

THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

### DEPARTMENT OF OTOLARYNGOLOGY -HEAD AND NECK SURGERY

Year in Review 2020



The Ohio State University

NATIONAL EAR, NOSE & THROA 2020-21

WEXNER MEDICAL CENTER

### OUR MISSION

The Ohio State Department of Otolaryngology – Head and Neck Surgery is guided by a mission to deliver exceptionally safe, high-quality and value-based care. Our team has been recognized by U.S. News & World Report as the #5 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. We focus on providing the best patient care in an excellent teaching environment. Our large and diverse patient population also provides a rich environment for medical education and research.





The Department of Otolaryngology is composed of 10 specialty divisions:

- Allergy and Immunology
- 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

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### Greetings from the

Department of Otolaryngology -Head and Neck Surgery at The Ohio State University Wexner Medical Center

As I reflect on the accomplishments of our department in 2020, I struggle to find the appropriate words to put my thoughts into sentences. With COVID-19 and the ongoing pandemic, this past year challenged all of us in so many ways and is likely to be discussed for many years to come. But, surprisingly and thankfully, the year was also one of change and innovation—driving many of our teams to reevaluate how we provide patient care, complete life-altering research, share knowledge and grow our profession.

I cannot say enough about how proud I am of the tireless work and dedication shown by the members of our department. When the virus hit, we mobilized quickly to provide telehealth as an alternative to many outpatient visits, created a safe environment for patients who needed in-person care and established a priority ranking system for surgical patients. Our faculty also found creative ways to continue offering training opportunities for medical students, residents and fellows during such an unprecedented time. Our entire team pulled together in ways we never had before, and I feel very fortunate to have gone through this experience with my colleagues at Ohio State.

Despite the hardships and restrictions created by COVID-19, I'm pleased to share that the Department of Otolaryngology had a successful year. The medical center was once again named the "Best Hospital" in central Ohio, while our department was named #5 in the nation and #1 in the state by U.S. News & World Report. This recognition is truly a testament to our team's dedication to advancing medicine through research, education and patient care, and I commend them for their ongoing efforts.

We also recruited many exceptional clinicians during this trying year. Kyle VanKoevering, MD, and Ryan Nesemeier, MD, joined us in Skull Base Surgery and Facial Plastic and Reconstructive Surgery, respectively, while nurse practitioners Emily Pisut and Sara Jo Harbison joined us to expand our General ENT efforts. Bryan Martin, DO, and Tiffany Owens, MD, both joined our division of Allergy and Immunology, and we also welcomed Amy Manning, MD, and Prasanth Pattisapu, MD, to our Pediatric Otolaryngology team at Nationwide Children's Hospital.

While COVID-19 caused issues in many capacities, it did provide our researchers the time to focus more on grant writing and submissions. Subsequently, our research funding portfolio grew by 38% between FY19 and FY20, which included a \$4.1 million U01 grant earned by Oliver Adunka, MD, as well as a \$7.5 million grant awarded jointly to Dan Merfeld, PhD, and other institutions by the Department of Defense. The grants will lead projects aimed at preserving natural hearing with less invasive surgical techniques, as well as unlocking the mysteries of spatial disorientation in flight.

I continue to be impressed by the clinical and surgical advancements made by our faculty and staff. Of note, I'd like to congratulate Eugene Chio, MD, who is now the #1 sleep implant surgeon in the world (based on volume of surgeries performed). Dr. Chio's outstanding efforts (and recent innovative two-incision approach) have led our Sleep Surgery program to receive many accolades, most recently helping us become the #2 Inspire implant facility in the United States. This is a tremendous accomplishment, and I thank him for his work.

In addition to clinical responsibilities, our faculty remains committed to embracing new leadership opportunities. We're extremely proud that Minka Schofield, MD, has been selected to chair the Ambulatory Quality Committee and co-lead the Anti-Racism Planning Committee at the Ohio State Wexner Medical Center. We also commend Leslie Kim. MD. who was nominated as the vice chair and chair-elect for the Women in Facial Plastic Surgery Committee for the American Academy of Facial Plastic and Reconstructive Surgery.

I'd also like to express my heartfelt gratitude to Ricardo Carrau, MD, who generously stepped up after I was asked to serve as interim dean for The Ohio State University College of Medicine last year. Dr. Carrau filled in where I could not, working diligently with our executive team on day-to-day department operations to ensure that our initiatives continued to progress. Furthermore, he skillfully navigated us through an unprecedented time in our medical center's and nation's history. I thank Dr. Carrau for his commitment and willingness to serve our team in this capacity and look forward to his contributions as our new vice chair of diversity.

The past year was remarkable, and I hope that 2021 will be a year of happiness and health for us all. I also hope that it will be a year of further growth and success as we continue developing our vestibular center, welcoming new faculty to the department, and adding our second Head and Neck fellow. Further opportunities will arise with the introduction and evolution of several medical center ventures, including the addition of two new outpatient care facilities in Columbus; the opening of a new surgical skills lab; the construction of a new Interdisciplinary Health Sciences Center; and a new biomedical research facility.

While 2020 was challenging for us all, our department continues to flourish. My optimism for the future is only further buoyed by the arrival of the vaccine—an unparalleled achievement and the beginning of the end of the pandemic. I am honored to serve our department and look forward to guiding us in our advancement of the academic mission. On behalf of the Department of Otolaryngology – Head and Neck Surgery, I hope you enjoy our annual report.

Sincerely.

James 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



# RESEARCH

# FY2020 by the Numbers

### Total Awards: \$6,490,701

NIH Awards: **\$4,208,355** Other Federal Awards: **\$2,111,272** Other Awards: **\$171,074** 

### Active Grants: 30

NIH Grants: 14 (includes 1 F32, 1 K56, 6 R01, 1 R01 Supplement, 1 R13, 3 R21, 1 R23) Non-NIH Federal Grants: 1 Department of Defense

Principal Investigators: 18

Active Clinical Trials: 21

New Publications: 202

# NEUROVESTIBULAR SCIENTIST LEADS \$7.5 MILLION STUDY THAT COULD UNLOCK THE MYSTERIES OF SPATIAL DISORIENTATION IN FLIGHT

Spatial disorientation is responsible for 5% to 10% of all aviation crashes, including the crash that killed John F. Kennedy Jr. and two passengers in 1999. The phenomenon typically occurs when flying in clouds or at night. Pilots, deprived of visual reference points, become more likely to misinterpret sensations from other body systems. They may experience sensory illusions, such as a feeling that the plane is tilted when it's actually flying straight. Ignoring flight instruments, they "correct" the problem—with sometimes fatal results.

The vestibular system plays an outsized role in spatial disorientation, says **Dan Merfeld, PhD**, a neurovestibular scientist in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center.

"When you can't see, you have to depend on vestibular function to get a sense of where you are in space," he explains. "That's challenging, because the vestibular system relies on visual cues to help us get our bearings. In the early days of flight, it was very common for pilots to fly into a cloud, become disoriented and crash to the ground. Better training and instrumentation have reduced the incidence of such crashes significantly, but these crashes still occur and cause unnecessary loss of life in civilian and military aviation."

#### **Complex Interactions**

Dr. Merfeld joined the Department of Otolaryngology in 2017 and also works as a senior vestibular scientist at the U.S. Department of Defense's Naval Medical Research Unit-Dayton (NAMRU-D). This year, he launched a multicenter research study focused on understanding how to avoid disasters when humans control complex machines, particularly airplanes.

The \$7.5 million study, funded by the Department of Defense, brings together experts in fields ranging from engineering to otolaryngology and includes sensory physiology, motor physiology and autonomic nervous system expertise at The Ohio State University, Johns Hopkins University, Massachusetts Eye and Ear Infirmary, Rutgers University, University of Arizona, University of Colorado-Boulder, University of Dayton and the NAMRU-D.

The team of about 30 researchers will develop computer-based models that capture crucial elements that relate to the way people interact with complex machines such as jet aircraft. These elements include how movements influence the decisions operators make when controlling an aircraft, and what effect those movements and actions have on a person's physiological sensory capabilities. These models can then be used to help reduce aircraft crashes and other disasters related to the complex interactions of humans with machines.



### Activities of Study

To conduct their experiments, the researchers will use existing equipment at labs across the country and develop new technology. Subjects will participate in simulations similar to immersive video games and operate the equipment under normal and adverse conditions.

"We might put someone in a motion device and move them around in ways we control or they control, and manipulate variables such as oxygen levels to create a hypoxic environment. We will simultaneously monitor multiple 'closed loop systems' that affect spatial orientation, including the vestibular, autonomic and somatosensation (body sense), as well as motor commands and the body's biomechanical functions."

Aviation crashes caused by spatial disorientation are almost always fatal, adding a sense of urgency to Dr. Merfeld's work. "While the National Transportation Safety Board has not released its final report on the helicopter crash that killed Kobe Bryant, initial evidence suggested that it was caused by pilot disorientation due to heavy fog," Dr. Merfeld says. "I hope that our research will lead to improvements in automated systems, instrumentation and pilot training to avoid tragedies like this one in the future."

### - Dan Merfeld, PhD

### U01 STUDY TO EVALUATE WHETHER INTRAOPERATIVE MONITORING DURING COCHLEAR IMPLANTATION CAN HELP PRESERVE RESIDUAL HEARING

Study Also Will Establish If Preserving Residual Hearing Is Beneficial



Cochlear implant surgery is life-changing for many people with substantial levels of hearing loss. But it comes at a potential cost, since the surgery usually destroys whatever natural hearing ability the patient had before implantation. What if there was a way to preserve natural hearing with less invasive surgical techniques?

Otolaryngologist <u>Oliver Adunka, MD</u>, has been exploring that possibility for his entire career. Now he's the co-principal investigator of a five-year, \$4.1 million multicenter project that will evaluate a novel technology designed to preserve residual hearing in the cochlear implant ear. The study also will establish whether preserving residual hearing is worth the effort.

The grant, a prestigious National Institutes of Health U01 research project cooperative agreement, was awarded to six U.S. centers— The Ohio State University College of Medicine, Mayo Clinic, Medical College of Wisconsin, University of North Carolina, Vanderbilt University and Washington University. The research team's findings have the potential to shift practice patterns nationwide.

#### A New Way to Maximize Insertion Depth

Dr. Adunka, who is director of the Division of Otology, Neurotology and Cranial Base Surgery at The Ohio State University Wexner Medical Center, has been working on hearing preservation cochlear implantation since the late 1990s. Several years ago, he and a colleague at Washington University developed intraoperative electrocochleography (ECochG) as a way to monitor cochlear implant insertion and obtain objective data about residual hearing during surgery. The Food and Drug Administration approved the technology in 2018, and ECochG now is integrated into most commercially available cochlear implant systems.

"ECochG helps the surgeon find the best position and depth for the electrode within the cochlea to ensure that the implant can function optimally," Dr. Adunka explains. "Using the technology also helps minimize trauma to the cochlea, which may allow us to preserve residual hearing and thus overall outcomes with cochlear implantation."

#### Is the Effort Beneficial?

The team will test the new technology by enrolling adults who are candidates for cochlear implantation and have residual hearing in low pitches. Patients will be randomized into two groups—one group will have intraoperative ECochG monitoring during implant surgery, and the other will have conventional cochlear implant electrode insertions. After surgery, both groups will participate in electric acoustic stimulation therapy—the ipsilateral combination of electric hearing via a cochlear implant and acoustic hearing via a hearing aid.

Researchers will record and analyze hearing preservation and other performance outcomes between the groups to assess the clinical value of intraoperative monitoring and hearing remnants in combination with the implant.

"We think that using ECochG will help us preserve hearing in a higher proportion of people, but we also want to quantify the value of hearing preservation," Dr. Adunka says. "Previous studies have suggested that preserving natural hearing allows patients to distinguish pitch better, which leads to better benefits for perceiving music, speech and other sounds. It also may help people process ambient noise, which can be challenging for those with a cochlear implant."

The Ohio State Wexner Medical Center is a high-volume center for cochlear implantation. Each year, the four otolaryngologists on the team perform about 80 implants on adults and 80 on children in partnership with Nationwide Children's Hospital. Dr. Adunka's U01 study is one of many at the medical center that is exploring ways to improve cochlear implantation and improve the quality of life for those with severe hearing loss who do not benefit from hearing aids.



## ACTIVE CLINICAL TRIALS FY20

The Department of Otolaryngology – Head and Neck Surgery continues to be a national leader in the exploration of otolaryngology and human communication disorders through 21 active clinical trials.

#### FACIAL PLASTIC AND RECONSTRUCTIVE SURGERY

**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

#### **GENERAL ENT**

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

#### **HEAD AND NECK CANCER**

**Stephen Kang, MD** – A Registry to Evaluate the Flexitouch System and Flexitouch Plus for Treatment of Head and Neck Lymphedema

**Stephen Kang, MD** – Detection of Occult Nodal Metastases Using Intraoperative Lymphatic Mapping in Head and Neck Oral Cavity Squamous Cell Carcinoma

**Matthew Old, MD** – Phase II Trial of Adjuvant Cisplatin and Radiation With Pembrolizumab in Resected Head and Neck Squamous Cell Carcinoma

**Matthew Old, MD** – Nivolumab and BMS986205 in Treating Patients With Stage II-IV Squamous Cell Cancer of the Head and Neck

**Enver Ozer, MD** – Transoral Robotic Surgery in Treating Patients With Benign or Malignant Tumors of the Head and Neck James Rocco, MD, PhD – Radiation Therapy With or Without Cisplatin in Treating Patients With Stage III–IVA Squamous Cell Carcinoma of the Head and Neck Who Have Undergone Surgery

James Rocco, MD, PhD – Phase II Trial of Adjuvant De-Escalated Radiation + Concurrent and Adjuvant Nivolumab for Intermediate-High Risk P16+ Oropharynx Cancer

**James Rocco, MD, PhD** – Phase II Study of Enzalutamide (NSC#766085) for Patients With Androgen Receptor Positive Salivary Cancers

James Rocco, MD, PhD – Cetuximab and Nivolumab in Patients With Recurrent/ 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 (*Co-investigators Laura Matrka, MD, and Brandon Kim, MD*)

**Brad deSilva, MD** – Customized Tracheostomy Fistula Plug (Co-investigators – Laura Matrka, MD, and Brandon Kim, MD)



### 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 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 (Co-investigators – Ed Dodson, MD, and Aaron Moberly, MD) **Edward Dodson, MD** – Regional Anesthesia for Otologic Surgery *(Co-investigators – Aaron Moberly, MD, and Jameson Mattingly, MD)* 

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

**Christin Ray, PhD** – Aural Rehabilitation: Contributing Factors and Speech Recognition Changes for Cochlear Implant Users

### RHINOLOGY

**Alex Farag, MD** – Treatment of Post-Operative Sinonasal Polyposis With Topical Furosemide

**Kai Zhao, MD** – Olfactory Training for Patients With Olfactory Losses

### **ACTIVE RESEARCH FUNDING FY20**

The Department of Otolaryngology — Head and Neck Surgery proudly expanded its research funding portfolio by 38% between FY19 and FY20.

### **ACTIVE NIH FUNDING**

Lauren Bakaletz, PhD, Pl International Symposia on Rece	00/01/2010 00/01/2020	NIH/NIDCD	R01DC015687
Lauren Bakaletz, PhD, Pl Otitis Media: Role of Epigenetic	08/01/2016 – 07/31/2021 Regulation on NTHI Pathogenesis (	NIH/NIDCD and Optimal Vaccine D	R01DC015688 Design
* *	07/20/2011 – 08/31/2021 he Management of Otitis Media Du	NIH/NIDCD ne to H. Influenzae	R01DC011818
<b>Lauren Bakaletz, PhD, Pl</b> Determinants of H. Influenzae V	09/30/1999 – 07/31/2020 'irulence in Otitis Media	NIH/NIDCD	R01DC003915
Irina Castellanos, PhD, Pl Psychosocial Outcomes in Deaf	03/01/2017 – 02/28/2020 Children With Cochlear Implants	NIH/NIDCD	R13DC017389
<b>Tendy Chiang, MD, Pl</b> Mechanisms of Regeneration in	07/14/2017 – 06/30/2022 Tissue Engineered Tracheal Grafts	NIH/NHLBI	K08HL138460
Shuman He, MD, PhD, PI Neural Encoding and Auditory F	04/01/2019 – 03/31/2024 Processing of Electrical Stimulation	NIH/NIDCD in Pediatric Cochlear Ir	R01DC017846 mplant Users
* * *	01/15/2018 – 06/30/2022 Perception in Cochlear Implant User		R01DC016038
,,,,,,,,,,,-	01/01/2020 – 12/31/2024 ord Learning in Young Deaf Childre	NIH/NIDCD on with Cochlear Impla	R01DC017925 nts
Derek Houston, PhD, Co-Pl Improving Early Literacy Outcon	09/01/2019 – 08/31/2021 nes for Children with Hearing Loss	NIH/NIDCD	R56DC017458
Derek Houston, PhD, Pl Oliver Adunka, MD, Cl Infant-Directed Speech and Lan	08/14/2015 – 6/30/2020 guage Development in Infants With	NIH/NIDCD h Hearing Loss	R01DC008581



	Daniel Merfeld, PhD, Pl Oliver Adunka, MD, Co-Pl Vestibular-Oriented Research M	03/15/2019 – 02/28/2022 eetings	NIH/NIDCD	R13DC017921
	Daniel Merfeld, PhD, Pl Employing Vestibular Threshold		NIH/NIDCD	R01DC014924
	Aaron Moberly, MD, Co-Pl Garth Essig, Jr., MD, Cl Auto-Scope Software-Automate	09/21/2018 – 08/31/2020 d Otoscopy to Diagnose Ear Patho	NIH/NIDCD logy	R21DC016972
	<b>Aaron Moberly, MD, Pl</b> Variability in Speech Recognition	04/01/2017 – 03/31/2022 n for Adults With Cochlear Implants	NIH/NIDCD s: Bottom-up and Top-a	K23DC015539 Iown Factors
	NIH/NIDCD er Cochlear Implantatio	F32DC017076		
	<b>Ruili Xie, PhD, Pl</b> Cellular Mechanisms of Age Rel	09/19/2017 – 06/30/2022 ated Hearing Loss	NIH/NIDCD	R01DC016037
	Kai Zhao, PhD, Pl Endoscopic Nasal Sinus Suraery	03/05/2019 – 02/28/2021 Simulator to Optimize Treatment (	NIH/NIDCD Outcome	R21DC017530

Endoscopic Nasal Sinus Surgery Simulator to Optimize Treatment Outcome



#### **ACTIVE NON-NIH RESEARCH FUNDING**

**Oliver Adunka, MD, Pl** 08/15/2019 – 08/14/2022 DOD Clinical Utility of Residual Hearing in the Cochlear Implant Ear

**Oliver Adunka, MD, Pl** 03/07/2017 – 04/30/2020 Cochlear Americas Clinical Evaluation of the Cochlear Nucleus® CI532 Cochlear Implant in Adults

Eugene Chio, MD, Pl06/22/2018 – 06/21/2021InspireAdherence and Outcome of Upper Airway Stimulation (UAS) for Obstructive Sleep Apnea (OSA) International Registry

Alex Farag, MD, PI11/19/2019 - 12/30/2020RELIEVA TRACT Balloon Dilation System: Preclinical Study

Acclarent Inc.

Jameson Mattingly, MD, Pl07/01/2019 – 06/30/2020Hearing Health FoundationDifferentiating Meniere's Disease and Vestibular Migraine Using Audiometry and Vestibular Threshold Measurements

Daniel Merfeld, PhD, Pl05/01/2020 - 04/30/2023Employing Vestibular Thresholds to Improve Patient Diagnosis

Office of Naval Research

Daniel Merfeld, PhD, Pl 02/05/2020 – 02/04/2021 NAMRU-D Vestibular Research (IPA)

NAMRU-D

Daniel Merfeld, PhD, Pl04/15/2019 – 04/14/2023Army Medical Research Acquisition Activity (DOD)Evaluating a Portable Virtual-Reality (VR) Balance Test as a Vestibular Assessment Screen

Daniel Merfeld, PhD, Pl10/01/2017 – 02/28/2020Environmental Tectonics CorporationMathematical Model of Spatial OrientationEnvironmental Tectonics Corporation

Aaron Moberly, MD, Co-Pl01/01/2020 - 04/30/2020Cochlear AmericasClinician-Guided Aural Rehabilitation for Adults with Cochlear Implants

Aaron Moberly, MD, Co-Pl02/21/2019 – 12/31/2019Cochlear AmericasAural Rehabilitation for Adults With Cochlear Implants

Brad Otto, MD, PI 07/06/2017 – 12/31/2019 Aerin Medical A Prospective, Non-Randomized Study to Evaluate Treatment Outcome of Nasal Airway Obstruction using the Aerin Medical Vivaer™ Stylus

Jason Riggs, Aud, Pl07/01/2019 – 06/30/2020Hearing Health FoundationElectrophysiological Characteristics in Children With Auditory Neuropathy Spectrum Disorder

James Rocco, MD, PhD, Pl03/28/2019 – 02/28/2025NCIUG1CA233331Scientific Leadership: OSU as a Network Lead Academic Participating Site for the NCI NCTN

Jeffrey Skidmore, PhD, Pl03/01/2019 – 09/30/2020Institute Electrical & Electronics EngineersAutomated Assistive BreathingDevice with Sustainable Energy Source for Disaster Response and theDeveloping World

Kai Zhao, PhD, Pl05/20/2019 – 08/16/2019NCHEvaluating the Utility of Computational Fluid Dynamics in Laryngotracheal Stenosis

### **Highlighted Publications**

In FY20, the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center published more than 200 articles. Here are highlights of those publications. For a complete list, please visit **medicine.osu.edu/departments/otolaryngology/research/publications** 

**Riggs WJ,** Fitzpatrick DC, **Mattingly JK, Harris MS, Hiss MM,** Rajkumar S, **Zhan KY,** Brown KD, **Moberly AC, Dodson EE, Adunka OF.** Electrocochleography During Translabyrinthine Approach for Vestibular Schwannoma Removal. *Otol Neurotol.* 2020 Mar;41(3):e369-e377. doi: 10.1097/ MAO.00000000002543. PMID: 31923083.

Trecca EMC, **Riggs WJ, Hiss MM, Mattingly JK**, Cassano M, Prevedello DM, **Adunka OF**. Intraoperative Monitoring of Auditory Function During Lateral Skull Base Surgery. *Otol Neurotol*. 2020 Jan;41(1):100-104. doi:

**Zhan KY, Puram SV, Li MM, Silverman DA, Agrawal AA, Ozer E, Old MO, Carrau RL, Rocco JW,** Higgins KM, Enepekides DJ, Husain Z, Kang SY, Eskander A. National Treatment Trends in Human Papillomavirus-Positive Oropharyngeal Squamous Cell Carcinoma. *Cancer.* 2020 Mar 15;126(6):1295-1305. doi: 10.1002/cncr.32654. Epub 2019 Dec 11. PMID: 31825543.

Wu Z, Craig JR, Maza G, Li C, Otto BA, Farag AA, Carrau RL, Zhao K. Peak Sinus Pressures During Sneezing in Healthy Controls and Post-Skull Base Surgery Patients. *Laryngoscope*. 2020 Sep;130(9):2138-2143. doi: 10.1002/lary.28400. Epub 2019 Nov 12. PMID: 31714627; PMCID: PMC7549275.

Li L, London NR Jr, Prevedello DM, **Carrau RL.** Endonasal Endoscopic Transpterygoid Approach to the Upper Parapharyngeal Space. *Head Neck*. 2020 Sep;42(9):2734-2740. doi: 10.1002/hed.26127. Epub 2020 Mar 4. PMID: 32129556.

Rock AN, Akakpo K, Cheresnick C, Zmistowksi BM, **Essig GF Jr, Chio E, Nogan S.** Postoperative Prescriptions and Corresponding Opioid Consumption After Septoplasty or Rhinoplasty. *Ear Nose Throat* J. 2019 Oct 15:145561319866824. doi: 10.1177/0145561319866824. Epub ahead of print. PMID: 31610698.

Niermeyer WL, Philips RHW, **Essig GF Jr, Moberly AC**. Diagnostic Accuracy and Confidence for Otoscopy: Are Medical Students Receiving Sufficient Training? *Laryngoscope*. 2019 Aug;129(8):1891-1897. doi: 10.1002/lary.27550. Epub 2018 Oct 17. PMID: 30329157.

Lin C, Puram SV, Bulbul MG, **Sethi RK, Rocco JW, Old MO, Kang SY.** Elective Neck Dissection for Salvage Laryngectomy: A Systematic Review and Meta-Analysis. *Oral Oncol.* 2019 Sep;96:97-104. doi: 10.1016/j.oraloncology.2019.07.008. Epub 2019 Jul 17. PMID: 31422220.

Choo S, **Nogan S, Matrka L.** Postoperative Opioid Prescribing and Consumption Patterns after Tonsillectomy. *Otolaryngol Head Neck Surg.* 2019 Dec;161(6):960-966. doi: 0.1177/0194599819866823. Epub 2019 Jul 30. PMID: 31361554.

**Kuhar HN, Heilingoetter A, Bergman M,** Worobetz N, **Chiang T, Matrka L.** Otolaryngology in the Time of Corona: Assessing Operative Impact and Risk During the COVID-19 Crisis. *Otolaryngol Head Neck Surg.* 2020 Aug;163(2):307-315. doi: 10.1177/0194599820930214. Epub 2020 Jun 2. PMID: 32482131; PMCID: PMC7267742.

Harris MS, Doerfer K, **Moberly AC.** Discussing Age-Related Hearing Loss and Cognitive Decline With Patients. *JAMA Otolaryngol Head Neck Surg.* 2019 Jul 3. doi: 10.1001/jamaoto.2019.1667. Epub ahead of print. PMID: 31268520.

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# CLINICAL PRACTICE

### FY2020 by the Numbers

Providers: 26 (OSUWMC) 13 (NCH)

### APPs: 8

Audiologists: 12

Total Encounters: 75,659

Inpatient Surgeries: 1,060

Outpatient Surgeries: 3,113

### wRVUs: 279,575

Cochlear Implants: 67

Sleep Apnea Surgical Implants: 103

### A DEDICATED TEAM EFFORT TO WEATHER THE COVID-19 STORM

Ohio was one of the first states to take definitive steps toward protecting its citizens against COVID-19. Gov. Mike DeWine declared a state of emergency on March 9, 2020, when only three people in the state had tested positive for the disease. On March 11, he limited nursing homes to one visitor per resident per day. The next week, he asked hospitals to delay elective surgical procedures to preserve personal protective equipment (PPE).

By then, otolaryngologists at The Ohio State University Wexner Medical Center were already taking decisive measures to ensure a safe environment for patients and health workers while continuing to provide critical medical services amid the pandemic. The stakes were also high for providers themselves, since otolaryngologists are at higher risk of COVID-19 exposure than most other medical specialists due to the types of surgeries and office-based procedures they perform.

"When the virus hit, we mobilized quickly to provide telehealth as an alternative to many outpatient visits, created a safe environment for patients who needed in-person care and established a priority ranking system for patients whose treatment plan included surgery," says <u>James Rocco, MD, PhD</u>, chair of the Department of Otolaryngology – Head and Neck Surgery. "Our faculty also found creative ways to continue offering training opportunities for medical students, residents and fellows during this unprecedented time."

#### Serving Our Ambulatory and Surgical Patients

When the governor's elective surgery ban was announced, the Department of Otolaryngology's head and neck cancer service line suspended almost all cancer surgeries for two weeks. The plan was to resume operations once the medical center could establish COVID-19 screening and testing procedures and ensure an adequate PPE supply.

The service line leaders created an emergency operations tumor board with representatives from otolaryngology, surgery, radiation oncology, medical oncology, nursing and pharmacy.

"We met via video conference every day to establish a priority ranking system for the 200-plus patients who were waiting for surgery," says <u>Matt Old, MD</u>, director of the Division of 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). "We discussed each patient individually—who needed surgery right away, whose surgery could be delayed and which patients could be switched to a nonsurgical treatment strategy."

"I think it helped patients to know that an entire team was behind them and working together to provide the best care possible in extremely unusual circumstances. It was a very stressful few weeks, but by early May, we caught up on the backlog of surgical patients. We didn't observe any advancement in disease as a result of the treatment decisions we made during those early weeks of the pandemic."

- Matt Old, MD



Every decision was made as a team so that the responsibility and emotional burden was shared by many.

Otolaryngology ambulatory clinics posed a different set of challenges, and leaders responded with a comprehensive plan to ensure everyone's safety. The most significant initiative involved a pivot to telehealth, which otolaryngologists at the Ohio State Wexner Medical Center had not used before the pandemic. Of the more than 2,000 otolaryngology appointments in April, 75% were conducted via telehealth.

The department began offering more inperson appointments in May while following well-established infection-control guidelines. These included requiring COVID-19 testing for any patient whose clinical evaluation would involve an aerosol-generating procedure.

### Creating a Safer Inpatient Plan

Caring for patients while keeping them (and providers) safe in the inpatient setting became a balancing act that required collaboration with other specialists throughout the medical center. For example, otolaryngologist <u>Minka</u> <u>Schofield, MD</u>, led a multidisciplinary effort to create a COVID-19 response for patients in the intensive care unit who were being considered for a tracheotomy.

"Tracheotomy is one of those aerosolgenerating procedures that puts providers at increased risk for contracting COVID-19," Dr. Schofield says. "We needed to establish protocols that would limit physician exposure to the virus and guide decision making when a complex airway patient tested positive for COVID-19. I worked with fellow otolaryngologists and a pulmonologist specializing in airway issues to develop trach protocols that took many factors



into account, such as a patient's condition and prognosis, physician availability during reduced workforce conditions, and the availability of PPE. We followed the protocol using a multidisciplinary team approach to reach a consensus about each patient's surgical airway plan."

#### **Preparing for What's Next**

During the early days of the pandemic, otolaryngologists at the Ohio State Wexner Medical Center recognized an opportunity to conduct research that would help establish new best practices if COVID-19 cases surge or another pandemic occurs.

"Before the medical center instituted COVID-19 testing protocols, there was a lot of fear about whether it was safe to do airway surgeries and how providers could protect themselves and their patients from the virus," says laryngologist Laura Matrka, MD. "Some of my colleagues and I decided to document the department's efforts to keep clinical areas safe. This involved collecting data about what PPE was worn and by whom, documenting other surgical safety methods and evaluating provider experiences with telehealth, for example. Our research on the initial response has already been published, and our additional publications will show how our response is evolving."

Dr. Matrka says that in the midst of a very trying year, she saw some silver linings. "To provide the best possible care for patients during the pandemic, our entire team pulled together in ways we never had to before," she says. "I feel very fortunate to have gone through this experience with my colleagues at the Ohio State Wexner Medical Center. If there's a surge or we face another pandemic in the future, we'll be ready."

# OHIO STATE OTOLARYNGOLOGIST IMPLANTS MORE UPPER AIRWAY STIMULATION DEVICES THAN ANYONE IN THE WORLD



#### A Significant Reduction in Sleep Apnea Events

Upper airway stimulation therapy, sometimes referred to as "Inspire" after the company that developed it, is an effective option for patients who don't tolerate CPAP therapy. The implant delivers mild stimulation to the hypoglossal nerve to improve tone and prevent the tongue from blocking the airway during sleep. The Food and Drug Administration approved the therapy in 2014, and in 2019, The Ohio State University Wexner Medical Center was designated as an Inspire Center of Excellence—one of about 20 in the world. "Initial studies show that upper airway stimulation patients experienced a 78% reduction in sleep apnea events, as well as reduced snoring—about 85% of bed partners report no snoring or soft snoring," says Dr. Chio, director of the Sleep Surgery Program at the Ohio State Wexner Medical Center.

In addition to helping patients with OSA, this therapy may also be appropriate for patients who have both obstructive and central sleep apnea, as long as the central sleep apnea episodes account for less than 25% of all disrupted breathing episodes.

#### **Two-Incision Approach**

During an outpatient surgical procedure that typically lasts two to three hours, Dr. Chio makes an incision under the chin to connect a lead to the hypoglossal nerve and another incision below the collarbone to place the battery and the respiratory sensor. Placing the sensor below the collarbone, rather than in the flank, results in needing only two incisions instead of three. Dr. Chio says this allows for a faster procedure and improved healing process, as well as a potentially lower risk of infection.



The device is not activated for the first month to allow for a full recovery. After a month, the patient returns to the Sleep Surgery Center to have the device activated and to set initial stimulation parameters.

#### Fully Adjustable

The patient uses a handheld remote to turn the device on and off based on their sleep schedule. The device can begin operating at a set interval after going to bed (typically 30 minutes), allowing adequate time for the patient to fall asleep naturally.

"The device senses chest wall motion and respiratory effort, issuing stimulation only when the patient inhales, which is when OSA occurs. This stimulation moves the tongue forward to prevent airway obstruction. Upon rising, the patient simply turns off the device using the remote."

- Eugene Chio, MD



Some patients report mild twitching of the tongue during use, but adjusting the stimulation settings can minimize this. The device battery lasts about 11 years and can be replaced when necessary.

Upper airway stimulation is indicated for patients with moderate to severe OSA who have failed conservative therapies, such as CPAP. The therapy is approved for patients with a body mass index (BMI) of less than 32, although patients with a BMI of up to 35 may be eligible. An evaluation for upper airway stimulation includes a drug-induced sleep endoscopy (DISE) to ensure that the patient's anatomy is compatible with treatment.

Dr. Chio and his colleagues at the Sleep Surgery Center offer other procedures for people with moderate to severe OSA, including tonsil removal, nasal surgery, and a variety of palate surgery/tonsil, soft palate and tongue-based procedures.

### RESEARCH DRIVES CLINICAL CARE FOR OHIO STATE AUDIOLOGY PROGRAM

At The Ohio State University Wexner Medical Center, close collaboration between the audiology program's clinical and research staff leads to steady growth in patient volume—and gives people with hearing loss access to some of the most advanced treatments available.

The team's ongoing participation in clinical trials and its unique expertise in new techniques and devices made it one of the most productive and forward-thinking audiology groups in the nation.

#### Audiology by the Numbers

At Ohio State, the audiology program which falls under the Division of Otology, Neurotology and Cranial Base Surgery—offers comprehensive hearing loss services, from screening and diagnosis to treatment and rehabilitation. It's home to a large, experienced team including 12 audiologists, three audiology aides and a dedicated medical secretary who work alongside fellowshiptrained otolaryngologists.

"Our audiologists are not a separate group within the hospital; they are part of the division," says **Oliver Adunka, MD**, division director and vice chair of clinical operations in the Department of Otolaryngology – Head and Neck Surgery. "This means we offer our patients a cohesive, multidisciplinary experience. We make treatment decisions as a group, not as individual providers."

The audiology program offers the full range of medical and surgical therapies for patients with conductive, sensorineural or mixed hearing loss. In Fiscal Year 2020, the team sold 770 hearing aids, **performed 67 cochlear implants** and performed 28 bone conduction implants that primarily used the innovative new Bonebridge device.

#### Unmatched Experience With an Emerging Device

Unlike traditional bone anchored hearing aids that have a visible titanium prosthesis, Bonebridge implants are fully embedded under the skin and don't require surgical access to the middle ear. As an added patient safety benefit, they also contain MRIcompatible magnets.

"We performed the first Bonebridge implant at Ohio State in late 2018, not long after it was approved by the Food and Drug Administration," says Dr. Adunka. "Because of its safety, efficacy and cosmetic appeal, this device has become the preferred implant for many patients with single-sided deafness and chronic ear disease."

In addition to performing Bonebridge implants on adults at the Ohio State Wexner Medical Center, Dr. Adunka also uses the device to treat pediatric patients at Nationwide Children's Hospital in Columbus. To date, Dr. Adunka and his team have performed more Bonebridge implants than any other program in the country.

#### **Scientific Investigations Inform Treatments**

The audiology program's high clinical volume supports a diverse amount of research and allows for robust clinical trial recruitment and enrollment.

Together, researchers work to improve longterm outcomes and quality of life for people with congenital or acquired hearing loss.





Current and recently completed studies, which span both Ohio State and Nationwide Children's, include:

- Comparing electric acoustic stimulation to cochlear implantation alone in patients with residual hearing
- Developing objective clinical tools for optimizing cochlear implant settings among children with cochlear nerve deficiency
- Understanding how children with hearing loss develop the ability to learn words
- Determining how to decrease outcome variability and improve rehabilitation protocols in adults with cochlear implants
- Exploring variability in speech recognition outcomes among adults with cochlear implants

"By integrating our clinical, academic and research activities, we're helping drive new discoveries and put them into practice. This translates to lifechanging treatments for people with profound hearing loss."

- Oliver Adunka, MD

"Our audiology team collectively has more than 230 years of experience and we proudly use that knowledge to provide our patients with the best hearing outcomes possible," adds audiology clinical manager Eryn Staats. "Be it a cochlear implant or a hearing device, a new clinical trial or rehabilitation services, we pride ourselves on being advocates for each patient and helping them enjoy life to the fullest."

### **OTOLARYNGOLOGISTS AT NATIONWIDE CHILDREN'S ACHIEVE IMPROVED** TONSILLECTOMY SAFETY

A multi-pronged safety initiative launched at Nationwide Children's Hospital has reduced the risk of complications among patients who have their tonsils removed.

As part of the hospital's ongoing Zero Hero program to achieve the best possible outcome for every patient, physicians in the Department of Otolaryngology changed the way they care for children who need tonsillectomies. Their efforts improved postoperative bleed rates and led to a significant reduction in the use of narcotic pain medication.

#### **A** Common Procedure with **Considerable Risks**

Pediatric tonsillectomy is one of the most common surgeries performed on children. However, it's still considered a major operation due to the risk of post-tonsillectomy hemorrhage and the complications associated with general anesthesia and opioid use.

"Our team performs up to 1,500 tonsillectomies annually," says Charles Elmaraghy, MD, FACS, FAAP, chief of the Department of Otolaryngology at Nationwide Children's and division director of Pediatric Otolaryngology at The Ohio State University Wexner Medical Center. "Even if there is only a 1% risk of complications, we could see postoperative problems among 10 patients for every 1,000 surgeries. We believe even one child with complications is too many."

Dr. Elmaraghy and his colleagues – including pediatric otolaryngologists Kris Jatana, MD, Meredith Lind, MD, and Patrick Walz, MD realized that making small changes to certain protocols could have a significant impact on patient outcomes. To that end, they addressed several tonsillectomy risks that are relatively manageable or measurable.

#### Assessing Alternatives for Pain Management

Because tonsillectomy recovery can be painful, physicians historically prescribed narcotic medications such as opioids – which are highly effective but potentially addictive.

"Due to the risks of side effects and addiction related to opioids, we decided it was time to change the standard of care," Dr. Elmaraghy says. "Our goal was to increase awareness about the dangers of opioid pain medicines while limiting their use among our pediatric patients."

The team tackled this goal in a stepwise fashion. First, they established a process of informed consent to help parents understand the benefits and risks of opioid use while setting realistic expectations about postoperative pain. This resulted in many parents declining the use of narcotic pain medication. Next, they monitored pain levels among those children given scheduled doses of NSAIDs or acetaminophen and found that most did not require stronger medicines during or after their hospital stay.

"Today, we only use opioids on an as-needed basis," Dr. Elmaraghy says. "After initially prescribing narcotics for around 90% of patients, we now use them in less than 20% of cases."

#### **Eliminating Variation in Bleed Rates**

One of the most significant risks following tonsillectomy is primary and secondary bleeding that, in severe cases, requires an additional surgery and blood transfusion. Even though post-tonsillectomy bleed rates at Nationwide Children's were less than the national average, there was still variation among individual surgeons.



"Because there was variation, we knew there was room for improvement," says Dr. Jatana, who, as director of quality improvement for the department, helped drive the team's efforts. "We started by looking at which colleagues had the lowest bleed rates, then confirming whether they used certain techniques that influenced outcomes."

Not only did each surgeon adopt intracapsular tonsillectomy and other techniques linked to lower rates of postoperative hemorrhage, but they also found that switching from ibuprofen to Celebrex (celecoxib) made a significant difference.

"Interestingly, our data showed that when we stopped using opioids, our bleed rates started to go up. We started using Celebrex because it doesn't have the same antiplatelet effect as other NSAIDs, and this change – coupled with our shift in surgical techniques – dropped our bleed rates by half, from 4% to 2%. This translates to 35 children who did not need to come in for a second surgery for bleeding."

#### Addressing "Never Events" and Language Barriers

Knowing adverse events are largely preventable, the team also created uniform expectations to ensure each patient receives standardized care regardless of who performs their tonsillectomy.

clear guidelines around hospital admissions, meaning we keep certain patients overnight based on specific factors such as their age, comorbidities and disease process."

The team also ensures all families understand and comply with postoperative care instructions, regardless of what language they speak. With the help of interpreters and translators, they make printed instructions available in many languages and proactively check in with families that don't speak English.

"We have a group of physicians who are willing to do whatever it takes to eliminate complications," Dr. Elmaraghy adds. "Plus, the hospital gave us the resources to achieve what others would consider impossible. I believe Nationwide Children's is now among the safest places for children to have a tonsillectomy in the country."



- Kris Jatana, MD

- "A key focus was the risk of catastrophic events following surgery," Dr. Elmaraghy says. "We created

# DESPITE 2020 CHALLENGES, LARYNGOLOGY TEAM MOVES FORWARD WITH NEW RESEARCH AND RECRUITMENT

Even in the midst of unusual and unforeseen circumstances, in 2020 the Voice and Swallowing Disorders Clinic at The Ohio State University Wexner Medical Center found opportunities to strengthen its patient care, teaching and research programs.

In addition to hiring a new research coordinator, the clinic continued providing financial and clinical support to local performing arts organizations.

#### **Robust Research Efforts**

Because the Voice and Swallowing Disorders Clinic may have up to two dozen active research projects underway at any given time, ongoing organization is crucial. With the addition of laryngology research coordinator Bhakthi Deshpande in early 2020, the team streamlined processes and improved productivity.

"With Bhakthi coordinating all of our research efforts, we've become more efficient and effective," says **Brad deSilva, MD**, director of Ohio State's Division of Laryngology and co-director of the Laryngology Fellowship Program. "My colleagues and I experience enhanced coordination in terms of patient recruitment for clinical trials, updating our Institutional Review Board protocols and submitting grants and abstracts."

One of these research projects, led by laryngologist Laura Matrka, MD, took place during the first four months of the COVID-19 pandemic. Dr. Matrka and her team studied how telehealth encounters impact patients with voice, airway and swallowing disorders. "We found that laryngology was better-suited to telehealth than previous studies had ever shown, in part because it was never attempted," Dr. Matrka explains. "While you can't replace that initial in-person visit with a scope of the vocal cords, we found that many post-op visits, pre-surgical discussions, and rechecks for chronic cough or reflux could be readily managed via telehealth."

"Because nearly 100% of our visits at that time were virtual, it was a good opportunity to evaluate how telehealth can streamline patient care," Dr. deSilva explains. "We screened certain patients virtually to determine what type of office procedure they needed prior to their in-person visit, which eliminated at least one trip to our office. We also determined which chief complaints are better suited for telemedicine evaluations."

Several other research initiatives continued or concluded in 2020. An ongoing prospective trial led by Dr. Matrka and laryngologist **Brandon Kim, MD**, in collaboration with Ohio State's neurosurgical and orthopedic surgery spine teams, examines voice and swallowing outcomes in patients undergoing revision anterior cervical spine surgery.

"This study represents an opportunity for us to examine how otolaryngologists' assistance in the approach for anterior cervical spine surgeries, especially in complex or revision cases, may have a positive impact on voice and swallowing measures in these patients," Dr. Kim says.



Multiple other studies, publications and clinical trials are also underway, including a joint research effort with Ohio State's lung transplant team to minimize swallowing dysfunction following lung transplantation.

"We are actively recruiting patients for studies on Zenker diverticulum, airway stenosis, recurrent respiratory papillomatosis and benign lesions of the vocal folds," Dr. Matrka says. "We have a great group of ENT doctors in our region who help get these patients to us for enrollment and we are always seeking new participants." Patients can be referred by calling 614-293-0363.

### A Commitment to Education and Community Engagement

In July 2021, the <u>Laryngology Fellowship Program</u> will welcome Liuba Soldatova, MD, a chief resident in otolaryngology at the University of Pennsylvania, as its latest fellow.

"We are thrilled to have Dr. Soldatova joining us in July in another successful match to our fellowship program," Dr. deSilva says. "With so many more laryngology fellowship programs than candidates across the county, our ability to attract exceptional talent is confirmation of the training opportunities and commitment to teaching within the division."

The voice clinic's faculty and staff also continued prioritizing its partnerships with Opera Columbus, the Columbus Association for the Performing Arts (CAPA) and other local programs that rely on financial support and other assistance from the community.

"While our clinic sponsors many of their productions, my colleague, Dr. Kim, serves on the Opera Columbus board and leads a lot of our community outreach efforts with CAPA and other organizations," Dr. deSilva says. "We also treat many singers and performers who develop laryngeal or vocal fold problems, and we work with local schools of music to teach young singers how to care for their voice. It's all part of our ongoing effort to raise awareness of complex voice, airway and swallowing disorders."

# RYAN NESEMEIER, MD, BRINGS AESTHETIC AND RECONSTRUCTIVE FACIAL SURGERY EXPERIENCE TO OHIO STATE

**Ryan Nesemeier, MD**, has joined the Division of Facial Plastic and Reconstructive Surgery at The Ohio State University Wexner Medical Center as an assistant professor. The Kentucky native, who completed his fellowship training at Indiana University in 2020, will help the division meet the growing demand for evidence-based cosmetic and reconstructive facial procedures.

While attending a training course as a fourthyear otolaryngology resident, Dr. Nesemeier watched a presentation given by his now mentor, Taha Shipchandler, MD, chief of the Division of Facial and Plastic Reconstructive Surgery at Indiana University. The presentation cemented Dr. Nesemeier's decision to practice facial plastics. "I've always been drawn to the complexities and changing nature of reconstructive surgery and was excited to attend Dr. Shipchandler's presentation on emerging reanimation techniques and technologies for people with facial paralysis. Meeting him was fortuitous because it turns out he was getting ready to launch IU's new Advanced Facial Plastic and Reconstructive Surgery Fellowship Program."

- Ryan Nesemeier, MD

The timing worked out; after finishing his otolaryngology residency at the University of Louisville, Dr. Nesemeier transitioned to IU and trained under Dr. Shipchandler and his colleagues for a year.

In addition to facial reanimation surgery, Dr. Nesemeier's clinical interests include facial trauma surgery, skin cancer reconstruction, scar revision, functional and cosmetic rhinoplasty, and facial gender-affirming surgery.

"One of my priorities is to develop a multidisciplinary clinic for people who are transgender or gender nonconforming here in Columbus," he says. "Ohio State already has a transgender primary care clinic, so adding subspecialty services such as facial gender-affirming surgery would be a natural extension of care—and an important local resource for a population that often has to seek care outside of the Midwest."

As a former participant in the Program for Post-graduate Trainees: Future Academic Clinician-Educators at the Harvard Macy Institute, Dr. Nesemeier is also passionate about medical education and looks forward to expanding his teaching responsibilities at Ohio State.

Outside of work, he enjoys thoroughbred horse racing, University of Kentucky basketball and keeping fit with daily cycling and boot camp classes.





### KYLE VANKOEVERING, MD, JOINS INTERNATIONALLY RENOWNED SKULL BASE SURGERY TEAM



Two years after completing his fellowship training at The Ohio State University Wexner Medical Center, Kyle VanKoevering, MD, has returned to Ohio State as an assistant professor in the divisions of Head

and Neck Oncology and Skull Base Surgery. In addition to caring for head and neck cancer patients at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James), he leads the Skull Base Surgery fellowship program and conducts innovative translational research.

Dr. VanKoevering was drawn to otolaryngology during his rotations at the University of Virginia School of Medicine.

"That's when I first began to appreciate the complex anatomy of the head and neck and the technology that continues to transform this rapidly evolving field," he says. "But more than that, I learned this is a specialty that can make a tremendous impact on patients' lives. When we treat head and neck disorders, we're helping preserve or improve speech, swallowing, hearing, facial appearance and other functional or aesthetic attributes that are critical to people's identities."

The Michigan native adds that he's found his professional calling in skull base surgery.

"The skull base is an intricate area of the body that often requires hybrid care from otolaryngologists and neurosurgeons. Together, we play a critical role in diagnosis, treatment and recovery. Not only is it my passion, but it is a privilege to help care for cancer patients; the procedures we perform can make a meaningful difference in their longterm quality of life."

- Kyle VanKoevering, MD

Dr. VanKoevering brought several active research projects to Ohio State from his previous position at the University of Michigan. He's currently building a laboratory that will bring together clinicians and engineers to create novel medical devices.

"During the last decade, I've explored how to combine engineering and medicine to create translational applications for patient care," says Dr. VanKoevering, who has a bachelor's degree in biomedical engineering. "I combine 3D printing, manufacturing techniques and engineering concepts to develop customized treatment tools, including devices related to tracheostomy use and surgical reconstruction."

When he's not busy in his lab or the operating room, Dr. VanKoevering enjoys fishing and other outdoor activities, as well as spending time with his family.

# TIFFANY OWENS, MD, JOINS GROWING DIVISION OF ALLERGY AND IMMUNOLOGY

After spending five years building a busy allergy and asthma program at Licking Memorial Health System in Newark, Ohio, <u>Tiffany Owens, MD</u>, joined the Division of Allergy and Immunology at The Ohio State University Wexner Medical Center in November 2020. The former Air Force physician cares for older children and adults with a wide variety of allergic and immunologic conditions.

Prior to pursuing her allergy and immunology fellowship training at the San Antonio Uniformed Services Health Education Consortium, Dr. Owens was a full-time pediatrician. During that three-year period, she realized how much she enjoyed providing allergy and asthma care.

"As a pediatrician, I cared for many children with conditions like allergic rhinitis and eczema," she says. "I took advantage of a special Air Force program that trains primary care providers to interpret allergy skin tests and administer allergy shots, and from there, I decided to pursue my subspecialty training."

Although she considers herself a general allergist, Dr. Owens—who is also a certified asthma educator—has a particular interest in stinging insect allergies and venom immunotherapy, penicillin allergy, chronic urticaria and pediatric food allergies.

Now that she's joined a leading academic medical center, Dr. Owens looks forward to expanded opportunities to participate in clinical research and medical education.

"I'm interested in education in general," she says. "On the clinical side, because patients are often interested in alternative treatment options, I want to help them understand how to safely and effectively blend nonmedicinal treatments with evidence-based medicine. And in my role as an assistant professor, I'm excited to work with residents and fellows. It's important to be present in the lives of medical students and trainees, not only to provide sound medical education but also to offer encouragement and mentorship."

Outside of work, Dr. Owens is a busy mother of three who enjoys traveling, camping and reading.



# PEDIATRIC OTOLARYNGOLOGY TEAM WELCOMES AMY MANNING, MD

Amy Manning, MD, joined the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center as an assistant professor in August 2020. Her appointment also spans the Department of Otolaryngology at Nationwide Children's Hospital, where she specializes in pediatric airway disease and voice and swallowing disorders.

Dr. Manning felt drawn to otolaryngology during medical school. Not only did the specialty allow her to pursue a surgical career, but she appreciated its breadth and depth of clinical practice along with the diversity of its patient population. Later, during her otolaryngology residency training at the University of Cincinnati Medical Center, she realized she wanted to pursue a career in pediatric otolaryngology.

"As soon as I rotated through the pediatric ENT department, I was hooked. I love kids and enjoy interacting with them in clinic. And perhaps more importantly, I like that I can use my surgical training and experience to support families by helping these young patients feel better."

- Amy Manning, MD



Dr. Manning completed a two-year pediatric otolaryngology fellowship at Cincinnati Children's Hospital Medical Center, where she received advanced training in airway reconstruction. In her new role at Nationwide Children's, she treats patients with a wide range of conditions, including laryngomalacia, tracheomalacia, subglottic stenosis, dysphonia and dysphagia. She also has a special interest in caring for children with tracheostomy dependence.

Although she enjoyed her seven years as a Cincinnati resident, the avid marathon runner says she's happy to be back in Columbus—her home while attending medical school at The Ohio State University College of Medicine.

"When an opportunity arose to join the faculty at Ohio State and Nationwide Children's, I jumped at it," Dr. Manning adds. "Both the job and the city are the perfect fit."

# PRASANTH PATTISAPU, MD, JOINS BUSY PEDIATRIC OTOLARYNGOLOGY DIVISION

The Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center welcomes **Prasanth Pattisapu, MD, MPH**, as an assistant professor. In addition to teaching Ohio State residents and medical students, the Texas native divides his time as a surgeon and researcher in the Department of Otolaryngology at Nationwide Children's Hospital.

Practicing medicine was a natural choice for Dr. Pattisapu, who follows in the footsteps of his surgeon father and uncle. After finishing his otolaryngology residency at Baylor College of Medicine, he completed a pediatric otolaryngology fellowship at Seattle Children's Hospital.

"During my fellowship, I trained under Dr. Andrew Inglis, who helped create the most commonly recognized classification system for laryngeal clefts," he says. "I also received advanced training in endoscopic airway surgery and did a lot of work related to tracheostomy safety and surveillance, which I hope to continue in my new role here in Columbus."

Dr. Pattisapu also discovered a passion for research while pursuing his Master of Public Health. He is especially interested in health care cost-effectiveness and patient decision-making—areas he will continue studying as a principal investigator with the <u>Center for Surgical Outcomes Research</u> at Nationwide Children's Hospital.

"I want to explore the trade-offs people make when considering elective procedures or other types of medical care, and better understand how they weigh the value of their health compared to monetary costs or the potential risks of treatment," he explains. "For example, how does a parent decide whether their child should have a tonsillectomy, knowing the procedure should improve quality of life but can also cause serious complications, including death."

While Dr. Pattisapu has always enjoyed working with children, he says he's especially empathetic to anxious parents now that he's a first-time father to a 15-month-old daughter.

"Parenthood has made me a better clinician because I can better relate to parents' concerns and understand the complexity of making decisions about a child's health," he adds.

Outside of work, Dr. Pattisapu enjoys spending time with his family, cooking, running and—in normal, COVID-19-free times — international travel.







# Education by the Numbers

### Number of Residents\*: 22

**77% male** 

23% female

### Number of Fellows: 8

Number of Specialty Fellowships: 6

\*Resident complement increased to five per year in 2019.

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### OHIO STATE IMPLEMENTS VIRTUAL RECRUITMENT PROCESS TO FILL RESIDENCY AND FELLOWSHIP POSITIONS

In 2020, the COVID-19 pandemic did more than disrupt routine patient care and elective surgeries at health systems across the nation. It also brought new challenges and opportunities to medical students and physicians seeking postgraduate training and to the academic medical centers and teaching hospitals trying to hire them.

Residency and fellowship program directors in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center rose to the occasion. They teamed up to create a multipronged, virtual experience that helps both faculty and candidates get to know each other and confidently make hiring and relocation decisions.

### **Engagement Is Key**

Ohio State's Department of Otolaryngology – Head and Neck Surgery is home to one of the country's largest <u>otolaryngology residency</u> **programs** and six of the most competitive **subspecialty fellowship programs**. Even in the best of times, it takes an extraordinary amount of time and effort to manage the ongoing interview process before hiring and training incoming residents and fellows.

"Before COVID-19, we'd bring 50 candidates to Columbus to interview for the residency program alone," says **Brad deSilva, MD**, director of the Otolaryngology Residency Program and the department's vice chair of education. "Normally, this is an important experience for each applicant, because they get to meet our faculty and residents, tour our facilities and get a sense of the culture in Columbus and at Ohio State. Coordinating these visits takes a lot of work, but it's exciting work we're used to doing; we know what to expect." If the graduate medical education program is a well-oiled machine, then the novel coronavirus was a wrench thrown into that machine. Normal operations ground to a halt.

"We had to quickly come up with solutions to keep potential residents and fellows engaged with and interested in Ohio State, despite taking away their ability to see the campus and the city in person."

- Brad deSilva, MD

He and his colleagues, working with staff inside and outside their department, relied on existing technology to create new means of interaction and observation. They used the **Ohio State website** to showcase video tours, interviews with current residents and faculty, and 360-degree photos of the operating rooms, exam rooms, temporal bone dissection lab and other spaces.

They also used the Zoom videoconferencing platform to host presentations and meet-and-greets and to conduct candidate interviews.

### A Fulfilling Experience for Fellows

One of the first faculty members to test this new virtual process was **Stephen Kang, MD**, director of the **Head and Neck Oncologic Surgery Fellowship Program** at the OSUCCC – James.



"We set aside a Saturday in August to conduct back-to-back interviews with 20 candidates for two fellowship positions," he says. "Despite all the moving parts needing coordination, and the need for staff to be on hand to troubleshoot any technical issues, the experience was a success. We had time to thoroughly interview each candidate, wrap up the interview and then smoothly transition to the next one."

Prior to the interviews, invited applicants attended a virtual presentation led by the current head and neck oncologic surgery fellow, as well as a Zoom "happy hour" with former fellows.

"I think the virtual social activities were a hit because our fellows and alumni are so passionate about their experience at Ohio State," says Dr. Kang. "And after the interviews, several candidates said they appreciated how well our coordinators, Elaine Ortiz and Audrey Agner, organized the process from start to finish."

### A Robust Resident Recruitment Process

Because Match Day for U.S. residency programs won't occur until March 2021, Ohio State had more time to work with medical students interested in its otolaryngology residency program.

"During the summer, we offered virtual rotations to medical students and gave them access to resident didactics and Grand Rounds presentations," Dr. deSilva says. "They were also invited to Zoom meet-and-greets with select faculty and residents, to help them determine if Ohio State was one of the places they wanted to apply." Out of the roughly 500 applicants vying for five otolaryngology residency positions, Dr. deSilva and his colleagues interviewed 50 people in December 2020. Candidates attended a virtual social activity with current residents the night before the interview, and they interviewed with the same faculty members that would have been present in person.

"Even though we didn't invite anyone to campus, we didn't scale back the number of faculty and residents that candidates met," Dr. deSilva adds. "Through all of the online interactions, we hope candidates received a good sense of who they could work with and a glimpse of the culture here."

### Looking Ahead

Although Ohio State's residency and fellowship program directors agree that in-person visits and interviews are preferable to virtual ones, they also feel confident that this alternative experience was effective and positive especially considering the circumstances.

"The in-person experience will always be key for applicants, but through this new process we still made many meaningful connections with people," Dr. Kang says. "One takeaway is that in the future, there's no reason not to add these virtual conversations to our traditional recruitment and hiring processes. There is no limit on how many times we can communicate with candidates, and if a quick Zoom conference helps us answer questions or keep applicants engaged, then we will certainly continue taking advantage of these tools."

# UNIQUE PROGRAM PROVIDES HANDS-ON SURGICAL TRAINING TO OTOLARYNGOLOGY RESIDENTS

A team-based learning initiative launched at the request of chairman James Rocco, MD, PhD, is strengthening surgical preparedness among **otolaryngology residents**.

Now in its second year, the Clinical and Operative Anatomy Skills Training (COAST) program helps residents improve their understanding of head and neck anatomy and practice common surgical procedures before starting their head and neck oncologic surgery rotations. It also improves resident interaction, teamwork and shared knowledge — which helps ensure head and neck cancer patients are well-cared for during and after surgery.

### COAST Relies on Collaboration — and Cadavers

The 10-week head and neck oncologic surgery rotation is not only the busiest rotation for Ohio State's otolaryngology residents, but it also requires familiarity with complex anatomy and procedures. The COAST program, which takes place the weekend before this rotation starts, brings together junior and senior residents, subspecialty fellows and faculty members to provide comprehensive assessment and training.

Together, participants review key head and neck blood vessels, muscles, tissues and other landmarks surgeons look for during surgery. And the availability of cadavers means residents can practice procedures including neck dissection, parotidectomy, thyroidectomy and laryngectomy.

"We use fresh cadavers from the anatomy lab, which provides a high-quality training experience," says COAST founder **Stephen Kang, MD**, an associate professor in the Department of Otolaryngology – Head and Neck Surgery and director of the Head and Neck Oncologic Surgery Fellowship Program at the OSUCCC – James. "This is a great opportunity for residents to stretch their skill set in a safe and supportive environment."

#### Making a Measurable Impact

Second-year resident Hannah Kuhar, MD, who coined the COAST acronym, aims to help the department understand how this type of teambased skills training benefits trainees. She created and implemented a survey process to evaluate residents' baseline knowledge and to measure gains achieved after completing COAST.

Dr. Kuhar is in the midst of the IRB submission process to study COAST participants' experiences and outcomes.

"We give participants a preinstructional survey to assess their knowledge of anatomy, their comfort with certain head and neck surgical procedures and their perceptions of team-based learning models. Following the daylong training, we administer the same survey to see how their responses change."

- Hannah Kuhar, MD



### Early, Advanced Training Makes a Difference

Even though the COAST program began as a pilot, it's quickly become a popular—and permanent—component of the otolaryngology residency program's didactic schedule.

"Surgical training has changed over the years; we're under pressure to do more surgeries in less time," Dr. Kang says. "Subsequently, more physicians are seeking additional, advanced training through fellowships. The COAST program provides valuable training to residents early in their careers. And even though we embrace technology and simulation training, there is something so simple yet effective about giving our residents hands-on training with cadavers."

While Dr. Kuhar has been active in assessing the impact of the COAST program on resident surgical education, she's also benefited as a trainee.

"I first participated in COAST as a surgical intern, and it was a great way for me to get to know the other residents and to learn about the expectations within the operating room," she says. "We're harnessing the benefits of team-based learning to improve our knowledge and skills and to become better teachers. I'm grateful to Ohio State for giving residents like me the autonomy to design hands-on training programs that enhance our skills."





### OHIO STATE SPEARHEADS NATIONAL ONLINE CURRICULUM FOR LARYNGOLOGY FELLOWS

In July 2020, in collaboration with academic health center faculty throughout the United States, physicians at The Ohio State University Wexner Medical Center launched an innovative, online didactics program for laryngology fellows.

In addition to keeping fellows educated and engaged in the midst of clinical disruptions caused by the COVID-19 pandemic, this virtual initiative—called the Laryngology Fellow Online Curriculum (LFOC)—provides valuable networking opportunities. It's also an important first step in developing standardized curriculum that benefits all laryngology fellows, regardless of where they train.

#### Getting Creative During COVID-19

As health systems around the country began preparing for and responding to the novel coronavirus, graduate medical education programs had to find ways to keep residency and fellowship training safely and successfully on track.

"The inspiration for LFOC started with our residents," says **Brad deSilva, MD**, director of **Ohio State's Otolaryngology Residency Program** and co-director of the **Laryngology Fellowship Program**. "There was a six-week period where all elective clinics and surgeries were shut down in Ohio. To help protect our residents, we implemented a platoon system where half provided urgent inpatient care while the other half stayed home and worked on research or other projects. In order to keep them engaged, especially during nonclinical time, we pooled our resources with other residency programs and volunteered to teach online didactics." As virtual educational sessions began popping up in the Midwest, the Southeast and in California, otolaryngology residents could tune in to daily presentations led by faculty at other institutions—and from the comfort of their own homes.

"The availability of this online residency curriculum was a silver lining during the pandemic. And I thought, 'Why can't we do something similar for our fellows?"

- Brad deSilva, MD

#### From Idea to Implementation

Prior to COVID-19, Dr. deSilva and other laryngology fellowship directors discussed how they might begin standardizing their fellowship curriculum but hadn't moved forward with any ideas.

"Each laryngology fellowship program varies in its strengths," Dr. deSilva explains. "That's not a bad thing, but we want to make sure all fellows graduate with similar knowledge and skill sets. We took advantage of our downtime—and the sudden popularity of videoconferencing technology—to begin developing a consistent, comprehensive curriculum."

In April, Dr. deSilva created an LFOC planning committee comprised of colleagues within and outside of Ohio State. It included:

- Lee Akst, MD, Johns Hopkins
- Paul Bryson, MD, Cleveland Clinic
- Dinesh Chhetri, MD, University of California, Los Angeles
- Candace Hrelec, MD, Cleveland Clinic
- Michael Johns III, MD, University of Southern California
- <u>Brandon Kim, MD</u>, The Ohio State University
- Robbi Kupfer, MD, University of Michigan
- <u>Laura Matrka, MD</u>, The Ohio State University
- Josh Schindler, MD, Oregon Health & Science University

Thanks to each contributor's effort and enthusiasm, LFOC is well-attended and well-received. Fellows and faculty fill out evaluation forms after each session, so the planning committee can refine the program as needed.

"It's gone very smoothly so far," Dr. deSilva says. "As we continue to survey participants, their feedback will inform our long-term plans. Even when the pandemic is over, we may continue offering a version of this program because the collaboration and curriculum is so beneficial to everyone involved."



Together, these committee members recruited 56 laryngology fellowship faculty from programs across the country. After each faculty member submitted their preferred topics and available dates, the team created a bi-weekly didactic schedule that's been ongoing since July.

### **Building Bridges While Bolstering Education**

Twice a month, laryngology fellows are invited to attend a virtual keynote presentation followed by a case discussion that's typically led by three panelists, with assistance from an assigned fellow. These panelists include laryngologists and speech-language pathologists, and topics range from building a successful laryngology practice to professional voice management and transgender voice care.

"Not only are we providing top-notch education, but fellows can now learn techniques from laryngology experts they previously didn't have access to," Dr. deSilva says. "And with all of our professional conferences canceled, these sessions provide a new way for fellows to network with each other, and for junior and senior laryngologists to build enduring relationships. This creates opportunities for future employment, professional committee recruitment and multi-institutional research endeavors."

# OHIO STATE EXPANDS HEAD AND NECK ONCOLOGIC SURGERY FELLOWSHIP AND TRANSITIONS TO NEW DIRECTOR

As life expectancy increases and the U.S. population ages, the demand for skilled head and neck surgeons continues to grow. The Department of Otolaryngology – Head and Neck Surgery at the OSUCCC – James will now accept two fellows per year in its Head and Neck Oncologic Surgery Fellowship Program.

In addition to creating this second fellowship position, the program also appointed a new leader for the first time in 15 years. Head and neck oncologic surgeon **Stephen Kang, MD**, who completed this same fellowship at Ohio State in 2015, was named director in July 2020.

### A High-Quality, High-Volume Experience

Among the 50 fellowship programs accredited by the American Head and Neck Society, at the OSUCCC – James Head and Neck Oncologic Surgery Fellowship is one of the most competitive.

"Because of our enormous clinical volume, our fellows are exposed to a wide range of outpatient and operative cases with diverse complexity," Dr. Kang says. "Not only do they gain experience treating rare head and neck cancers, but they're trained to perform some of the most advanced surgical techniques available."

During the one-year fellowship, participants receive extensive training in ablative and transoral robotic surgeries and have an opportunity to work with some of the world's leading experts in open and endoscopic skull base surgery. They also acquire invaluable hands-on experience in microvascular reconstruction; subspecialists in the Department of Otolaryngology – Head and Neck Surgery perform more than 250 free tissue transfers per year, making it one of the busiest programs of its kind.

"Our continued growth in volume means we can

easily accommodate another clinical fellow," says Dr. Kang. "Plus, the addition of a second position provides more flexibility to both fellows. They will have more time to thoroughly and thoughtfully complete their research and teaching responsibilities."

Applicants are also attracted to Ohio State's collaborative environment and collegial atmosphere, where faculty embrace the two-team approach for complicated head and neck cancer surgeries.

"Our fellowship program includes nine head and neck faculty who work closely together and count on each other. We think of our fellows as integral members of the team and aim to provide an experience that's as enjoyable as it is fulfilling."

- Stephen Kang, MD





#### **Fellows Benefit From Firm Foundation**

The OSUCCC – James Head and Neck Oncologic Surgery Fellowship owes much of its success to its previous director, **Amit Agrawal, MD**, who remains on faculty after leading the program for many years.

"Thanks to Dr. Agrawal's leadership, we have one of the most soughtafter head and neck training programs in the nation," Dr. Kang says. "It's an honor to continue providing clinical and academic mentorship to our fellows while helping them pursue their career goals."

The program's expansion to two fellows kicked off with the recent selection of fifth-year otolaryngology residents Catherine Haring, MD, from the University of Michigan, and Bryan Swendseid, MD, from Thomas Jefferson University in Philadelphia. They will begin their head and neck oncologic surgery fellowships at at the OSUCCC – James in July 2021.



### **OTOLARYNGOLOGY DEPARTMENT APPOINTS NEW DIRECTOR OF MEDICAL** STUDENT EDUCATION

The Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center has named Nolan Seim, MD, director of medical student education.

In this role, Dr. Seim—a fellowship-trained head and neck oncologic and microvascular reconstructive surgeon who joined the department in July 2019—mentors and guides medical students who have an interest in otolaryngology. This includes managing clinical rotations for third- and fourth-year medical students and coordinating away rotations for visiting students.

"One of my first responsibilities as director was helping create a virtual away rotation for fourth-year medical students who wanted to learn more about our **Otolaryngology Residency Program**," Dr. Seim says. "Normally we host students from other medical schools who spend a month rotating through our department, but because of COVID-19 we were unable to do so. As an alternative experience, we developed an online rotation that allowed about 50 medical students from across the country to participate in virtual Grand Rounds, resident didactics and informational meetings with our current residents and faculty."

Every year, nearly 40 third-year students from The Ohio State University College of Medicine participate in a two-week otolaryngology rotation, and several fourth-year students complete a comprehensive four-week rotation. These rotations expose participants to head and neck cancer patients at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute; pediatric



otolaryngology patients at Nationwide Children's Hospital; and general adult patients at the Ohio State Wexner Medical Center. They divide their time among operating rooms, outpatient clinics and inpatient floors.

"At any given time, my colleagues and I mentor around 20 medical students who have a legitimate interest in becoming otolaryngologists," Dr. Seim says. "My role is to help them figure out what they need to accomplish during their remaining time in medical school, so they are set up for a successful residency application and interview process—and eventually match at top programs."

As a former Ohio State otolaryngology resident, Dr. Seim feels like he's come full circle.

"Our department has always been a leader in mentorship and education across the College of Medicine; I felt that even as a resident," he says. "Now I get to help inspire young, excited students looking to pursue their own careers in otolaryngology. It's a great opportunity to give back, and to help grow our field."

### **NEW FELLOWS**

#### Allergy and Immunology



Christopher Brooks, MD Hometown: Westerville, Ohio Undergraduate: Ohio Wesleyan University Medical School: The Ohio State University College of Medicine Residency: University of Minnesota



Kelsey Lecerf, MD Hometown: Akron, Ohio Undergraduate: Denison University Medical School: The Ohio State University College of Medicine Residency: Nationwide Children's Hospital/The Ohio State University Medical Center

#### Head and Neck Oncologic Surgery



Anuraag Parikh, MD Hometown: Bombay, India Undergraduate: Princeton University Medical School: Columbia University College of Physicians and Surgeons Residency: Massachusetts Eye and Ear

#### Laryngology



Jeff Straub, MD Hometown: Shawnee Mission, Kansas Undergraduate: Tulane University Medical School: University of Kansas School of Medicine Residency: The Ohio State University Medical Center

### Pediatric Otolaryngology



Celine Richard, MD, PhD Hometown: Saint-Étienne, France Undergraduate: Saint-Étienne, France Medical School: Jacques Lisfranc, Saint-Étienne-Lyon, France Residency: Saint-Étienne-Lyon and Paris, France

# **NEW RESIDENTS**



Daniel Hall, MD Hometown: Ammon, Idaho Undergraduate: Brigham Young University Medical School: University of Utah



University PhD: University of Michigan Medical School: University of Michigan Ryan Ivancic, MD

Zach Huttinger, MD, PhD

Hometown: Wooster, Ohio

Undergraduate: The Ohio State



Hometown: Lorain, Ohio Undergraduate: The Ohio State University Medical School: The Ohio State University College of Medicine



Peter Lancione, MD Hometown: Avon Lake, Ohio Undergraduate: The Ohio State University Medical School: The Ohio State University College of Medicine



Yufan Lin, MD Hometown: Glenmont, New York Undergraduate: Dartmouth College Medical School: Albany Medical College



# LEADERSHIP & RECOGNITION

### DISTINGUISHED ACHIEVEMENTS

The following physicians of the Department of Otolaryngology – Head and Neck Surgery received promotions in Fiscal Year 2020: **Eugene Chio, MD**, was promoted to associate professor-clinical; **Charles Elmaraghy, MD**, was promoted to professor-clinical; **Alexander Farag, MD**, was promoted to associate professor-clinical; **Kris Jatana, MD**, was promoted to professor-clinical; **Stephen Kang, MD**, was promoted to associate professorclinical; **Leslie Kim, MD**, was promoted to associate professor-clinical; **Aaron Moberly, MD**, was promoted to associate professor.

The following physicians from the Department of Otolaryngology – Head and Neck Surgery were named Castle Connolly Top Doctors for 2020: **Oliver Adunka, MD; Amit Agrawal, MD; Ricardo Carrau, MD; Brad deSilva, MD; Edward Dodson, MD; Garth Essig, MD; L. Arick Forrest, MD; Laura Matrka, MD; Matthew Old, MD; Bradley Otto, MD; Enver Ozer, MD;** and James Rocco, MD, PhD.

# OHIO STATE OTOLARYNGOLOGISTS TAKE ON KEY LEADERSHIP ROLES DURING SEARCH FOR NEW MEDICAL COLLEGE DEAN

At the beginning of 2020, when The Ohio State University needed an interim dean for its College of Medicine, it turned to a physician with a long track record of leadership experience. **James Rocco, MD, PhD**, chair of the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center, embraced the additional responsibilities associated with overseeing one of the nation's top-ranked medical schools.

While Dr. Rocco served as interim dean from January until the end of September, his colleague—otolaryngologist <u>Ricardo Carrau,</u> <u>MD, MBA</u>, director of Ohio State's Division of Skull Base Surgery at the OSUCCC – James stepped in as acting chair of the department.

Despite 2020 turning out to be an unexpectedly challenging year, these seasoned physician leaders exemplified the spirit of collaboration Ohio State is known for.

### Similar Responsibilities, at a Much Larger Scale

As department chair, Dr. Rocco serves his faculty—and as interim dean, he served all of the chairs who support the College of Medicine.

"In some ways, when you've been in the same position for a while, your field of vision narrows," Dr. Rocco says. "Becoming interim dean was a great opportunity to see the breadth and depth of the clinical and research operations across the medical school and medical center, and to achieve a better understanding of the challenges other departments face. I have a new appreciation for how our department fits into the institution as a whole and have built relationships with many other chairs."

Although Ohio State's COVID-19 response dominated Dr. Rocco's responsibilities, he helped the College of Medicine accomplish several goals. These include:

- Coordinating salary market adjustments for residents and fellows
- Creating the model for a diversity vice chair position within each department, as part of Ohio State's anti-racism plan
- Initiating a search for a new radiology chair
- Recruiting a new chair of the cancer biology and genetics program
- Securing approval on a new clinical funds flow model to better recognize faculty teaching and research efforts





"The nine months I served as interim dean were very informative and rewarding, and I'm glad I could devote my full attention and energy to the position. I knew the department was in good hands with Dr. Carrau; he did a phenomenal job during a very uncertain time."

- James Rocco, MD, PhD

### Supporting Staff During a Sudden, Seismic Shift

Although Dr. Carrau is no stranger to the demands of running busy clinical, academic and research programs, his responsibilities changed dramatically as acting department chair.

"I started by meeting with every faculty member to understand their goals and see what I could do to remove obstacles," Dr. Carrau says. "Although I've been a member of the department for nearly 10 years, I realized I didn't have a deep understanding of how each division functions or the challenges they face. Now I have a completely different view of the challenges, solutions, opportunities and trade-offs our department encounters or implements on a day-to-day basis."

About a month into his role as acting chair, Dr. Carrau—along with every other leader at Ohio State—suddenly faced a new challenge: the COVID-19 pandemic. He and his colleagues tackled issues ranging from patient and staff safety to clinical trial closures and preparing to care for patients in temporary field hospitals.

Minka Schofield, MD, director of the Division of General Otolaryngology, says Dr. Carrau's leadership skills helped calm the waters and provide a direction for the department during a time when there were so many unknowns, and everyone in the department was trying to navigate their practices and home lives.

"Dr. Carrau recognized that we needed to remain nimble as the climate, policies and procedures changed rapidly," Dr. Schofield explains. "He organized executive team huddles with division directors and a resident representative, along with staff huddles that included the remainder of the department, to share COVID-related updates and operational changes. Under his leadership, we transitioned to a telemedicine platform that allowed us to continue providing patient care. And he was supportive of department faculty who were trying to gain institutional approval of COVID policies designed to keep our physicians and patients safe."

Not one to take credit, Dr. Carrau says he couldn't be prouder of the entire team.

"Our priorities changed almost overnight, and despite the large size of our department, we all moved in the same direction," he says. "This is a testament to Dr. Rocco's ongoing leadership; as chair, he's built a solid, supportive foundation that was unshakeable during a period of high anxiety and ambiguity."

# CAROL BRADFORD, MD, NAMED OHIO STATE DEAN; JOINS DEPARTMENT OF OTOLARYNGOLOGY - HEAD AND NECK SURGERY

After an extensive nationwide search, Carol Bradford, MD, FACS, has been named the next dean of the The Ohio State University College of Medicine, the Leslie H. and Abigail S. Wexner

Dean's Chair in Medicine and vice president for Health Sciences at the Ohio State Wexner Medical Center. Dr. Bradford also joins the Division of Head and Neck Surgery at the OSUCCC – James.

Dr. Bradford comes to Ohio State from the University of Michigan, where she was the executive vice dean of academic affairs and the chief academic officer for Michigan Medicine. A Michigan faculty member since 1992, she also served as chair of the Department of Otolaryngology – Head and Neck Surgery, co-director of the Head and Neck Oncology program for Michigan's Rogel Cancer Center and principal investigator of a major project on the specialized program for research excellence in head and neck cancer.

A physician-scientist, Dr. Bradford specializes in head and neck cancer surgery and reconstruction, cutaneous oncology and sentinel lymph node biopsy. Her research interests include identifying predictive biomarkers for response of head and neck tumors to chemotherapy and radiation and developing novel therapeutics. She has been the principal or co-principal investigator on more than 30 grants and has authored nearly 300 journal articles and more than 20 book chapters.

"How we interact with each other is essential to our own humanity, and tumors of the head and neck can have an impact on many of the ways we connect with others. My goal as a head and neck cancer surgeon specialist is to help people, and preserve form and function, both quality and quantity of life."

- Carol Bradford, MD, FACS

Dr. Bradford earned her medical degree from the University of Michigan, where she also completed an otolaryngology – head and neck surgery residency. Her many awards include being inducted into the National Academy of Medicine in 2014, a Distinguished Service Award from the American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) in 2007 and a listing in Best Doctors since 2001. She became president of AAO-HNS in September 2020.

### THE OHIO STATE DIVISION OF GENERAL OTOLARYNGOLOGY APPOINTS NEW DIRECTOR

### Minka Schofield, MD, FAAOA, FACS,

associate professor in the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center, has been named director of the Division of General Otolaryngology.

Dr. Schofield is no stranger to leadership roles. In addition to her new appointment, she's in the midst of a two-year term as chief of staff for Ohio State's University Hospital, Harding Hospital and East Hospital. She is also cochair of The Ohio State University College of Medicine Admissions Committee and serves on several committees within the American Academy of Otolaryngology – Head and Neck Surgery.

In her capacity as division director, Dr. Schofield represents her team's needs and interests during decision-making at the department level. She also aims to enhance recognition of division members nationally, and ensure clinical staff and residents have the training and resources they need to provide outstanding otolaryngology care.



"In addition to making sure our division's nurse practitioners feel well-equipped to evaluate and treat patients, I'm revamping the educational series we offer to our otolaryngology residents. General otolaryngology is a huge component of the residents' in-service exam, and my colleagues and I are committed to helping them be successful."

- Minka Schofield, MD, FAAOA, FACS

Whether she's refining clinical workflows to accommodate patient volume or making sure patients can take advantage of telemedicine, Dr. Schofield is passionate about improving access to high-quality general otolaryngology care.

"One of my goals is to increase awareness of our division among referring providers and people in the community," she explains. "Not only do we see patients at several locations throughout greater Columbus, but we also offer advanced, minimally invasive treatments such as hypoglossal nerve stimulation for obstructive sleep apnea and sialendoscopy for salivary gland disorders. We plan to continue expanding our breadth of innovative services and helping our patients get the treatment they need and deserve."

# RICARDO CARRAU, MD, NAMED DIRECTOR OF THE NEWLY EXPANDED DIVISION OF SKULL BASE SURGERY

**Ricardo L. Carrau, MD, MBA**, has been named director of the Division of Skull Base Surgery, a role that now spans The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) as well as the Department of Otolaryngology – Head and Neck Surgery at The Ohio State University Wexner Medical Center. The division's recent expansion across disciplines and facilities and its unique leadership collaboration ensures patients with skull base tumors receive the most comprehensive care available.

The OSUCCC – James' Division of Skull Base Surgery is one of the few programs of its kind in the nation. It's led by two internationally renowned pioneers in endoscopic endonasal approaches to skull base surgery: Dr. Carrau, an otolaryngologist with fellowship training in head and neck surgery, and **Daniel Prevedello, MD**, a neurosurgeon with dual fellowship training in neuroendocrine and pituitary surgery, and skull base and cerebrovascular surgery.

"We offer a true multidisciplinary approach, with physicians from neurosurgery and otolaryngology/head and neck surgery working together on nearly every case," Dr. Carrau says. "We also collaborate with physicians from several other medical and surgical specialties, such as neuropathology, head and neck pathology, radiology, endocrinology, medical oncology, radiation oncology and oculoplastic surgery."

The division has a long history of success in improving outcomes for patients across the region and beyond. However, Dr. Carrau says there's still room for growth.



"I'd like us to grow the division in terms of both clinical volume and our academic and research enterprises," he says. "Not only are we committed to developing educational courses and programs for physician trainees and other personnel, but we must continue conducting innovative research that pushes the field forward."

While Dr. Carrau is honored to serve in this leadership capacity, he notes that he's just one of many clinicians and staff members who help guide the division.

"I believe in creating a system that isn't dependent on any particular person to survive," he says. "Here in our division, we have a comprehensive, cohesive network of people and processes that will continue to thrive no matter who is director."





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