OTOLARYNGOLOGY HEADLIGHTS

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THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

COLLEGE OF MEDICINE
DEPARTMENT OF OTOLARYNGOLOGY

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A VISION REALIZED: PART 1

M. Boyd Gillespie, MD, MSc

The decision to pull up stakes and come to Memphis 18 months ago was difficult. I had great colleagues, a great community, and a great practice in Charleston. My chairman,. Paul Lambert, MD, was not only a man of character, integrity, and vision, but he was my friend and mentor. I was Dr. Lambert's first hire-number six in a small out of the way otolaryngology department. From those humble beginnings, Dr. Lambert built a department that grew to 22 clinical faculty; number ten in the **US News & World Report** ranking; top ten in NIH funding for otolaryngology; number one in otolaryngology clinical trials; and top ten in Doximity ranking of ENT training programs. I was fortunate to witness Dr. Lambert's plan yield fruit, and therefore it made sense for me to go forth and do likewise.

I came to Memphis after a period of personal success. I was yearning to do something significant; namely, build a great tertiary academic otolaryngology program in the heart of Midtown Memphis to serve the community and otolaryngology colleagues throughout the region. I wanted to create a place where patients would want to come for advanced care; where young physicians would want to come to learn; and where innovation in otolaryngology would increase. I wanted to offer the best to an area that has been notoriously underserved. That is my mission, pure and simple.

I am pleased to report that we are making progress. With the help of numerous friends in the otolaryngology, hospital, and the university communities, we recently completed phase I of our growth by opening a state-of-the-art 6000 square foot tertiary otolaryngology office in partnership with UT Methodist University Hospital in Midtown Memphis (Figure). The office has a dedicated team of nurses and physicians prepared to meet the needs of the community in advanced head and neck cancer; head and neck microvascular reconstruction; skull base tumors; sinus and allergy; snoring and sleep apnea; advanced airway disorders; and disorders of voice and swallowing. Phase II within the next 12 to 24 months will see a build-out of an additional 4000 square feet to accommodate the needs of adult otologic care including hearing loss, tinnitus, vertigo, and chronic ear disease.

The opening of the new UTMP Head and Neck Clinic is a Vision Realized, Part I. Building a large clinical operation in an area that is economically challenged and burdened by a large population of the underserved, requires a certain amount of faith. Not unlike the Iowa corn farmer in **Field of Dreams**, we have built it in the hope that they will come. A Vision Realized, Part II, requires you; your referrals, your financial support, your encouragement, and your prayers. Together, we will make this possible.

DE-ESCALATION – THE NEXT FRONTIER FOR ENDOSCOPIC SKULL BASE RECONSTRUCTION

Sanjeet Rangarajan, MD, MEng

RHINOLOGY AND ENDOSCOPIC SKULL BASE SURGERY

Over the last 20 years, indications for endoscopic skull base surgery have grown significantly since the first series describing the positive outcomes for patients undergoing endoscopic endonasal approaches to the sella and suprasellar space were published in the literature in the late 1990s. Since then, advances in instrumentation, intraoperative navigation, and anatomic understanding have helped expand the indications for minimally invasive endoscopic approaches to the cranial base. As a result, patients have experienced improved rates of resection, decreased recurrence, and reduced morbidity.

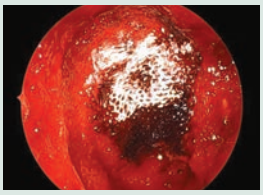
Perhaps the most important development in our field over the last decade, however, is the refinement of strategies for post-ablative cranial base reconstruction. Exposure of the intracranial cavity to the polymicrobial environment of the sinuses can result in cerebrospinal fluid (CSF) leakage, meningitis, and other complications. The development of robust reconstructive techniques, which largely began with the description of the pedicled nasoseptal flap by Hadad et al. in 2006, have allowed us to remove lesions which would have traditionally been considered inoperable.

Tumors extending into the cavernous sinus, middle cranial fossa, infratemporal fossa, orbit, pterygopalatine fossa, and the cervicovertebral junction are now endoscopically resectable because of our ability to reconstruct the complex, three-dimensional defects created during resection. The choice of which technique to use to repair these defects, whether large or small, is a matter of regular debate in our professional societies, and opinions vary significantly between surgeons and institutions. Today, clinical studies from large-volume endoscopic skull base programs are helping to change long-held paradigms of how to best manage cranial base defects at the time of surgery and post-operatively.

Early publications endorsed the routine use of lumbar drains, abdominal fat, synthetic implants, autologous bone, xenografts, heavy nasal packing, and other materials following both routine pituitary surgery and expanded approaches (e.g. transplanum defects, transpterygoid defects, etc.). In general, recent literature has reflected a trend towards de-escalation of reconstructive techniques. My endoscopic "reconstructive ladder" utilizes these materials less often and employs the pedicled nasoseptal mucosal flap selectively based on the specific defect, rather than routinely.

A small skull base defect (A) patched with synthetic graft (B) shows excellent healing during post-operative inspection (C).

A: Post-resection sellar defect.



B: Single sheet of Surgicel placed epidurally over the defect.

C: One month follow-up endoscopic demonstrates re-mucosalization of the sella with scant post-operative crusting.

While I highly recommend a personalized approach to skull base reconstruction, most of our defects are repaired using the following general "algorithm". For patients undergoing routine endoscopic pituitary surgery who do not sustain an intraoperative cerebrospinal fluid leak, a single sheet of an absorbable hemostatic cellulose polymer is placed in an overlay fashion in the extradural space to close the site of the tumor resection (Figure). Placement of the polymer promotes re-epithelialization which begins soon after surgery and can be visualized endoscopically by the second post-operative visit. For defects resulting in a low-flow cerebrospinal fluid leak or a patulous diaphragm sella, a single piece of a synthetic collagen dural graft is placed intradurally and secured with a thin layer of dural sealant on the epidural surface of the repair.

While a free mucosal graft or other epidural overlay can assist with prompt re-epithelialization, a pedicled nasoseptal flap is often not necessary to achieve an excellent post-operative result following a low-flow leak. For extended approaches and resections which result in a high-flow CSF leak in continuity with an intracranial ventricle or cistern, a water-tight primary dural repair and a vascularized mucosal flap is necessary. A bilayer "button" graft composed of autologous tensor fascia lata is an excellent choice to primarily repair the dura given its pliability, inherent resistance to migration, and ability conform to complicated defects.

While lumbar drains are used to be placed routinely for patients undergoing endoscopic skull base surgery, we rarely employ them except in cases where a patient has objective evidence of preoperative, idiopathic intracranial hypertension. Even patients who develop a high-flow CSF leak during tumor resection do not necessarily require a lumbar drain, provided a careful, customized endoscopic reconstruction is performed. Minimizing the use of lumbar drains has led to shorter hospital stays, reduced patient discomfort, and improved cost savings without increasing the post-operative leak rate.

As with head and neck oncologic surgery, careful patient selection and understanding of a post-ablative defect may be the most useful tool in the endoscopic surgeon's armamentarium. Choices regarding reconstructive techniques must be made together with the treating neurosurgeon and other members of the clinical team to maximize patient outcomes. Today, the University of Tennessee Health Science Center Skull Base Surgery Program, which is comprised of clinicians within the UTHSC Departments of Otolaryngology–Head and Neck Surgery and Neurosurgery, addresses skull base lesions and disorders in a multidisciplinary fashion while employing the latest technology and evidence-based research to develop personalized surgical (endoscopic and/or open) treatment plans for our patients.

For patient appointments, please call: **Dr. Sanjeet Rangarajan** 901.737.3021

TRANSORAL ROBOTIC SURGERY (TORS): A TOOL FOR FINDING THE UNKNOWN PRIMARY

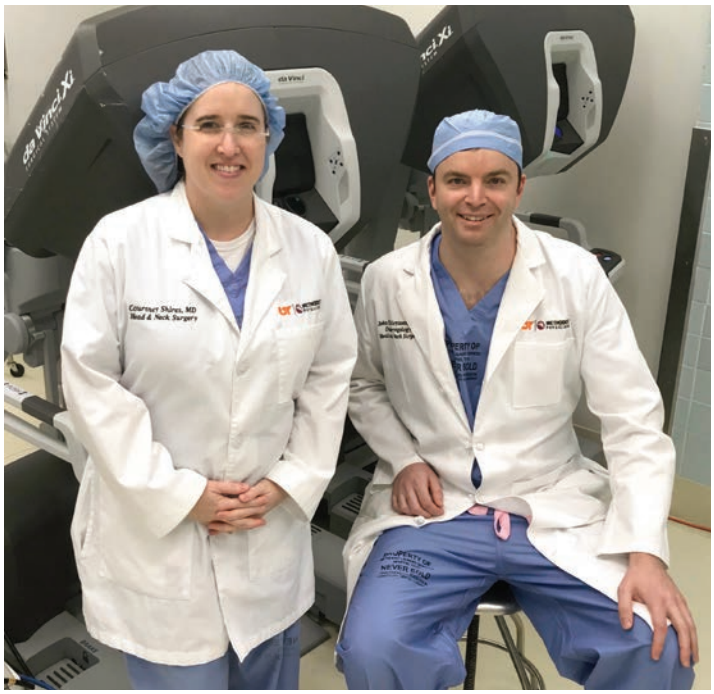
John Gleysteen, MD

The rising incidence of human papilloma virus (HPV)-associated oropharyngeal squamous cell carcinoma (OPSCC) is well documented topic in current meetings and journals. Less often discussed, however, is the increasing proportion of HPV-associated squamous cell carcinoma of unknown primary (SCCUP). This is increasing at a rate similar to HPV-associated oropharyngeal cancer, as oropharyngeal sites are the most common locations of occult primary tumors. Just as the management for oropharyngeal cancer has changed significantly over the past decade, so has the approach for the detection and treatment of SCCUP.

The most common presentation of HPV-related OPSCC is a painless, mobile neck mass. Fine needle aspiration is indicated prior to removal of any persistent neck mass in the adult in order to determine the presence of squamous cell carcinoma. In addition, the work-up of a neck mass includes palpation of throat tissues, a thorough flexible fiber optic examination, as well as cross-sectional imaging of the head and neck. If these steps fail to diagnose the site of the primary lesion, the diagnosis of SCCUP is made and further workup is needed. Traditionally, the workup for SCCUP included direct laryngoscopy with directed biopsies of the nasopharynx, tonsils, tongue base, and hypopharynx. If this approach was unsuccessful in identifying the primary site, the patient would typically be subjected to comprehensive radiation of the entire pharynx and bilateral necks thereby increasing the toxicity and long-term side-effects of radiation.

The old approach has changed due to two main factors: improved prognosis with HPV-associated OPSCC and the advent of transoral surgery. Patients are now living longer after treatment due to the improved prognosis of HPV-related OPSCC, so the need to minimize adverse treatment effects is paramount. Wide field radiation causes unnecessary morbidity to sensitive normal tissue such as the salivary glands and neuromuscular swallowing structures resulting in xerostomia and dysphagia that worsen the patient quality of life. In order to reduce the size of the radiation field, as well as the overall dose, better attempts to find the primary site are necessary. Transoral surgery, primarily by means of transoral robotic surgery (TORS), has led to significant improvements in the ability to identify the occult primary in the oropharynx. The magnification and illumination provided by the robotic camera facilitate detection of subtle mucosal abnormalities, and the ability to perform palatine and lingual tonsillectomies followed by finely-sectioned inspection by the pathologist have resulted in detection rates ranging from 63-100% in HPV-associated SCCUP (Galloway, JCO 2015).

Several algorithms for detection of the occult primary are described in the literature. The current approach to HPV-associated SCCUP at UTHSC is to perform ipsilateral transoral lingual and palatine tonsillectomies followed by frozen section analysis. If the tumor is identified, a complete transoral resection to negative margins is performed. If the tumor is nor found on frozen section, the contralateral tonsils are removed and sent for frozen analysis. If primary tumor is still not found after the removal of all tonsillar tissue, it is now reasonable to pursue de-escalated



Drs. Shires and Gleysteen with DaVinci system

(lower dose) adjuvant treatment to the oropharynx. Management of the neck depends on the suspicion of the presence of extra-capsular spread (ECS) in the nodes. If there is no evidence of gross ECS in the imaging, neck dissection, including ligation of external carotid branches entering the oropharyngeal defect site as necessary is performed. If the imaging is highly suspicious for ECS, neck dissection is deferred and the patients is referred for the appropriate chemoradiotherapy.

Since the best treatment of HPV-associated SCCUP remains uncertain, treatment patterns are often based on institutional biases. For T0N1 (without ECS), unimodality treatment is appropriate with a neck dissection with no adjuvant radiation to the neck or oropharynx being sufficient. With N2a disease, the decision for adjuvant treatment must be weighed on the presence of risk factors like smoking status and ECS. Low risk cases can be treated with unimodality therapy, high risk cases should receive adjuvant treatment. In N2b or N3 disease, radiation is indicated and chemotherapy may be added for the presence of ECS and/or involvement of >4 lymph nodes. **All of these treatment recommendations, however, are predicated on being able to confidently state that the oropharynx is truly T0, which is now possible as a result of improved transoral surgery techniques.**

The UTHSC Head and Neck Team is prepared to use the robotic to find unknown head and neck primaries, as well as provide curative single-modality treatment for HPV-associated oropharynx cancer.

For patient appointments, please call:
UTMP Head and Neck Surgery 901.272.6051

References: Galloway TJ, Ridge JA. Management of squamous cancer metastatic to cervical nodes with an unknown primary site. *J Clin Oncol*. 2015; 33: 3328-37.

A PACT MADE, A PROMISED FULFILLED

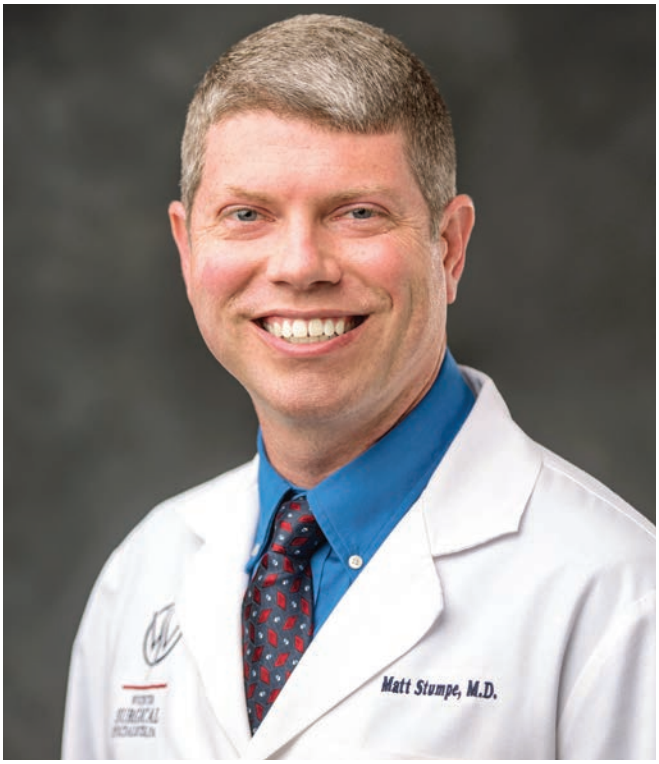
Matt Stumpe, MD, and **Jeremy Watkins, MD,** forged a friendship over the long hours and grueling demands of otolaryngology residency at UTHSC. Since completing their residency training in 2008, the two friends have gone their separate ways, but each has continued to remain true to a pact that they made prior to leaving Memphis. They decided to make annual financial contributions to the mission of the UTHSC Department of Otolaryngology-Head and Neck Surgery. Their donations have been critical in supporting the otolaryngology resident book and loupes fund.

In addition to making financial contributions to the department, Drs. Stumpe and Watkins continue to pay forward their training and expertise within their communities. Dr. Stumpe is currently in private practice in Wichita, Kansas where he serves as a clinical instructor in the Department of Surgery at the University of Kansas. Thanks to his excellent training at UTHSC, he cares for patients facing every facet of otolaryngological disease and pathology. He continues to be active in education and participates in the training of medical students and residents in Wichita. He works to bring new technology and techniques to the community. To facilitate this, he provides education at local community events and professional organization conferences. In addition to raising two children with his wife, Dr. Stumpe volunteers in the community and is currently a scoutmaster of a Boy Scout troop. Being able to mentor and teach young men about the outdoors as well as foster their role as citizens in the community, nation and world, is a great way to give back to the next generation. Giving back was always encouraged during his time at UTHSC which included a meaningful medical mission trip to Vietnam with Mac Hodges, MD.

Dr. Watkins is currently a general otolaryngologist in private practice in Fort Worth, Texas, where he specializes in disorders of the nose and sinuses. He is on the clinical staff at the University of North Texas, and helps train medical students and residents during their otolaryngology rotation. Dr. Watkins serves on several boards for local hospitals and ambulatory surgery centers. He has helped coordinate a volunteer head and neck cancer screening program in the Fort Worth community. Dr. Watkins enjoys spending time with his wife and two sons. He enjoys traveling, fishing, biking, cooking and playing the guitar.

When a recent call came for donations for a new temporal bone/microvascular lab, Drs. Stumpe and Watkins sent donations immediately. They have fond memories of drilling out the structures of the temporal bones in residency but likewise remember the old, outdated equipment. They recall temporal bone labs taught by Bruce MacDonald, MD, with residents crammed into a small space while scavenging for equipment for all the stations. The two friends share an aspiration to give back to foster the training ground that has made them successful. It is their common desire that past and future residents give their support so that the department can continue to grow and provide training in every facet of this noble field.

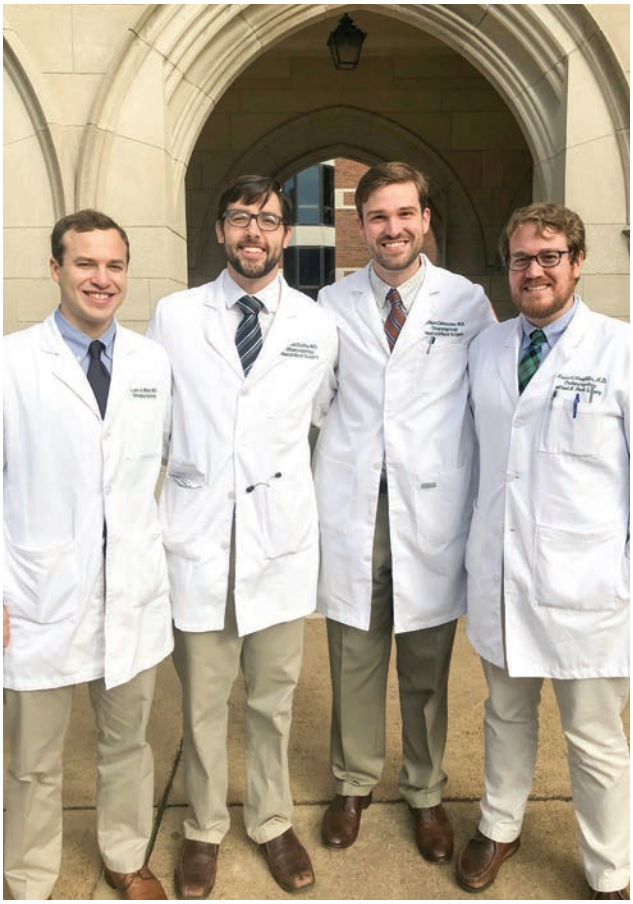
To make a gift to UTHSC Otolaryngology-Head and Neck Surgery, please go to: **uthscalumni.com/GiveENT**



Matt Stumpe, MD

Jeremy Watkins, MD

NEW RESIDENT ARRIVALS



(left to right) Drs. Miller, Dudley, Clinckscales, and Coughlin

80s Flashback. Residents meet Emilio Estevez at a local Memphis pub after work.

Samuel Dudley, MD, grew up with six brothers and sisters in the thumb of Michigan, raising pigs and sheep for 4-H. He attended Brigham Young University, where he obtained a BS in Biochemistry. During his undergraduate degree, he took two years to serve as a missionary in Sacramento, California for the Church of Jesus Christ of Latter-day Saints. After graduating from BYU, Sam was happy to return to Michigan to study medicine at Oakland University William Beaumont School of Medicine. There, Sam's capstone research project centered around assessment of nodal status in head and neck cancer. He also enjoyed researching biomarkers involved with local tumor recurrence. Sam loves playing the piano and tennis, and doing anything outdoors. His favorite things about Memphis are the warm weather and the delicious barbecue restaurants.

William Clinkscales, MD, was born and raised in Sumter, South Carolina with three brothers. The son of medical professionals, he began his own medical career at Vanderbilt University, earning a Bachelor's degree in Neuroscience. While in Nashville, he spent time working in the lab of Dr. Kevin Ess studying aberrant interneuron development in Tuberous Sclerosis. After graduation, he moved to Charleston, SC, to attend the Medical University of South Carolina. While in medical school, he conducted research with the MUSC Department of Otolaryngology-HNS, publishing papers on topics ranging from thyroid genomics to the benefit of middle ear implants. Having returned to Tennessee to begin his training otolaryngology at UTHSC, his research interests include facial reanimation and the effect of tracheostomies on chronic aspiration. In his free time, he enjoys supporting the Grizzlies and the Redbirds, exploring the nearby parks, and listening to live music at local venues.

Kevin Coughlin, MD, grew up in Tampa, Florida. He graduated from Davidson College (Cum Laude) with a Bachelor of Science in Biology and a minor in Chemistry. Dr. Coughlin attended medical school at Florida State University where he worked with the Balance Disorders Clinic on several projects involving vestibular dysfunction, specifically efforts to improve the specificity and sensitivity of the Dix-Hallpike maneuver. During medical school, Dr. Coughlin was inducted into the Alpha Omega Alpha Honor Medical Society, and received the FSU Dean's Award upon graduation. Dr. Coughlin is excited to begin this next chapter in Memphis. In his free time, he is an avid outdoorsman, finding opportunities to backpack, cycle, and hike. He is particularly excited to explore the extensive live music scene in Memphis.

Luke Miller, MD, was raised with loving parents and two younger sisters, Sarah and Grace, in the Chicago area. In high school he ran his own landscape business and was an All-State and All-American wrestler. After tearing his ACL, he decided to pursue medicine. He attended the University of Illinois at Chicago where he graduated Summa Cum Laude with a degree in Biological Sciences. While there, he worked three years in a mice lab investigating treatments for lung cancer. He then attended Chicago Medical School at Rosalind Franklin University. During medical school he continued mice research investigating treatments for diabetic wound healing at Northwestern University. He was inducted into Alpha Omega Alpha and designed a USMLE step 1 review course utilizing novel teaching methods he derived from competitive memory techniques. In his free time, he enjoys playing the piano, exploring Memphis with his co-residents, and playing various sports. He couldn't be happier with where he is training and hopes to continue with basic science research.

RESEARCH HIGHLIGHTS: ADVANCING CANCER CARE IN CHILDREN AND ADULTS

ADVANCING THE MANAGEMENT OF THYROID CANCER IN CHILDREN

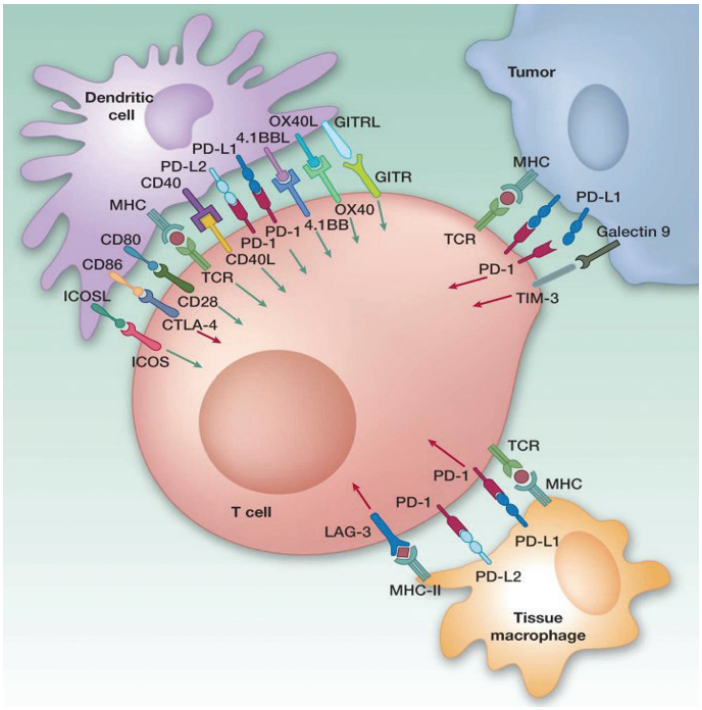
Since the development of a multidisciplinary thyroid malignancy group at St. Jude Children's Research Hospital, the University of Tennessee Health Science Center Division of Pediatric Otolaryngology has engaged in collaborative efforts to develop research projects to improve care for their young patients. Three projects are currently being underway. The first is being led by otolaryngology resident Steven Cox, MD and Alexandra D'Oto (MS III) under the mentorship of Dr. Anthony Sheyn, MD The project focuses on whether pediatric patients undergoing unilateral or total thyroidectomy can be discharged on the same day as surgery to recuperate at home. Minimal complications were observed in preliminary data on 39 patients over a two-year period, indicating that this is likely a safe strategy to decrease hospital costs at experienced centers.

A second study was developed from a previous paper which identified a 20% rate of hypocalcemia in pediatric total thyroidectomy patients. This study by otolaryngology resident Anas Eid, MDHiba Al-Zubeidi, MD (pediatric endocrinology), and Dr. Sheyn focuses on the development of a hypocalcemia protocol for monitoring and treatment of patients undergoing total thyroidectomy. Patient accrual is currently ongoing. A final study is being led by otolaryngology resident Nicholas Beckmann, MD and Dr. Sheyn and focuses on identifying predisposing factors to thyroid malignancy in pediatric patients with genetic cancer syndromes such as DICER1.

BOOSTING THE IMMUNE SYSTEM OF ADULT PATIENTS WITH ORAL SQUAMOUS CELL CARCINOMA

M. Boyd Gillespie, MD, MSc and Courtney Shires, MD, in partnership with the West Cancer Center are excited to offer a research trial of a promising novel immunotherapy for patients with oral squamous cell carcinoma (OSCC). OSCC patients have immune deficiency from poor nutrition and/or tumor-derived immune suppression which leads to the growth and spread of the cancer. The new study drug IRx is designed to boost the native immune system to allow the body to defend itself from the tumor.

IRx is injected subcutaneously behind the ear on the side of the cancer for 10 days prior to surgical resection. The drug stimulates both dendritic cells (antigen presenting cells) and T cells (the cellular immune system) that infiltrate the tumor resulting in reduced tumor volume prior to definitive treatment with surgery and radiation. Patients then undergo booster injections every three months for one year.



Dedritic and T cell activated by IRx can better recognize and attack oral cancer cells.

In initial studies in which Dr. Gillespie was an investigator, the drug was well-tolerated while showing significant increases in tumor infiltrating T cells [1]. The current trial seeks to follow-up on these results to determine whether the therapy reduces cancer recurrence and improves survival. Eligible patients include the following:

- Stage II, III, or Iva squamous cell carcinoma of the oral cavity
- Tumor surgically resectable with curative intent

It is hoped that IRx will improve the likelihood of cure in this patient population, and will add immunotherapy to our growing armamentarium of weapons to fight this dreaded disease.

References

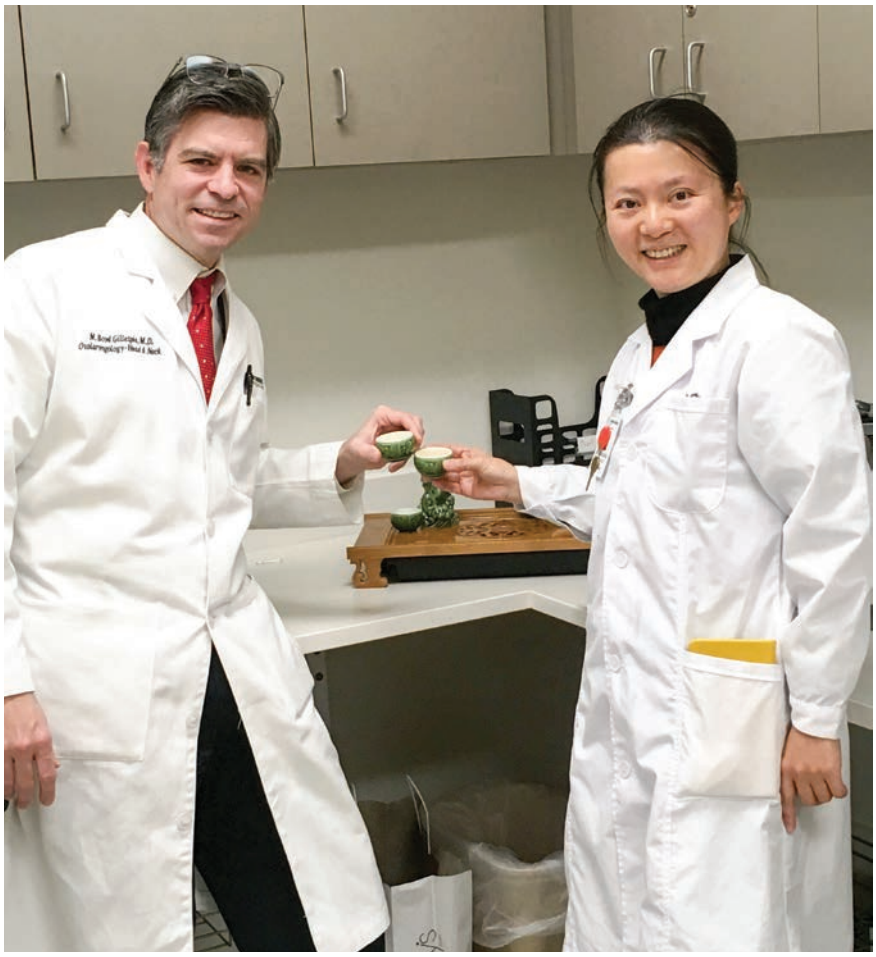
Wolf GT, Fee WE Jr, Dolan RW, Moyer JS, Kaplan MJ, Spring PM, Suen J, Kenady DE, Newman JG, Carroll WR, **Gillespie MB**, et al. Novel neoadjuvant immunotherapy regimen safety and survival in head and neck squamous cell cancer. Head Neck 2011; 33: 1666-74.

FELLOWS AND FRIENDS:
FAREWELL INTERNATIONAL VISITORS

Huiahong Chen, MD, returns home after completing a year as a visiting clinical scholar in the UTHSC Department of Otolaryngology-Head and Neck Surgery. During her time in Memphis, Dr. Chen participated in the surgery and patient care of **M. Boyd Gillespie, MD**, director of the UT-Methodist Sleep Surgery Clinic. Dr. Chen was able to participate in the clinical evaluations of patients with sleep-disordered breathing, hypersomnia disorders, insomnia, and restless-leg disorders. She observed management of snoring in the office-based setting using palatal stiffening procedures such as Pillar implants as well an investigation device with barbed sutures. She performed evaluation of upper airway anatomy and patterns of collapse using fiberoptic examination of the upper airway in both awake supine patients and patients under drug-induced sleep. She was exposed to surgical techniques such as radiofrequency ablation of the tubinates, soft palate, and base of tongue; epiglottectomy; lingual tonsillectomy; transoral robotic (TORS) partial glossectomy; expansion pharyngoplasty; uvulopalatal flap; hyoid myotomy and suspension; and upper airway stimulation therapy with two different devices. Dr. Chen participated in weekly departmental teaching conferences, an advanced sleep surgical course in St. Louis, and the American Academy of Otolaryngology meeting in Chicago.

Dr. Chen contributed to departmental research helping to construct a clinical database to allow longitudinal study of patients undergoing sleep surgery. She observed several clinical trials of sleep surgery devices and learned the best practices and ethics of human clinical trials. She successfully published a case report of a woman who presented with neck pain due to a schwannoma of the hypoglossal nerve. Dr. Chen gave an outstanding grand rounds lecture to the department on current surgical techniques for obstructive sleep apnea in December 2017.

Upon returning to her position as professor of otolaryngology at Nanfang Hospital, Southern Medical University, Guangzhou, Dr. Chen plans to contribute to the growing field of sleep surgery in China. In particular, she hopes to offer TORS as a treatment alternative once her hospital adds a Da Vinci robotic system, and to continue research collaborations on sleep-surgery outcomes with Dr. Gillespie.



Drs. Gillespie and Chen take a break during clinic for Chinese tea.

Amani Obeid, MD, completed a fellowship in facial plastics and reconstructive surgery in the dpeartment. While in Memphis, Dr. Obeid worked with numerous faculty as a clinical fellow performing advanced functional rhinoplasty for patients with sleep-disordered breathing, complex local and regional flaps, distal microvascular reconstruction, and facial nerve rehabilitation with our head and neck cancer team under the direction of **Chris Vanison, MD**. **Philip Langsdon, MD, FACS**, served as her preceptor for facial trauma, aesthetic rhinoplasty, aging face, and facial rejuvenation **Chris Fleming, MD**, professor in the UTHSC Department of Ophthalmology, directed Dr. Obeid's education in oculoplastic surgery.

Dr. Obeid was widely recognized for her professional demeanor and outstanding surgical skills. She provided several facial plastics lectures to the residents over the course of the year, including two grand rounds. Dr. Obeid was an excellent surgical instructor, and residents were eager to do cases under her guidance. She was awarded for her efforts by passing the American Academy of Facial Plastics and Reconstructive Surgery board examination. In addition, Dr. Obeid was an excellent chef of middle eastern delicacies. She returns home to Saudi Arabia where she will serve on the staff of King Abdulaziz Medical City in Riyadh.

PHILLIP R. LANGSDON, MD, FACS, ELECTED PRESIDENT OF AAFPRS

Phillip R. Langsdon, MD, FACS, professor and chief of the Division of Facial Plastic and Reconstructive Surgery in the UTHSC Department of Otolaryngology-Head and Neck was recently elected president of the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS) at the Annual Meeting of the AAFPRS in Phoenix, Arizona. He will serve as president-elect in 2017–18 and then as president 2018–19. As president, he will oversee the nation's largest organization of facial plastic and reconstructive surgeons.

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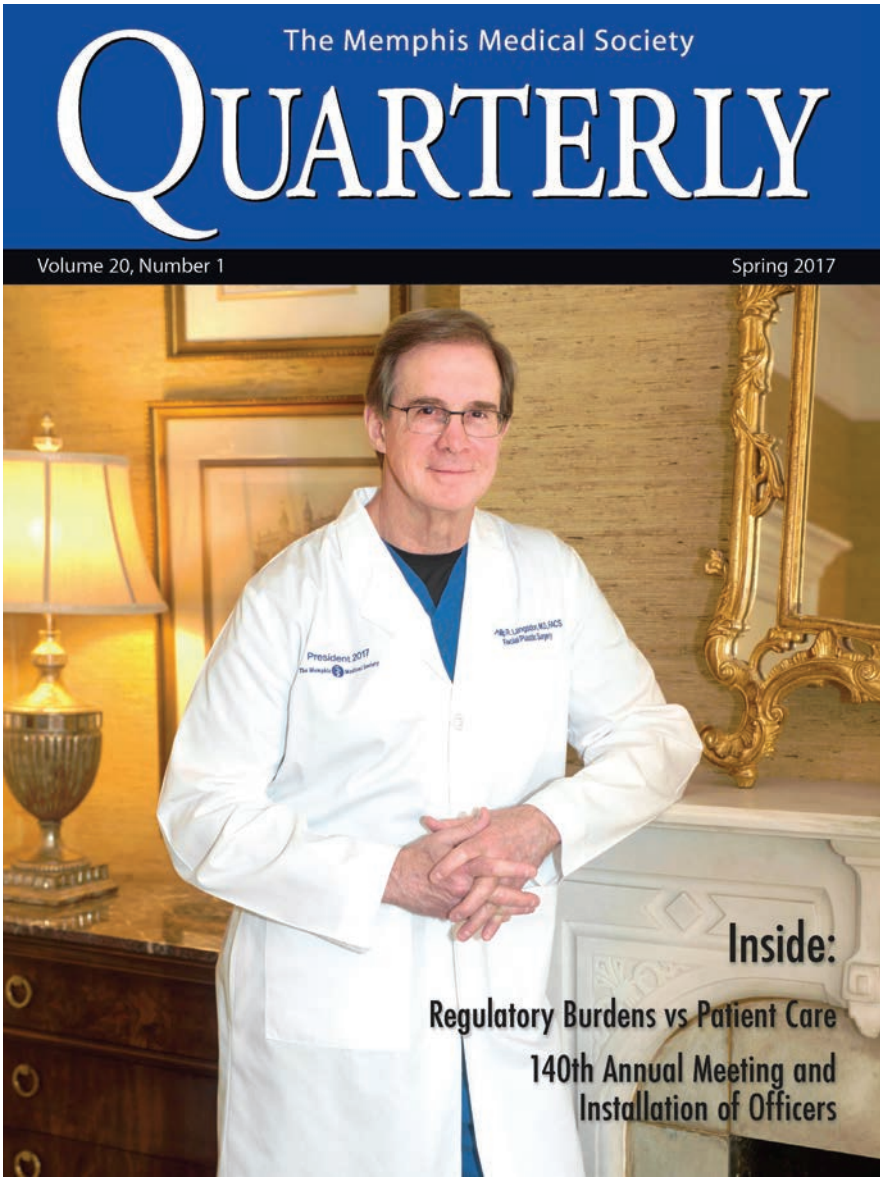
Over the years, Dr. Langsdon has served the AAFPRS in many capacities, most recently as national meeting director as well as a member of the Board of Directors representing the Southern region of the United States As meeting director, he oversees CME programs for the AAFPRS Annual Fall Meeting, rhinoplasty and aging face meetings, and the meeting of the facial plastic surgery section of the Combined Otolaryngology Spring Meeting. As meeting director, he oversaw an improvement of meeting finances, participation of new speakers, and the expansion of both the reconstruction and new innovations education categories.

Dr. Langsdon has been a member of the otolaryngology department at UTHSC for 23 years, where he provides residents training in facial aesthetic surgery at The Langsdon Clinic in Germantown, and trauma and reconstruction training at Regional One Health. Additionally, he is fellowship director for a one-year fellowship in Facial Plastic Surgery under the auspices of the AAFPRS and the Accreditation Council on Post Specialty Education.



Dr. Langsdon on cover of Memphis Medical Quarterly

This year, Dr. Langsdon is completing his term as president of the Memphis Medical Society. He has worked with the University of Tennessee Health Science Center since 1986 when he first served as volunteer faculty for seven years, later becoming a full time faculty member. He received his medical degree from the University of Arkansas College of Medicine, his general surgery training at University of Arkansas for Medical Science in Little Rock, residency in Otolaryngology-Head and Neck Surgery at Indiana University, and fellowship with the AAFPRS, affiliated with the University of Alabama at Birmingham.

FACULTY PROFILES

DR. JOSHUA WOOD

Joshua Wood, MD, joins us after completing a fellowship in pediatric otolaryngology at the Children's Hospital of Pittsburgh. His expertise is in the treatment of the full spectrum of ear, nose and throat disorders in children with a special interest in childhood hearing loss, including cochlear implantation, and other childhood ear diseases as well as training in endoscopic ear surgery. Originally from Idaho, he obtained his medical degree at Creighton University School of Medicine, and completed his otolaryngology-head and neck surgery residency at UTHSC. He joins our faculty as an assistant professor at UT-Le Bonheur Pediatric Specialists where he sees patients at Le Bonheur Children's Hospital and St. Jude Children's Research Hospital. Dr. Wood enjoys spending his time outside of work with his wife and four children. He is an avid water and snow skier, and enjoys watching and playing most sports. He is also actively involved in his church, where he participates in the choir and plays the organ, and is involved in various service projects.

DR. MADHU POORHIMA MAMIDLA

Madhu Poornima Mamidala, PhD, is a native of Hyderabad, India. She earned a PhD in epidemiology from Birla Institute of Technology and Science, Pilani, India. She completed her Masters in biochemistry from Osmania University, India and was a gold medalist. As a researcher, she has given more than a dozen oral and poster presentations at national and International conferences and published five papers in International journals. She loves working in both scientific and administrative fields. Madhu lives in Memphis with her husband Karthik and daughter Skanda. In her spare time, she loves going out with family, exploring new places and playing with her daughter. She looks forward to improving the quantity and quality of translational and clinical research within the department.

DR. JOHN GLEYSTONE

John Gleysteen, MD, is a native of Birmingham, Alabama He received his bachelor's degree in mechanical engineering from the University of Colorado followed by a medical degree from the University Of Alabama School Of Medicine. He then relocated to Portland, Oregon for his residency in otolaryngology at Oregon Health and Science University. Following residency, he completed a fellowship in head and neck oncologic and microvascular reconstructive surgery at Thomas Jefferson University in Philadelphia, Pennsylvania. His research and clinical interests include transoral robotic surgery, HPV+ oropharyngeal carcinoma, microvascular reconstructive surgery, surgical ergonomics, and fluorescence-guided surgery. Outside of the hospital, he enjoys playing the guitar, hiking, skiing, and tennis. He and wife Casey are excited to return to her hometown of Memphis.

DR. SANJEET RANGARAJAN

Sanjeet Rangarajan, MD, MEng. is excited to join UTHSC and serve the Memphis region as a fellowship-trained rhinologist and endoscopic skull base surgeon. Dr. Rangarajan, a native of Ohio, who grew up in southeast Michigan, completed his undergraduate and graduate studies in biomedical engineering at Vanderbilt University. While at Vanderbilt, he pursued advanced training in biomaterials, drug delivery, and tissue engineering before transitioning to medical school in 2007 at Michigan State University. Upon graduation, he completed his otolaryngology – head and neck surgery residency at The Ohio State University Wexner Medical Center in Columbus, Ohio and a fellowship in Advanced Rhinology and Endoscopic Skull Base Surgery at Thomas Jefferson University in Philadelphia, Pennsylvania. Dr. Rangarajan's clinical interests include the medical and surgical management of acute and chronic sinusitis, state-of-the-art minimally invasive sinus surgery (including in-office procedures), as well as endoscopic approaches to the skull base and orbit. His research interests include new treatments for sinonasal pathology using novel biomaterials and drug delivery techniques, skull base surgery simulation, and new applications for virtual and augmented reality platforms in otolaryngology. Outside of work, Dr. Rangarajan enjoys spending time with his family and friends, playing tennis, traveling, listening to live music, and digital photography and videography.

HONORS AND PUBLICATIONS

VISITING PROFESSORSHIPS AND INVITED LECTURES

Jerome Thompsom, MD, MBA. The Vincent Eusterman Honorary Speaker, Denver Medical Center, 2017.

Gillespie MB. Gland-Preserving Therapy Without Endoscopes. Emerging In-Office and Operative Techniques in Otolaryngology, University of Kansas Medical Center, Kansas City, KS, Friday, November 4, 2017.

Gillespie MB. Hypoglossal Nerve Stimulation for OSA. Emerging In-Office and Operative Techniques in Otolaryngology, University of Kansas Medical Center, Kansas City, KS, Friday, November 3, 2017.

Gillespie MB. Current Management of Salivary Carcinoma. 3rd Annual West Oncology Conference, Memphis, TN, October 28, 2017.

Gillespie MB. Glossectomy for OSA: Is It Worth The Risk? 11th Annual Otolaryngology Update in NYC, New York, New York, October 27, 2017.

Dr. Gillespie teaches about Elvis as guest professor of the Chinese Medical Association Otolaryngology Congress.

Gillespie MB. Current Management of Snoring and Mild OSA. 15th Chinese Medical Association Otolaryngology-HNS Congress, Xiamen, China, October 13, 2017.

Gillespie MB. Upper Airway Stimulation Therapy for OSA. UTHSC Division of Pulmonary Medicine Grand Rounds, Memphis, TN, September 6th, 2017.

Gillespie MB. Snoring Management 2017, Georgia Society of Otolaryngology-HNS 2017 Annual Summer Meeting, Ponte Vedra, FL, July 28, 2017.

Gillespie MB. Gland-Preserving Therapy without Endoscopes, Georgia Society of Otolaryngology-HNS 2017 Annual Summer Meeting, Ponte Vedra, FL, July 28, 2017.

Gillespie MB. Beyond Stones: Sialendoscopy for Non-Stone Disorders, Georgia Society of Otolaryngology-HNS 2017 Annual Summer Meeting, Ponte Vedra, FL, July 28, 2017.

Topf MC, Moritz E, **Gleysteen JP**, Curry JM, Cognetti DM, Luginbuhl AJ. First bite syndrome following transcervical arterial ligation after transoral robotic surgery. Laryngoscope. 2017 Nov.

Gleysteen JP, Troob S, Light T, Brickman D, Clayburgh D, Andersen P, Gross N. The impact of prophylactic external carotid artery ligation on postoperative bleeding after transoral robotic surgery (TORS) for oropharyngeal squamous cell carcinoma. Oral Oncol. 2017 Jul; 70:1-6.

Geltzeiler M, Clayburgh D, **Gleysteen JP**, Gross N, Hamilton B, Andersen P, Brickman D. Predictors of extracapsular extension in HPV-associated oropharyngeal cancer treated surgically. Oral Oncol. 2017 Feb; 65:88-93.

Sheyn, A. Current Treatment of Pediatric Thyroid Cancer. St. Jude Children's Research Hospital, Grand Rounds, Memphis, TN, November 30, 2017.

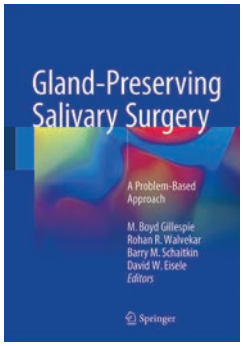
Sheyn, A. Pediatric salivary gland and parathyroid malignancies. St. Jude Children's Research Hospital, Fellow Lecture Series, Memphis, TN.

BOOKS AND BOOK CHAPTERS

Thimmappa V, Bharami A, **Sheyn A**. Mycobacterium Avium Presenting as Recurrent Acute Otitis Media in Toddler: Case Report and Treatment Recommendations. Ulualp, S, ed. Recent Advances in Pediatric Medicine, 2017, Vol. 1, 52-64,

Thimmappa V, Bharami A, **Sheyn A**. Therapies for Pediatric Chronic Rhinosinusitis. Ulualp, S, ed., Recent Advances in Pediatric Medicine, 2017, Vol. 1, 52-64.

Langsdon PR, Singleton A, Wilson C. Chemical Peeling for Treatment of the Aging Face (chapter) Expert Techniques in Facial Plastic Surgery: Lasers and Peels. Thieme Medical Publishers.



Dr. Gillespie's text Gland-Preserving Salivary Surgery will arrive Spring 2018.

Langsdon PR. Facial Plastic Surgery Clinics of North America: Functional Rhinoplasty (Book Review). Aesthetic Surgery Journal, Volume 38, Issue 2, 17 February 2018, Pages NP45–NP46, https://doi.org/10.1093/asj/sjx156

Rangarajan SV, Rosen MR, Evans JJ. "Endoscopic Approaches to the Sella and Suprasellar Region", Rhinology: Diseases of the Nose, Sinuses, and Skull Base (2nd Edition) New York; Thieme Publishing. In Press.

Wood JW, Macdonald CB. Chapter 132: Mastoid Surgery. Operative Otolaryngology: Head and Neck Surgery. 3rd ed. Elsevier. 2017

PEER-REVIEWED JOURNAL ARTICLES

Ong AA, Buttram J, Nguyen SA, Platter D, Abidin MR, **Gillespie MB**. Hyoid myotomy and suspension without simultaneous palate of tongue base surgery for obstructive sleep apnea. *World J Otorhinolaryngol.* 2017; 3: 110-114.

Soose RJ, Padhya TA, **Gillespie MB**, Froymovich O, Lin HS, Woodson BT. OSA treatment history in an upper airway stimulation trial cohort. *World J Otorhinolaryngol.* 2017; 3: 79-84.

Ong AA, Ayers CM, Kezirian EJ, Woodson BT, de Vries N, Nguyen SA, **Gillespie MB**. Application of drug-induced endoscopy in patients with upper airway stimulation therapy. *World J Otorhinolaryngol.* 2017; 3: 92-96.

Pynnonen MA, **Gillespie MB**, Roman B, et al. Clinical practice guideline: evaluation of the neck mass in adults. *Otolaryngol Head Neck Surg.* 2017; 157 suppl.: S1-30.

Kato MG, Erkul E, Nguyen SA, Day TA, Hornig JD, Lentsch EJ, **Gillespie MB**. Extracapsular dissection vs superficial parotidectomy of benign parotid lesions: surgical outcomes and cost-effectiveness analysis. *JAMA Otolaryngol Head Neck Surg.* 2017; 143: 1092-97.

Kato MG, Isaac MJ, **Gillespie MB**, O'Rourke AK. The incidence and characterization of globus sensation, dysphagia, and odynophagia following surgery for obstructive sleep apnea. *J Clin Sleep Med.* 2018; 14: 127-32.

Naik AN, Clinkscales WB. Kato MG, Nguyen SA, **Gillespie MB**. Nonsurgical management of human immunodeficiency virus-associated parotid cysts: A systematic review and meta-analysis. *Head Neck* 2018; Epub ahead of print.

Hanba C, Svider P, **Sheyn A**, et al. An Investigation of Operative Outcomes: Pediatric Invasive Fungal Sinusitis. *Int J Pediatr Otorhinolaryngol*. 2017 Nov;102:142-147.

Sheyn A, Naylor T, et al. Maxillary Sinus Mucoceles and Other Side-Effects of External Beam Radiation in the Pediatric Patient: A Precautionary Tale. *Ear Nose Throat J.* 2017 Sep; 96(9):E27-E28

Smith A, Kull A, Thottam P, **Sheyn A**. Pyriform Aperture Stenosis: A Novel Approach to Stenting. *Ann Otol Rhinol Laryngol*. 2017; 126: 451-54.

Hanba C, Svider PF, Siegel B, **Sheyn A**, et al. Pediatric *Thyroidectomy. Otolaryngol Head Neck Surg.* 2017 Feb;156(2):360-367

Bangiyev J, Haupert M. **Sheyn A**, Thottam P. Novel Application of Steroid Eluting Sinus Stent in Choanal Atresia Repair. *Ann Otol Rhinol Laryngol.* 2017 Jan;126(1):79-82.

Rangarajan SV, Hachem RA, Ozer E, Beer-Furlan A, Prevedello D, Carrau RL. *"Robotics in Sinus and Skull Base Surgery"* Otolaryngologic Clinics of North America on Technological Advances in Sinus and Skull Base Surgery. Otolaryngol Clin North Am. 2017 Jun;50(3):633-641.

RECENT PRESENTATIONS

Gleysteen J, Curry J, Luginbuhl A, Johnson J, Zinner R, Biel M, Cognetti D. Poster Presentation: Update on Aspyrian Trial: Study of RM-1929 and Photoimmunotherapy in Patients with Recurrent Head and Neck Cancer. Combined Otolaryngology Spring Meeting (COSM). San Diego, CA. 2017 (Awarded Poster of Distinction).

Naylor T, Rhodes C, Obeid A, Gillespie MB. Reasons for CPAP failure in patients presenting for upper airway stimulation therapy. Triological Society Sectional Meeting, Scottsdale, AZ, January 19, 2018

Naylor T, Chen H, Nguyen SA, **Gillespie MB**. Occult squamous cell carcinoma of the tonsil of OSA patients. Triological Society Sectional Meeting, Scottsdale, AZ, January 19, 2018

Woodson BT, Soose R, Maurer JT, **Gillespie MB**. Five year results of cranial nerve XII stimulation for obstructive sleep apnea. Annual Meeting of the American Academy of Otolaryngology-Head and Neck Surgery, Chicago, IL, September 10, 2017.

Pynnonen MA, **Gillespie MB**, Roman B, et al. Clinical practice guideline:evaluation of the neck mass in adults. Annual Meeting of the American Academy of Otolaryngology-Head and Neck Surgery, Chicago, IL, September 10, 2017.

Beckmann N, Sheyn A. *IMSLEEPY survey correlation with AHI in Pediatric Sleep Apnea*. Poster Presentation, American Academy of Otolaryngology, Chicago, IL.

Sheyn A. 2018 *Eustachian Tube Dilation Experience: Tips, Tricks, and Indications*. Southern Pediatric Otolaryngology Study Group, Palm Beach, FL.

Sheyn A, Gentile A, Shah G. *Use of Mometasone Eluting Stents in Complex Pediatric Sinus Disease.* SENTAC 2017, Toronto, ON, Canada.

Sheyn A. *Pediatric Sinus Disease.* Midwest Resident Update in Rhinology, St. Louis, MO.

Muller RG, **Sheyn A**. *Tracheostomy Placement and Management in the Pediatric Cancer Patient*. Poster Presentation 4th International Tracheostomy Symposium, Dallas, TX.

Muller RG, **Sheyn A**. Incidence, epidemiology, and outcomes of pediatric tracheostomy in the United States from 2000 to 2012. Poster Presentation 4th International Tracheostomy Symposium, Dallas, TX.

Richardson J, **Smith S, Sheyn A**. *Pediatric Salivary Masses: A Database Evaluation of Hospital Course and Perioperative complication.* Poster presentation, SENTAC, Toronto, ON, Canada.

Smith S, Smith A, Vanison C, Sheyn A. *Short Term Outcomes in Pediatric Head and Neck Cancer.* American Academy of Otolaryngology, Chicago, IL.

Gentile A, McLevy J, Stocks R, Sheyn A, Thompson J. *Timing of Post-Tonsillectomy Bleeds: A Meta-Analysis.* Poster Presentation, American Academy of Otolaryngology, Chicago, IL.

Cox S, Shah G, **Sheyn A**. *Pediatric Eustachian Tube Dilation*. Poster Presentation, American Academy of Otolaryngology, Chicago, IL.

Hamblin J, Sheyn A. *Sudden Sensorineural Hearing Loss in an Adolescent with Sickle Cell Disease.* Poster Presentation, ASPO, Austin, TX

Muller RG, **Thimmappa V, Sheyn A**. *Post-Operative Pain Control Following Common Pediatric Otolaryngology Procedures.* Poster Presentation, ASPO, Austin, TX

Hanba C, **Sheyn A**, et al. *A Nationwide Perspective of Pediatric Invasive Fungal Sinusitis: Perioperative Complications and Outcomes.* Poster Presentation COSM San Diego

Langsdon P. State of the art in facial aesthetics. New Orleans, LA, March 2017.

Langsdon P. Complications in facelifting. AAFPRS 2017 Annual Meeting, Phoenix, AZ, October 2017.

Langsdon P. Analysis of cervical angle improvement with submental muscular medialization and suspension. AAFPRS 2017 Annual Meeting, Phoenix, AZ, October 2017.

Rangarajan S. Management of Rhinosinusitis in Immunocompromised Patients: Predictors, Treatment Trends, and Outcomes. AAO-HNSF Annual Meeting, Chicago, 2017.

Rangarajan SV, Shumrick C, Rabinowitz MR, Crawley M, Nyquist GG, Rosen MR. *Management of rhinosinusitis in immunocompromised patients: predictors, treatment trends, and outcomes.* American Rhinologic Society Annual Meeting, Chicago, IL, September 9, 2017 (Oral Presentation)

Rangarajan SV, Siu A, Farrell C, Nyquist GG, Rabinowitz MR, Rosen MR, Evans JJ. *Quantitative Determination of the optimal Temporoparietal Fascia Flap necessary to Repair Skull Base Defects.* North American Skull Base Society Annual Meeting, San Diego, CA, February 18, 2018 (Oral Presentation)

Rangarajan SV, Siu A, Patel P, Chen E, Li M, Farrell C, Nyquist GG, Rabinowitz MR, Rosen MR, Evans JJ. Approaches to the Sella with the Preservation of the Pedicle to the Nasoseptal Flap. North American Skull Base Society Annual Meeting, San Diego, CA, February 18, 2018 (Oral Presentation)

Siu A, **Rangarajan SV**, Farrell C, Nyquist GG, Rabinowitz MR, Rosen MR, Evans JJ. *Subtotal Resection of Pituitary Apoplexy is associated with Recurrent Apoplexy.* North American Skull Base Society Annual Meeting, San Diego, CA, February 18, 2018 (Oral Presentation)

Siu A, **Rangarajan SV,** Farrell C, Nyquist GG, Rabinowitz MR, Rosen MR, Evans JJ. *Early versus delayed Fractionated Stereotactic Radiotherapy for Residual and Progressive Nonfunctioning Pituitary Adenomas.* North American Skull Base Society Annual Meeting, San Diego, CA, February 18, 2018 (Oral Presentation)

Smith A, Shires C, Vanison C, Boughter J, Timmappa V, Sebelik M. Effect of bevacizumab on thyroid volume and vascularity. AAO-HNSF Annual Meeting, Chicago, 2017.

Petty B, Smith A, Langsdon P, et al. Histologic and thermal study of ultrasonic dermabrasion. AAO-HNSF Annual Meeting, Chicago, 2017.

Smith A, Kortebein S, Case S, Vieira F. Combined intubation technique for advanced larynx cancer. AAO-HNSF Annual Meeting, Chicago, 2017.

Vieira FM. Videolaryngoscope-assisted fiberoptic bronchoscopy for difficult intubation in upper airway cancer. Difficult Airway Society, London, UK, November, 2017.

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UPCOMING EVENTS AND CME

20TH ANNUAL EDWIN W. COCKE, JR., MD, RESEARCH SYMPOSIUM

May 18, 2018
UTHSC Coleman Building Auditorium

Guest Professor
David W. Eisele, MD,
Andelot Professor and Director
Department of Otolaryngology-
Head and Neck Surgery
Johns Hopkins University School
of Medicine

RESIDENT GRADUATION CELEBRATION

June 23, 2018
Chickasaw Country Club, Memphis, TN

UTHSC DEPARTMENT OF OTOLARYNGOLOGY-HNS RESIDENT AND ALUMNI GATHERING (TBD)

October 2018 (TBD)
Atlanta, Georgia

JOHN SHEA, JR. MEMORIAL TEMPORAL BONE COURSE

November 2018 (TBD)
UTHSC Department of Otolaryngology-
HNS Temporal Bone Lab
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