngology Quality Improvement at Nationwide Children’s Hospital in Columbus.

As he begins his two-year term as chair, Dr. Jatana is pleased to represent his specialty in this program. He hopes to increase national participation in data collection initiatives and use this information to make relevant clinical recommendations.

“As a specialty, we are often asked to provide input on various clinical outcome measures and help shape quality improvement initiatives, like antibiotic stewardship,” Dr. Jatana comments.

“Serving on this committee gives me an opportunity to make a difference. We can use the data collected to impact care of pediatric otolaryngology patients around the country and around the world.”

Dr. Jatana also has led a national quality improvement project for pediatric tracheostomy for four years, as part of NSQIPP. The team has gathered data across more than 100 centers in the United States. The data gathered will help identify risk factors for complications, as well as improve healthcare resource utilization.

Other work he has been involved in includes creating process measures for acute tonsillar hemorrhage and esophageal button battery cases, to benchmark the time from arrival to operating room in these emergent clinical situations.

“As a surgical specialty, our goal is to obtain meaningful data, measuring clinical outcomes. This national program allows us to use multi-institutional data to help drive quality improvement efforts at the institutional level,” he says.



# Clinical Trials

## *Facial Plastics*

**Leslie Kim, MD** – A Prospective Randomized Double Blind Trial to Assess the Effect of a Single Preoperative Dose of Gabapentin on Postoperative Opioid Consumption in Patients Undergoing Rhinoplasty

## *Head and Neck*

**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** – A Phase I/II Study of Concurrent Cetuximab and Nivolumab in Patients with Recurrent and/or Metastatic Head and Neck Squamous Cell Carcinoma

## *Laryngology*

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

**Laura Matrka, MD** – Treatment Alternatives in Adult Rare Disease; Assessment of Options in Idiopathic Subglottic Stenosis North American Airway Collaborative PR-02 Study (NoAAC PR-02 Study)

**Laura Matrka, MD** – Laryngeal Findings and Intubation Injury Patterns after Endotracheal Intubation

## *Otology, Neurotology and Cranial Base Surgery*

**Oliver Adunka, MD** – A Proposal to Evaluate Revised Indications for Cochlear Implant Candidacy for the Adult CMS Population (Co-investigators – Ed Dodson, MD, and Aaron Moberly, MD)

**Oliver Adunka, MD** – Clinical Evaluation of the Cochlear Nucleus® CI532 Cochlear Implant in Adults (Co-investigators – Ed Dodson, MD, and Aaron Moberly, MD); IRB approval 2017

**Oliver Adunka, MD** – Cochlear Implantation during Vestibular Schwannoma Removal or During Labyrinthectomy Surgery for Treatment of Meniere's Disease (Co-investigators – Ed Dodson, MD, and Aaron Moberly, MD); IRB approval 2017, not active, not enrolling yet



### *Otology, Neurotology and Cranial Base Surgery (cont.)*

*Edward Dodson, MD – Regional Anesthesia for Otologic Surgery*

*Aaron Moberly, MD – Aural Rehabilitation for Adults Receiving Cochlear Implants*

*Aaron Moberly, MD – Aural Rehabilitation for Experienced Cochlear Implant Users*

### *Rhinology*

*Brad Otto, MD – A Prospective, Non-Randomized Study to Evaluate Treatment Outcome of Nasal Airway Obstruction Using the Aerin Medical Vivaerä Stylus (Co-investigators – Alex Farag, MD, and Kai Zhao, PhD)*

*Alexander Farag, MD – Treatment of Post-Operative Sinonasal Polypsis with Topical Furosemide (Site PI)*



# Research Funding

## Active NIH Funding

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<b>Irina Castellanos, PhD</b>	03/01/2017 – 02/28/2020	NIH/NIDCD	R21DC01613
<i>Psychosocial outcomes in deaf children with cochlear implants</i>			
<b>Tendy Chiang, MD</b>	07/01/2017 – 06/30/2022	NIH/NHLBI	K08HL138460
<i>Mechanisms of Regeneration in Tissue Engineered Tracheal Grafts</i>			
<b>Shuman He, MD, PhD</b>	01/01/2018 – 06/30/2022	NIH/NIDCD	R01DC016038
<i>Neural encoding and auditory perception in cochlear implant users</i>			
<b>Derek Houston, PhD, PI</b>	12/1/2006 – 6/30/2020	NIH/NIDCD	R01DC008581
<b>Oliver Adunka, MD, CI</b>			
<i>Infant-Directed Speech and Language Development in Infants with Hearing Loss</i>			
<b>Daniel Merfeld, PhD</b>	07/01/2015 – 06/30/2020	NIH/NIDCD	R01DC014924
<i>Employing Vestibular Thresholds to Improve Patient Diagnosis</i>			
<b>Daniel Merfeld, PhD</b>	03/01/2016 – 02/28/2019	NIH/NIDCD	R21DC014909
<i>Employing Magnetic Vestibular Stimulation (MVS) During Functional Imaging</i>			
<b>Aaron Moberly, MD</b>	04/01/2017 – 03/31/2022	NIH/NIDCD	K23DC015539
<i>Variability in Speech Recognition for Adults with Cochlear Implants: Bottom-up and Top-down Factors</i>			
<b>Aaron Moberly, MD, Co-PI</b>	09/21/2018 – 08/31/2020	NIH/NIDCD	R21DC016972
<b>Garth Essig, Jr., MD, CI</b>			
<i>Auto-Scope Software-Automated Otoscopy to Diagnose Ear Pathology</i>			
<b>Claire Monroy, PhD</b>	03/01/2018 – 02/28/2021	NIH/NIDCD	F32 DC017076
<b>Irina Castellanos, PhD, Co-Mentor</b>			
<b>Derek Houston, PhD, Co-Mentor</b>			
<i>Action and interaction in infants with hearing loss, before and after cochlear implantation</i>			

## Active NIH Funding (cont.)

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**James Rocco, MD, PhD**      07/01/2011 – 04/30/2018      NIH/NIDCR      R01DE022087  
*Bcl-2 as a Biomarker for Prognosis and Therapy of Head and Neck Cancer*

**Gregory Wiet, MD**      08/05/2011 – 07/31/2018      NIH/NIDCD      R01DC011321  
*Virtual Temporal Bone Surgery: Defining and Translating Standardized Metrics to an Automated Assessment Tool*

**Ruili Xie, PhD**      09/19/2017 – 06/30/2022      NIH/NIDCD      R01DC016037  
*Cellular Mechanisms of Age Related Hearing Loss*

**Kai Zhao, PhD**      12/1/2014 – 11/30/2019      NIH/NIDCD      R01DC013626  
*Objective evaluation of conductive olfactory losses & nasal obstruction symptoms*

## Active Non-NIH Research Funding

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**Derek Houston, PhD**      08/01/2017 – 02/28/2019      OBERKOTTER FOUNDATION  
*Children's Hearing and Language Development Resource Network [CHLDRN] of Ohio Community Collaborative*

**Aaron Moberly, MD, Co-PI**      01/01/2017 – 12/31/2019      Cochlear Corporation  
*Aural Rehabilitation for Adults with Cochlear Implants*

**Bradly Otto, MD, PI**      05/19/2017 – 05/19/2018      Industry Sponsor  
**Kai Zhao, PhD, CI**  
*A Prospective, Non-Randomized Study to Evaluate Treatment Outcome of Nasal Airway Obstruction Using the Aerin Medical Vivaer Stylus*

**Kara Wada, MD**      04/17/2018 – 05/31/2019      OSU Patient Safety and Advancement  
*Comprehensive Quality Improvement Strategy to Address Penicillin Allergy Documentation and Evaluation – A Pilot Initiative*

# Highlighted Publications

Pienkowski M, **Adunka OF**, Lichtenhan JT. Editorial: New Advances in Electrocochleography for Clinical and Basic Investigation. *Frontiers of Neuroscience*. 2018 May 8; 12:310. PMID: 29867322

Todeschini AB, Montaser AS, Shahein M, Revuelta JM, **Otto BA, Carrau RL**, Prevedello DM. Endoscopic Endonasal Approach to a Suprasellar Craniopharyngioma. *Journal of Neurological Surgery Part B: Skull Base*. 2018 Apr;79(Suppl 3):S237-S238. PMID: 2958888

Tanjararak K, Upadhyay S, Thiensri T, Muto J, Roongpuvapaht B, Prevedello DM, **Carrau RL**. Potential Surgical Exposure of the Parapharyngeal Internal Carotid Artery by Endonasal, Transoral, and Transcervical Approaches. *J Neurol Surg B Skull Base*. 2018 Jun;79(3):241-249. PMID: 29765821

Vankoevinger K, Prevedello DM, **Carrau RL**. Endoscopic Endonasal Approaches for the Management of Cranial Base Malignancies: Histologically Guided Treatment and Clinical Outcomes. *J Neurosurg Sci*. 2018 Dec;62(6):667-681. PMID: 29808637

**Moberly AC**, Vasil K, Wucinich TL, Safdar N, Boyce L, Roup C, Holt RF, **Adunka OF, Castellanos I, Houston DM**, Pisoni DP. How Does Aging Affect Recognition of Spectrally Degraded Speech? *Laryngoscope*. 2018 Nov; 128 Suppl 5. PMID: 30325518

**Castellanos I**, Kronenberger W G, Pisoni DB. Psychosocial Functioning in Long-term Cochlear Implant Users. *Ear & Hearing*. 2018 May/Jun;39(3):527-539. PMID: 29189431

**Moberly AC, Castellanos I**, Vasil KJ, **Adunka OF**, Pisoni DB. “Product” Versus “Process” Measures in Assessing Speech Recognition Outcomes in Adults With Cochlear Implants. *Otology & Neurotology*. 2018 Mar; 39 (3): e195–e202. PMID: 29342056

Best CA, Pepper VK, Ohst D, Bodnyk K, Heuer E, Onwuka EA, King N, Strouse R, **Grischkan J**, Breuer CK, **Chiang T**. Designing a Tissue-engineered Tracheal Scaffold for Preclinical Evaluation. *Int J Ped Otorhinolaryngol*. 2018 Jan; 104:155-160. PMID: 29287858

Eichaker L, Li C, King N, Pepper V, Best C, Onwuka E, Heuer E, **Zhao K, Grischkan J**, Breuer CK, Johnson J, **Chiang T**. Quantification of Tissue Engineered Trachea Performance with Computational Fluid Dynamics. *Laryngoscope*. 2018 Aug;128(8):E272-E279. PMID: 29756207

Li C, Jiang J, Kim K, **Otto BA, Farag AA**, Cowart BJ, Pribitkin EA, Dalton P, **Zhao K**. Nasal Structural and Aerodynamic Features That May Benefit Normal Olfactory Sensitivity. *Chem Senses*. 2018 Apr 23;43(4):229-237. PMID: 29474516

Anfang R, **Jatana KR**, Keith Rhoades MS, Jared Fry MS, Jacobs IN. pH-neutralizing esophageal irrigations as a novel mitigation strategy for button battery injury. *Laryngoscope*. 2019 Jan;129(1):49-57. PMID 29889306



**He S**, McFayden TC, Shahsavarani BS, Teagle HB, Henderson L, Ewend M, Buchman CA. The Electrically Evoked Auditory Change Complex Evoked by Temporal Gaps Using Cochlear Implants or Auditory Brainstem Implants in Children with Cochlear Nerve Deficiency. *Ear and Hearing*. 2018 May/Jun; 39(3):482-494. PMID: 28968281

**He S**, Teagle HFB, McFayden TC, Ewend M, Henderson L, He N, Buchman CA. Longitudinal Changes in Electrically Evoked Auditory Event-related Potentials in Children with Auditory Brainstem Implants: Preliminary Results Recorded Over Three Years. *Ear and Hearing*. 2018 Mar/Apr; 39(2):318-325. PMID: 28891823

Fortunato-Tavares T, Schwartz RG, de Andrade CRF, Marton K, **Houston DM**. Prosodic Boundary Effects on Syntactic Disambiguation in Children with Cochlear Implants. *Journal of Speech, Language, and Hearing Research*. 2018; 61(5), 1188-1202.

Bush B, Tobias J, Lin C, **Ruda J, Jatana K, Essig G**, Cooper J, **Elmaraghy C**. Postoperative Bradycardia Following Adenotonsillectomy in Children: Does Intraoperative Administration of Dexmedetomidine Play a Role? *Int J Pediatr Otorhinolaryngol*. 2018 Jan; 104:210-215. PMID: 29287870

Li M, Yiu Y, Merrill T, **Matrka L**. Risk Factors for Post-Tracheostomy Tracheal Stenosis. *Otolaryngol Head Neck Surg*. 2018 Oct;159(4):698-704. PMID: 30130451

**deSilva B**, Crenshaw D, **Matrka L, Forrest A**. Vocal Fold Botulinum Toxin Injection For Refractory Paradoxical Vocal Fold Motion Disorder. *Laryngoscope*. 2018 Dec 13. [Epub ahead of print] PMID: 30548857

Clark TK, Yi Y, Galvan-Garza R, Bermúdez Rey MC, **Merfeld DM**. When Uncertain, Does Human Self-motion Decision-making Fully Utilize Complete Information? *Journal of Neurophysiol*. 2018 Apr 1;119(4): 1485-1496. PMID: 29357467

**Moberly AC**, Vasil KJ, Baxter J, **Ray C**. What to Do When Cochlear Implant Users Plateau in Performance: A Pilot Study of Clinician-guided Aural Rehabilitation. *Otol Neurotol*. 2018 Oct;39(9):e794-e802. PMID: 30199497

Lee TS, Goyal P, Li C, **Zhao K**. Computational Fluid Dynamics to Evaluate the Effectiveness of Inferior Turbinate Reduction Techniques to Improve Nasal Airflow. *JAMA Facial Plastic Surgery*. 2018 Jul 1;20(4):263-270. PMID: 29372235

Li C, Dong H, **Zhao K**. A Balance Between Aerodynamic and Olfactory Performance During Flight in *Drosophila*. *Nature Communications*. 2018 Aug 10;9(1):3215. PMID: 30097572

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