

WHAT YOU OTO KNOW



Department of Otolaryngology -
Head and Neck Surgery

SUMMER 2023
VOL. 4, NO. 1



RESIDENT LIFE

An interview with our chiefs on their residency experience

DIVISION PEARLS

New additions and clinical pearls explored by faculty & residents

RESEARCH

Stay up-to-date on all the research highlights in the department



University of Virginia

Department of Otolaryngology-HNS

P.O. Box 800713

Charlottesville, VA 22908

<http://med.virginia.edu/otolaryngology>

What You Oto Know

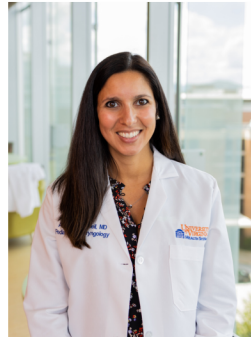
Summer 2023 VOL. 4, NO. 1

Editor

Ariana Greenwell, MD

Creative Director

Stephen Oswald



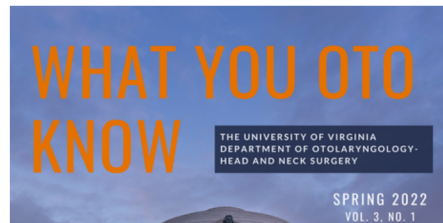
Ariana Greenwell, MD



Stephen Oswald, BA

What You Oto Know is a bi-annual newsletter published by The University of Virginia Department of Otolaryngology - Head and Neck Surgery.

Please send questions, comments, and requests for hard copies to Stephen Oswald at: zrz2ht@uvahealth.org



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LOCATIONS

- UVA Health Main Hospital
- ENT Clinic at Fontaine
- Emily Couric Clinical Cancer Center
- Pediatric Otolaryngology Clinic at the Battle Building
- Charlottesville ENT Associates

Message From The Chair

STEPHEN S. PARK, MD



Greeting Colleagues, Alumni, and Friends,

Well, we are off to another academic year and the exciting growth continues. This past year was marked with some terrific accomplishments and your alma mater remains strong, reputable, and committed. I hope you enjoy this summer, 2023 Newsletter and a special thanks to Mr. Stephen Oswald for putting it together.

This past Fitz-Hugh symposium was coupled with our Nose: Inside & Out course, honoring Dr. Charles W. Gross and his lifetime contributions. We were thrilled to host so many alumni back to Charlottesville who contributed to the course, including **Phil Chen, Dane Barrett, Will Dougherty, Dan Becker, Jared Christophel, Greg Zachmann, and Cath Meller** (from Australia!). As we celebrated our three graduates, we simultaneously welcomed three new interns – featured below, as well as new fellows in Neurotology, Facial Plastic Surgery, and Head & Neck Surgery. The training program remains vibrant and top tier!

Two new faculty have started to put their roots down in exciting and growing clinical practices – Dr. **Delaney Carpenter** at the Pantops office practicing general Otolaryngology with an expertise in sleep surgery, and Dr. **Eric Dowling**, our newest H&N surgeon in the largest and busiest division. By the time you read this, Dr. **Vanessa Torrecillas** will have arrived from Ann Arbor and started her practice in Laryngology. In the coming months, we will look to be recruiting a new Division Head of Head & Neck Surgery, Neurotologist to assume the practice of **George Hashisaki** (retiring after 3 decades of work at UVA), a generalist to join the Pantops group to replace the big shoes of **Dan Landes** (the founder of that clinical practice), a new PhD scientist with expertise in olfaction, and possibly a third Facial Plastic Surgeon.

Our footprint in the basic science research space has never been so large and deep. We have secured over \$3,000,000 in federal funding and established a new wet lab space – no small feat in this climate of high rent real estate. The academic productivity from the residents, fellows, and students has never been so prolific.

Stronger community outreach is a priority for this year. We will continue supporting World Voice Day, and begin services to the Charlottesville Free Clinic. Additionally, the department will look to ways that we can make a difference in Head & Neck Cancer screening and hearing screening.

At the cornerstone of this department is the support and involvement of you, our friends and alumni. I hope you take the time to enjoy this Newsletter and consider giving back in some way. This can be through our [alumni reunion at the AAO-HNS meeting](#) in Nashville this year (Monday, October 2), coming “home” to participate in our [Fitz-Hugh Symposium](#) (June 20-21, 2024), and of course through charitable monetary contributions to the department and our Book Fund.

Stay well and stay in touch!

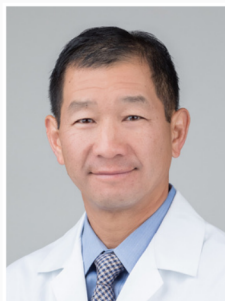
As Always,

A handwritten signature in black ink that reads "Stephen Park, MD". The signature is fluid and cursive.

Stephen S. Park

FACULTY

Facial Plastic & Reconstructive Surgery Division



Stephen Park, MD, FACS
Department Chair,
Division Director,
Professor

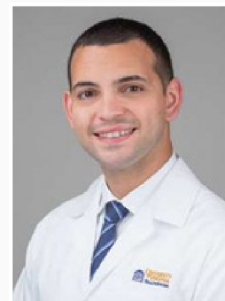


Samuel Oyer, MD, FACS
Associate Professor

Rhinology & Endoscopic Sinus Surgery Division



Spencer Payne, MD
Division Director,
Professor



Jose Mattos, MD, MPH
Residency Program Director,
Associate Professor

Audiology/Vestibular & Balance Center

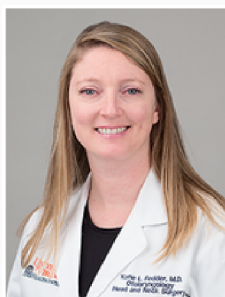


Lori Grove, PhD
Division Director,
Assistant Professor

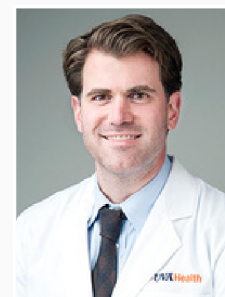
Head & Neck Oncologic & Microvascular Surgery Division



David Shonka Jr., MD
Interim Division Director,
Associate Professor



Katherine Fedder, MD
Assistant Professor



Jonathan Garneau, MD
Assistant Professor



Eric Dowling, MD
Assistant Professor

Laryngology & Voice Care Division



Vanessa
Torrecillas, MD
Assistant Professor

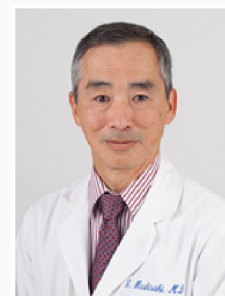


James Daniero, MD, MS
Division Director,
Associate Professor



Patrick McGarey Jr., MD
Assistant Residency
Program Director,
Assistant Professor

Otology & Neurotology Division



George Hashisaki, MD
Division Director,
Associate Professor



Bradley Kesser, MD
Vice-Chair,
Professor

Pediatric Otolaryngology



William Brand, MD
Division Director,
Assistant Professor



Ariana Greenwell, MD
Assistant Professor

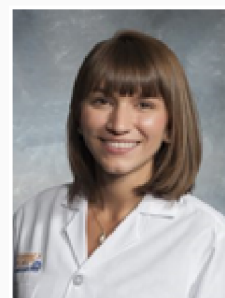


Daniel Landes, MD
Associate Professor

General Otolaryngology



John Mason, MD
Associate Professor



Delaney Carpenter, MD
Assistant Professor

RESIDENTS & FELLOWS

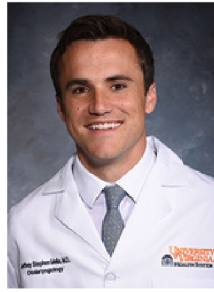
CHIEFS



Simone Barker, MD



Hyunseo "David" Jung, MD



Jeffrey Mella, MD



Otolaryngology /
Neurotology
Fellow



Adam Thompson-Harvey, MD

PGY-4



Nelson Gruszczynski, MD



Claudia Gutierrez, MD



Christopher Harryman, MD

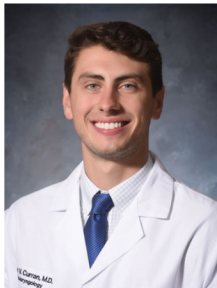


Facial Plastic &
Reconstructive
Surgery Fellow

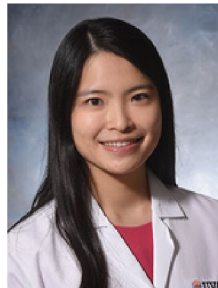


Katherine Gossett, MD

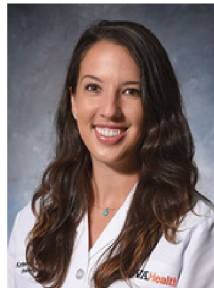
PGY-3



Kent Curran, MD



Betsy Szeto, MD



Katherine Webb, MD

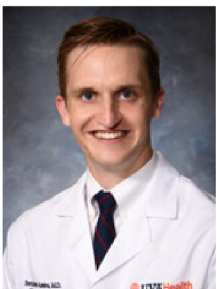


Head & Neck
Oncologic &
Microvascular
Surgery Fellow



Connor O'Meara, MD,
PhD, FRACS

PGY-2



Benjamin Aunins, MD



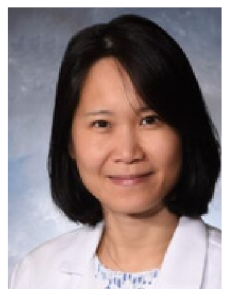
Alexander Murr, MD



Jared Sperling, MD

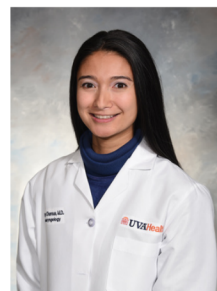


Rhinology
Fellow



Jieun Lee, MD, PhD

PGY-1



Shaley Charous, MD



Aleeza Leder Macek, MD



Akshay Murthy, MD

DEPARTMENT HIGHLIGHT: NEW FACULTY



VANESSA TORRECILLAS, MD

ASSISTANT PROFESSOR
DIVISION: LARYNGOLOGY &
VOICE CARE

Dr. Vanessa Torrecillas is our newest laryngologist, joining the faculty this August. She received her undergraduate degree at the University of Arizona and moved cross country to attend the George Washington University School of Medicine and Health Sciences for medical school. She then completed her otolaryngology residency at the University of Utah. She pursued advanced fellowship training in laryngology at the University of Michigan and specializes in the medical and surgical care of patients with voice, airway, and swallowing disorders. Her clinical interests include treating vocal professionals, performing gender affirming voice care, correcting airway stenosis and laryngeal trauma, and conducting in-office procedures. She is committed to academic medicine with passions for advancing medical education and surgical training and instituting women physician wellness initiatives. Outside the hospital, Dr. Torrecillas enjoys spending time with her family, travelling, hiking, water and downhill skiing, Peloton-ing, and crafting the perfect cup of coffee.

NEW FELLOWS



CONNOR O'MEARA, MD, PHD, FRACS

HEAD & NECK ONCOLOGIC
& MICROVASCULAR
SURGERY FELLOW



KATHERINE GOSSETT, MD

FACIAL PLASTIC AND
RECONSTRUCTIVE
SURGERY FELLOW



ADAM THOMPSON-HARVEY, MD

OTOLOGY/
NEUROLOGY
FELLOW

NEW RESIDENTS



SHALEY CHAROUS, MD

PGY-1 RESIDENT



ALEEZA LEDER MACEK, MD

PGY-1 RESIDENT



AKSHAY MURTHY, MD

PGY-1 RESIDENT



DEPARTMENT HIGHLIGHT: NEW STAFF



**TARA
ALTIZER, BS**

**SR. ADMINISTRATIVE
COORDINATOR**

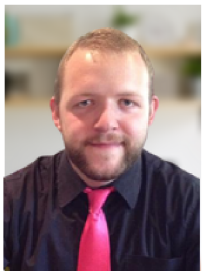
Tara Altizer is our new Senior Administrative Coordinator to the Department Chair and Facial Plastics Team. She received her undergraduate degree in Recreation and Sports Leadership with an Exercise Science focus and a minor in Business and Coaching at Eastern Mennonite University. Tara has been with the department for many years working with all of our physicians over at the Fontaine Clinic and more recently the Appointment Coordinator to our Head & Neck Team at the Cancer Center. Aside from being the Chair's assistant, Tara helps coordinate surgeries/appointments for both the Cosmetic and MOHS practice. Outside of work, Tara enjoys spending time with her family/cat, cooking/baking, playing video/board games and watching anime.



**ELENA
MILLER, MPH**

RESEARCH SPECIALIST

Elena Miller joined the Department as a Research Specialist in November of 2022. Born and raised in the Shenandoah Valley of Virginia, she traveled to Texas where she graduated with honors from the University of Houston with an interdisciplinary science degree, focusing in mathematics, communication sciences and disorders, and health communications. She began working at UVA in 2018, and shortly after started taking graduate courses, earning her MPH in 2022. Elena's role encompasses applying for research grants, managing ongoing research projects, new project start-up, mentoring other research personnel, and looking for ways to expand the department's research portfolio. Someday she'll find the time to do her own research, but in the meantime she fills her free time by practicing yoga, hanging with friends and family, reading mystery novels, and snuggling with her family dog Noodle.



**STEPHEN
OSWALD, BA**

**RESIDENCY PROGRAM
COORDINATOR
MEDICAL EDUCATION
ADMINISTRATOR**

Stephen Oswald joined the department as the Residency Program Coordinator/Medical Education Administrator January, 2023. He received his undergraduate degree in Eng. Lit with Teaching Emphasis from Western Washington University and is currently pursuing his M. Ed. in Curriculum and Instruction here at UVA. Stephen joined us from the Undergraduate Medical Education department at the School of Medicine and was a teacher/barista prior in WA. Aside from coordinating the residency program, he is in charge of compiling the newsletter, updating the department website, coordinating the annual Fitz-Hugh Symposium, and assisting in a variety of educational activities. When he's not at work, Stephen spends most of his time with his wife who is a medical student here at UVA. He enjoys cooking, baking, snowboarding, brewing coffee, and playing dungeons and dragons.

NEW RESEARCH FELLOWS



**KEERTHI
KURIAN, BS**



**NAUSHIN
ALI, MS**



Department of Otolaryngology -
Head and Neck Surgery

FELLOWS STARTING 2023 ACADEMIC YEAR



**CONNOR
O'MEARA, MD,
PHD, FRACS**

**HEAD & NECK ONCOLOGIC
& MICROVASCULAR
SURGERY FELLOW**

Dr Connor O'Meara is our Head & Neck Oncology and Microvascular Fellow who will join UVA in September of this year. After receiving his undergraduate degree with the University of Melbourne (Australia), he completed his medical education at the Australian National University School of Medicine. He then completed his Otolaryngology, Head & Neck Training via the Royal Australasian College of Surgeons. He has a passion for academic surgery and has previously completed a PhD and Post-doctoral Research Fellowship in Immunology & Vascular Biology. His clinical interests include all aspects of Head & Neck Oncology, with a special interest in cutaneous, oral cavity, sinonasal and laryngeal cancer; including techniques to reconstruct to optimize function and aesthetic appearance. His current research interests include biomarkers to identify occult metastasis in the node negative neck and the development of novel small molecule immunotherapy agents for cancer therapy. Connor thoroughly enjoys teaching medical students and specialty trainees. In his free time, he focuses on spending time with his busy fiancé Dilini (Developmental Pediatrician) and gregarious 3-year-old son Idris. He also enjoys snowboarding, surfing, and nature walking.



**KATHERINE
GOSSETT, MD**

**FACIAL PLASTIC AND
RECONSTRUCTIVE
SURGERY FELLOW**

Dr. Katherine Gossett is our new Facial Plastics and Reconstructive Surgery Fellow. She received her undergraduate degree from University of Georgia, and returned home to attend University of North Carolina at Chapel Hill for medical school. She completed her Otolaryngology residency training at Medical University of South Carolina. She is excited to be at UVA for fellowship, as her clinical interests lie in facial nerve reanimation, complex nasal reconstruction, and Mohs reconstruction. Her current research interests include utilizing mindfulness and meditation in the non-flaccid facial paralysis population. In her free time, Katherine enjoys hiking, biking, skiing, reading and cooking.



**ADAM
THOMPSON -
HARVEY, MD**

**OTOLOGY/
NEUROTOLOGY
FELLOW**

Dr. Adam Thompson-Harvey is our Neurotology Fellow, having joined UVA this July. After receiving his undergraduate degree from Northwestern University, he returned home to receive his medical education from the Saint Louis University School of Medicine. He then completed his otolaryngology residency at the Medical College of Wisconsin in Milwaukee. He has a passion for academic medicine. His clinical interests include all aspects of neurotology, with a special focus on vestibular disorders and skull base surgery. His current research interests include novel applications of vestibular function testing and investigating noncognitive performance and wellbeing among graduate medical trainees. In his free time, Dr. Thompson-Harvey enjoys spending time with his wife Alex, playing tennis, DJ-ing, snowboarding, kayaking, and traveling.

New Facial Plastic & Reconstructive Surgery Fellowship

DIVISION: FACIAL PLASTIC & RECONSTRUCTIVE SURGERY

We are excited to announce the addition of a formalized fellowship training program in Facial Plastic & Reconstructive Surgery starting July 2023. Dr. Stephen Park has trained numerous international surgeons in advanced facial plastic surgical techniques over the last two decades, and this level of training will now be available to graduates of any Otolaryngology residency program through this fellowship affiliated with the American Academy of Facial Plastic & Reconstructive Surgery (AAFPRS). Dr. Stephen Park and Dr. Sam Oyer will serve as co-directors for this one year training program.



Our fellowship offers advanced training in a wide range of treatments across the spectrum of facial plastic surgery. There is a particularly strong emphasis on facial reconstruction following Mohs surgery, rhinoplasty, and facial reanimation surgery. Fellows will also receive high level training in facial trauma repair as part of a Level I trauma center at UVA. Additionally, the fellowship offers training in many other aspects of the specialty such as: facial aesthetic surgery, minimally invasive injectable treatments, laser skin treatments, scar revision, microtia reconstruction, and gender-affirming facial surgery.



Katherine Gossett, MD

The fellow will be integrated into the resident teams for clinical care and play an active teaching role alongside the faculty during the various resident courses offered throughout the year including: botox and filler clinics, facial trauma courses, and cadaver dissection courses focused on facial reconstruction and rhinoplasty. After completion, the fellow will be eligible to sit for the board exam offered by the American Board of Facial Plastic & Reconstructive Surgery and pursue board certification through this organization.

We're thrilled to introduce Dr. Katherine Gossett who will be joining us this July as our inaugural fellow. Dr. Gossett hails from Raleigh, NC. She completed medical school at the University of North Carolina and residency in Otolaryngology at the Medical University of South Carolina prior to joining us in Charlottesville.

STEPHEN PARK, MD, FACS
PROFESSOR, DIVISION DIRECTOR

SAM OYER, MD, FACS
ASSOCIATE PROFESSOR

Impact of Polyphenolic Compounds on Alcohol Consumption in Patients with AERD

DIVISION: RHINOLOGY & ENDOSCOPIC SINUS SURGERY

DIVISION HIGHLIGHT

The division is celebrating both Dr. Spencer Payne's promotion to Professor and the induction of Dr. Payne and Dr. Jose Mattos into the Triological Society along with the acceptance of their respective theses.



Dr. Spencer Payne (Left), Dr. Stephen Park (Center) and Dr. Jose Mattos (Right)

Dr. Mattos was honored to receive the Maureen Hanley Award for his thesis entitled "Determinants of patient satisfaction after endoscopic sinus surgery: a mixed methods approach." Dr. Payne's thesis on the polyphenolic activation of basophils in aspirin exacerbated respiratory disease (AERD) represented the culmination of several years of work in pursuit of the mechanism behind the sensitivity to alcoholic beverages seen in patients suffering with this disease.

Many otolaryngologists are familiar with the classical reaction to aspirin and other NSAIDs in patients with AERD, also known as Samter's Triad. What is often less well appreciated is the generation of similar respiratory symptoms upon imbibition of alcoholic beverages in up to 75% of these patients as well. Symptoms can be upper or lower respiratory in nature, and typically include nasal congestion, sneezing or mild shortness of breath. The reactions seem to be more common to red wines and beer, but in some patients, white wine and liquors can also be involved.

From the research performed at UVA, we were able to determine that the apparent cause of these reactions is the concentration of polyphenolic compounds in the beverages. Polyphenols, which are typically thought of as anti-inflammatory and anti-oxidant comprise the dyes and tannins in fruits and vegetables.

As a result, beverages which are made from the skins of fruits and/or aged in oak barrels will have a higher concentration of polyphenols than other similar beverages. Consequently, darker wines, darker beers and darker liquors tend to be the culprits.



A comparison between a beer with a high concentration of polyphenols (left) and one with a low concentration of polyphenols (right)

So how can we put this information to good use? Well, not everyone takes aspirin or NSAIDs on a regular basis. As such, including queries regarding reactivity to alcoholic beverages in your standard intake on patients with sinusitis and nasal polyps (CRSwNP) may help steer you to a possible diagnosis of AERD which could be confirmed either with an Aspirin Challenge or urinary LTE4 lab testing. Furthermore, for the patient with AERD, and some others with severe CRSwNP, who miss the social or culinary aspects of alcoholic beverages, you can advise them to consider steel fermented whites or clear liquors to minimize the likelihood of symptom-exacerbation.

SPENCER PAYNE, MD
PROFESSOR, DIVISION DIRECTOR

Supine Position Enhances Subscapular System Flap Harvesting for Head and Neck Reconstruction

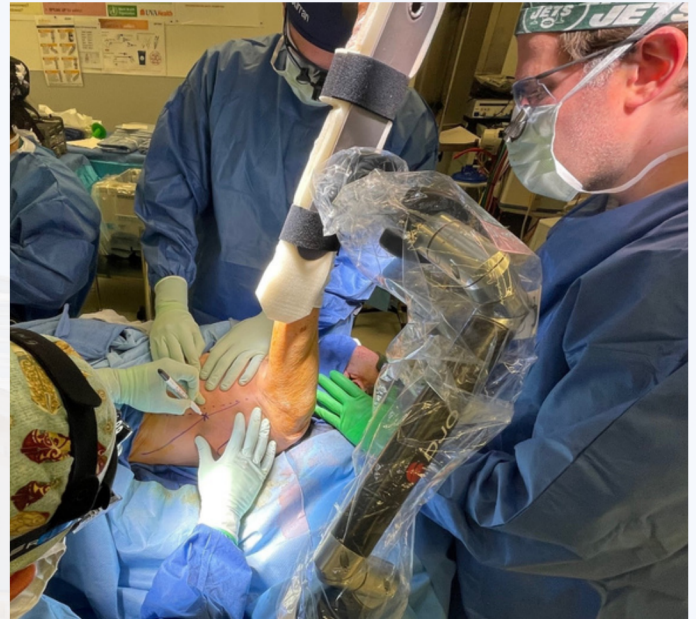
DIVISION: HEAD & NECK ONCOLOGIC & MICROVASCULAR SURGERY

The subscapular system, which can incorporate multiple components including the latissimus dorsi muscle, lateral scapular border, scapular tip, parascapular skin paddle, thoracodorsal artery perforator, and serratus anterior flaps, is a versatile and reliable source of free flaps for head and neck reconstruction. It caters to a wide range of bony and soft tissue defects and often results in reduced donor site morbidity as well as favorable aesthetic and functional outcomes compared to other free flaps, such as the fibula free flap.

Despite its advantages, some surgeons avoid harvesting this flap due to positioning, prepping, and draping challenges, the inability to perform simultaneous ablation and harvest, and short-term limited shoulder range of motion. Traditionally, the subscapular system harvest was performed in the lateral decubitus position, which required intraoperative repositioning after oncologic resection. This posed challenges for head and neck teams to perform efficiently and increased time under anesthesia for the patient.

Our team has adopted an approach to harvesting subscapular system flaps using the supine position with an ipsilateral, surgeon-controlled arm retractor, without requiring additional equipment or assistants. This positioning offers several benefits, including simultaneous tumor extirpation and free flap harvest, which reduces operative time. With the patient lying supine and the donor side arm in a 90-degree "punching" position, both the head and neck region and subscapular donor site can be accessed concurrently, allowing one surgical team to perform oncologic resection and prepare the recipient site while another team harvests the flap. This streamlines surgery- increasing efficiency and reducing time under anesthesia for patients.

The supine position also has other advantages such as better patient tolerance, reduced risk of nerve injury, pressure ulcers, respiratory complications, and injury during repositioning. Furthermore, it facilitates improved communication and coordination between surgical teams, enabling easy observation and collaboration during the procedure.



The limb retractor is placed on the side ipsilateral to the harvest site. The patient is positioned on two small gel pad shoulder rolls and a hip bump, which provides partial rotation and raises the scapula off the bed while still maintaining the supine position. The arm retractor is then used to lift the arm vertically, as shown in the photo. This setup allows the reconstructive surgeon (on the left) to harvest the flap efficiently while the ablative surgeon (on the right) performs the resection. This arrangement enables simultaneous flap harvest and ablation, along with subsequent flap inset and donor site closure.

There are some challenges with the supine position, such as limited exposure for the medial dissection compared to the lateral decubitus position. However, with adequate retraction and proper lighting, our team has successfully harvested subscapular flaps without compromising dissection or vessel identification quality.

In conclusion, using the supine position for harvesting subscapular system flaps has resulted reduced operative time and improved patient tolerance. By combining the subscapular system's versatility with the advantages of supine positioning, we have provided patients with efficient, high-quality head and neck reconstruction while minimizing donor site morbidity.

ERIC DOWLING, MD
ASSISTANT PROFESSOR

Endoscopic Resection and Mucosal Reconstitution with Epidermal Grafting (Maddern Procedure) for Long Term Treatment of Subglottic Stenosis

DIVISION: LARYNGOLOGY & VOICE CARE

DIVISION HIGHLIGHT

The division is celebrating the induction of Dr. James Daniero into the Triological Society with the acceptance of his thesis "The Rational Design of Next-generation Biomaterials for Vocal Fold Augmentation".



James Daniero, MD, MS

Idiopathic subglottic stenosis (iSGS) is a rare fibroinflammatory narrowing of the subglottis. Traditional endoscopic techniques do not address the underlying pathophysiology which is thought to be aberrant fibroblast and adaptive immune function within the subglottic mucosa. Dr. Guri Sandhu developed a technique in which diseased mucosa is removed, and then reconstituted with a split thickness skin graft. This surgery is referred to as the Maddern Procedure, after the first patient who underwent this surgery. We have refined this technique here at UVA.

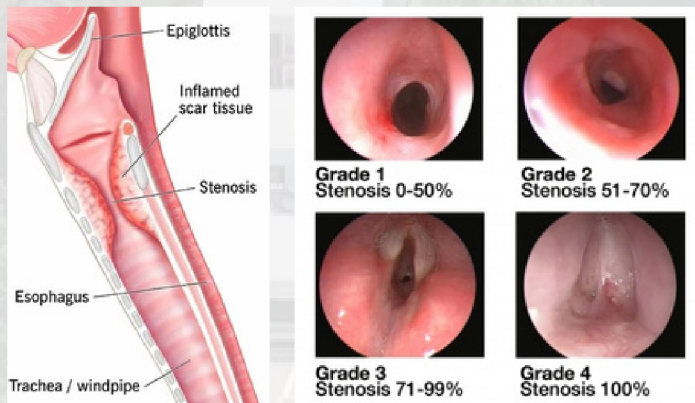


Illustration of a subglottic stenosis from the Cleveland Clinic (Left) and images depicting the varying degrees of stenosis from Children's Hospital of Philadelphia.

After exposure via suspension laryngoscopy, radial incisions are created within the stenosis using the CO2 laser. This establishes the depth of the perichondrium. Use of the laser is conservative, as the skin graft will not take at these locations. The microdebrider is then used to fully excise the stenosis.



(Top Left) Surgical team preparing patient for suspension laryngoscopy. (Top Right) Image of silastic sheet. (Lower Left) Image of skin graft about to be taken (Arizona College of Medicine) (Lower Right) Surgical team applying PDS sutures.

Traditionally, a silastic T-tube limb was cut to the length of the stenotic segment. However, this assumes that the subglottis is a perfect cylinder and may not allow full skin graft contact to the subglottis. Instead, we place a 0.04-inch reinforced silastic sheet within the subglottis and trim it to conform to the exact 3D contours. Next, a split thickness skin graft is harvested. PDS sutures are used to circumferentially tack the STSG to the silastic sheet, with the deep dermal layer exposed. The skin graft is wrapped around the edges of the silastic, to prevent exposure of the silastic sheeting edge, which can cause granulation tissue. The stent complex is placed into the subglottis, with the deep dermal layer against the cricoid perichondrium. The stent is secured in place with a PDS suture around the cricoid. In 2-3 weeks, the patient returns to the operating room for removal of the silastic sheet.

JAMES DANIERO, MD, MS
ASSOCIATE PROFESSOR, DIVISION DIRECTOR

RACHEL JONAS, MD
CHIEF RESIDENT

DIVISION UPDATE

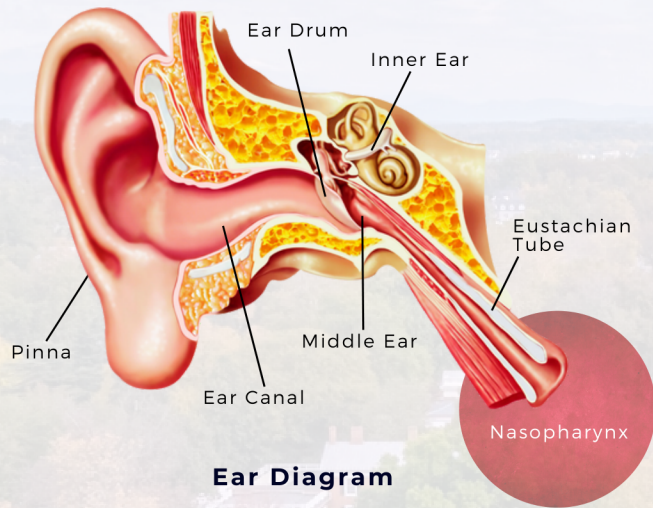
The division would like to celebrate Dr. Daniel Morrison completing his Otolaryngology-Neurotology Fellowship! Dr. Morrison joined a practice in Charlotte, NC where he will continue doing incredible work. Thank you, Dr. Morrison, for your service and the impact you left on the department. We wish you well!



Daniel Morrison, MD

The differential diagnosis includes superior semicircular canal dehiscence (SSCD). A simple manipulation may help distinguish these entities. Occlude the ear canal of the affected ear with a finger tip. If the echolalia resolves, patulous ET is more likely than SSCD

Treatment is often simple. Adequate hydration may help. Increase humidity in the nasopharynx by spraying and irrigating with saline. Add mass to the tympanic membrane (“mass loading”). A short stack of Steri-Strips, or a dab of ointment like Vaseline are temporary means of adding mass, changing middle ear impedance. A pressure equalization tube may also serve as a mass, although the associated change in middle ear pressure may produce unpredictable hearing changes.



Ear Diagram

Have you ever heard your own voice echo in your ears, or heard the sound of your own breathing mimic Darth Vader in Star Wars? You may have or had a patulous Eustachian tube. In this type of annoying Eustachian tube (ET) dysfunction, the tube lumen remains abnormally open between the nasopharynx and the middle ear. This patency creates a continuous air column from the larynx to the ear's sound conduction mechanism. Airway sounds directly reverberate at the level of the middle ear. Patients may also suffer from aural fullness.

The condition has a variety of potential etiologies including weight loss- which can decrease the fat deposits within the nasopharyngeal wall, use of nasal decongestants or nasal steroids, or drying/shrinkage of the nasal mucosal lining.

The hallmark sign of a patulous ET is detecting tympanic membrane movement during quiet or tidal respiration, coincident with breathing. Practice your otoscopy!



Staying hydrated, spray/irrigation, and ointment use are some of the simplest, yet effective treatments of ET.

Few surgical procedures are uniformly effective. The ET orifice in the middle ear can be partially occluded—the hub portion of an IV catheter has been used. In Japan, a commercially available ET plug is available for this purpose. Transnasal approaches have included injection of non-absorbable material adjacent to the ET or submucosal placement of cartilage shims.

In summary, patulous ET is an uncommon condition, but newer treatment paradigms are evolving. The key is making the correct clinical diagnosis and counseling the patient appropriately.

GEORGE HASHISAKI, MD

DIVISION DIRECTOR, ASSOCIATE PROFESSOR

Use of Dynamic Bronchoscopy in Pediatric Airway Evaluation

DIVISION: PEDIATRIC OTOLARYNGOLOGY

Traditionally, direct laryngoscopy and tracheobronchoscopy (DLB) is performed in a spontaneously breathing child under deep sedation, often times quickly during periods of apnea to avoid laryngospasm. This can lead to missed diagnoses of subtle findings.



Figure 1. Pediatric Ventilating Bronchoscope

More recently, “dynamic” or “triple-phase” bronchoscopy has been described, which evaluates the airway under multiple phases: quiet/shallow breathing, vigorous breathing or coughing, and distension with positive pressure. To do this safely, a rigid ventilating bronchoscope is used (See Figure 1). This technique allows for assessment of static compression (eg vascular rings) as well as dynamic collapse (eg tracheobronchomalacia, Figure 2). The use of a rigid ventilating bronchoscope can also provide passive insufflation (typically 40 cm H₂O) to distend the airway and better evaluate the posterior tracheal wall.

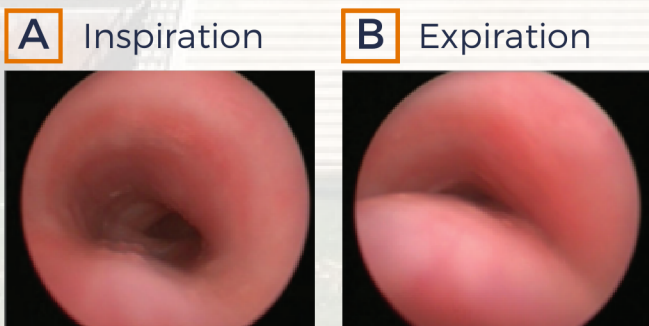


Figure 2. Photo Courtesy of JAMA Otolaryngol Head Neck Surg. 2019; 145(3):265-275. doi:10.1001/jamaoto.2018.3276

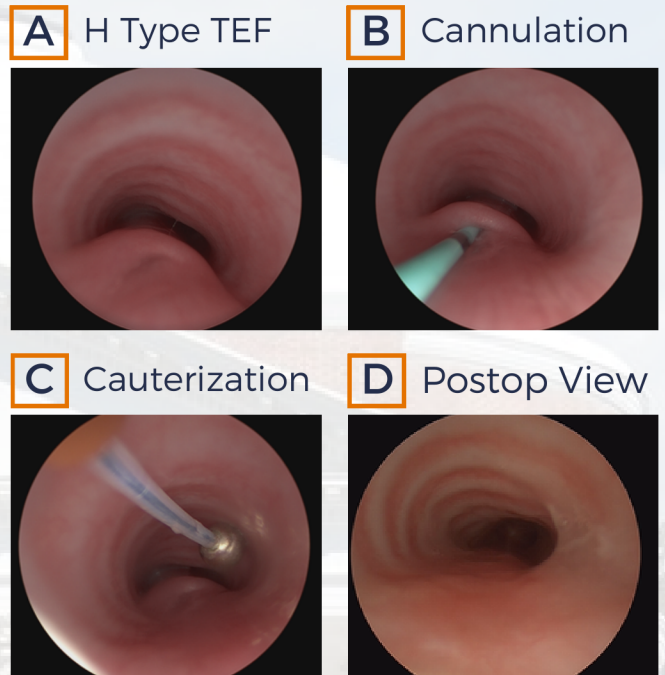


Figure 3. Incidentally identified TEF in a 7mo (A), with cannulation using a 3Fr ureteral catheter (B), and intraoperative cauterization (C). Postoperative appearance on surveillance bronchoscopy 8mo later (+40cmH₂O) (D)

By using dynamic bronchoscopy, we are able to diagnose patients with the common complaints of “noisy breathing” and “recurrent croup” more accurately.

Additionally, we occasionally find what we are NOT expecting, including a 7mo who was diagnosed with an H-type tracheoesophageal fistula (Figure 3).

With our advancing endoscopic techniques, we are now able to treat select types of these fistula through minimally invasive procedures. For this particular patient, we used an endoscopic electrocautery device to seal the tract- avoiding the need for thoracotomy, prolonged intubation and ICU stay. He underwent two bronchoscopic procedures with cauterization of the tract and has had serial bronchoscopies over the last 18 months- with no signs of recurrence.

ARIANA GREENWELL, MD
ASSISTANT PROFESSOR

Management options for Single-Sided Deafness

DIVISION: AUDIOLOGY / VESTIBULAR & BALANCE CENTER

Unilateral hearing loss (UHL) is characterized by normal hearing in one ear and some degree of hearing loss on the contralateral side. This condition affects approximately 7% of adults in the U.S. Approximately 1 in 1000 children are born with UHL. Single-sided deafness (SSD) is a subset of UHL where the degree of hearing loss in the affected ear is so severe that the ear is considered nonfunctional or deaf. Unlike people with bilateral hearing loss, SSD is far less noticeable as these people typically exhibit fairly good hearing and understanding in many situations.

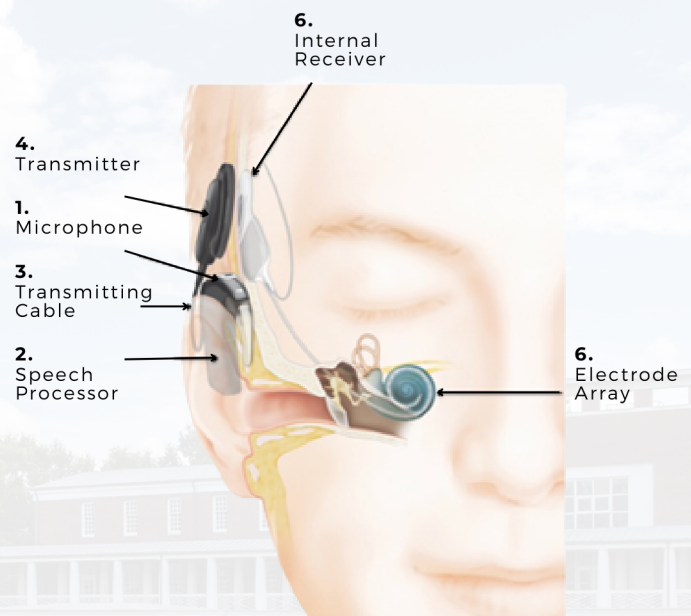
However, SSD can significantly impact an individual's quality of life, including mental fatigue from increased listening effort. They can also experience considerable hearing difficulties when someone is speaking on their poorer ear side, in group settings, or in noisy environments. Sound localization, or the ability to identify the location of a sound source, is also compromised in people with SSD. This can make it impossible to know which way to turn when someone is calling, or more worrisome, from which direction traffic is coming when crossing the street.



A depiction of sound localization affecting individuals with SSD. While blind folded, the child with SSD (located in the middle) can hear the children on the right side of the photo, but has limited or no hearing of the children on the left side.

Traditionally, aural habilitation options for patients with SSD were limited to re-routing devices, such as the CROS (contralateral routing of signal) system or bone conduction devices. These technologies have been effective in improving sound awareness from the poorer side, but they do not restore hearing ability in the affected ear or provide true binaural auditory stimulation.

In July 2019, the U.S. Food & Drug Administration (FDA) extended cochlear implant (CI) candidacy to include patients with SSD. Before this, CIs were reserved for patients with significant bilateral hearing loss. Unlike other technologies for SSD management, cochlear implantation is a surgical solution that can actually restore hearing ability in the affected ear. CI recipients with SSD should not only gain improved access to sound from their poorer hearing side, but they can achieve true binaural hearing. Thus, they are afforded many advantages of binaural auditory processing such as the ability to hear in noise and localize sounds. There are also other benefits of CI for SSD patients, including tinnitus suppression and reduced listening effort.



Cochlear Implant

The UVA CI team is excited to see the continued expansion of cochlear implant candidacy criteria and the growing number of patients pursuing cochlear implantation for treatment of their SSD. As treatment options evolve, we remain committed to providing personalized care and hearing restoration for our patients to improve hearing, communication, safety and quality of life.

LORI GROVE, PHD

DIVISION DIRECTOR, ASSISTANT PROFESSOR

What motivated you towards the ENT specialty?

Dr. Basu: I didn't know what ENT was when I randomly chose it as a 3rd year surgical subspecialty. But I am so glad I did! I think it was a combination of the type of people that make up the field and the types of patients we see that ended up finally drawing me in. I love kids and knowing that I can take care of children without having to do any fellowships was definitely a huge draw.



Annesha Basu, MD



Rachel Jonas, MD



Neil Saez, MD

Dr. Jonas: The people and the multidisciplinary collaboration.

Dr. Saez: Once I realized I was good with my hands, and I could gladly go the rest of my life without touching the abdomen, it was pretty clear that ENT could be a good fit. And corny as it may sound, helping people regain the ability to swallow, speak, taste, smell, breath – qualities that make life worth living – is incredibly gratifying.

How do you feel your residency experience helped you prepare for the future?

Dr. Basu: UVA ENT has given me all the tools, both surgically and clinically, as well as mentors I need to start paving my own path.

Dr. Jonas: I experienced a large breadth and depth of cases as a resident, so I feel prepared for cases I will see as a fellow.

Dr. Saez: I am going into a general Otolaryngology practice and my training at UVA has prepared me to confidently practice the full breadth of Otolaryngology. Also, I am now part of the incredible network that is UVA Otolaryngology.

What is a major highlight of your residency?

Dr. Basu: There isn't one major highlight I can think of—just small wins along the way that sort of make you proud of yourself. I think one would have to be when I took my first weekend call as a 4th year chief—just successfully making it through that weekend while leading my team and managing all the patients appropriately sort of gave me the confidence to say, "Hey, yeah, ok, I can do this."

Dr. Jonas: The friendships I've formed and mentorship provided to me.

Dr. Saez: Last week I walked out of a thyroidectomy, and I did 100% of the operation under the supervision of Dr. Dowling. It is incredible to see the clinical/surgical growth over the course of 5 years - thanks largely to the guidance from our attendings, co-residents, and patients.

Extras

Fitz-Hugh Research Project

Dr. Basu: Acute Laryngeal Injury Patient Factors & Interventions Leading to Successful Decannulation

Dr. Jonas: Voice Improvement After Essential Tremor Treatment via Focused Ultrasound and Deep Brain Stimulation

Dr. Saez: Thyroid-preserving laryngectomy in patients with laryngeal carcinoma: oncologic outcomes and iatrogenic hypothyroidism

Chief's Bagel

Dr. Basu: Egg salad sandwich on everything whole wheat

Dr. Jonas: Egg salad on a sesame bagel

Dr. Saez: Pastrami, muester, tomato on everything

Best Bite in Charlottesville

Dr. Basu: Anything at Public Fish & Oyster

Dr. Jonas: The macaroons from Bowerbird are my weakness.

Dr. Saez: The Mexican kitchen inside the Marathon gas station on Rio Rd

CONTINUED ON PAGE 17

Interview with the Chiefs

What are your plans following residency?

Dr. Basu: Private practice in Richmond, VA! Excited to be the first woman physician joining my group and also glad I get to be just down the road from UVA!

Dr. Jonas: Laryngology fellowship at University of Washington in Seattle.

Dr. Saez: I am thrilled to be joining ENT Associates of San Diego and start working in their Chula Vista office minutes from the U.S. – Mexico border. Most of the patients I will be seeing in this office will be Spanish-speaking, and a large percentage of these are Medi-Cal. As a bilingual physician this is one of the things that attracted me to the practice. The beach doesn't hurt either.

Do you have any parting advice for aspiring Otolaryngologists?

Dr. Basu: As Tommy Haverford from Parks and Rec would say, "Sometimes you gotta work a little so you can ball a lot". Getting into ENT residency and then completing residency is hard work! But what we do and the people we work with are phenomenal and make it worth it.

Dr. Jonas: Do as many cases as possible and always say yes to cases/opportunities/ teaching/courses.

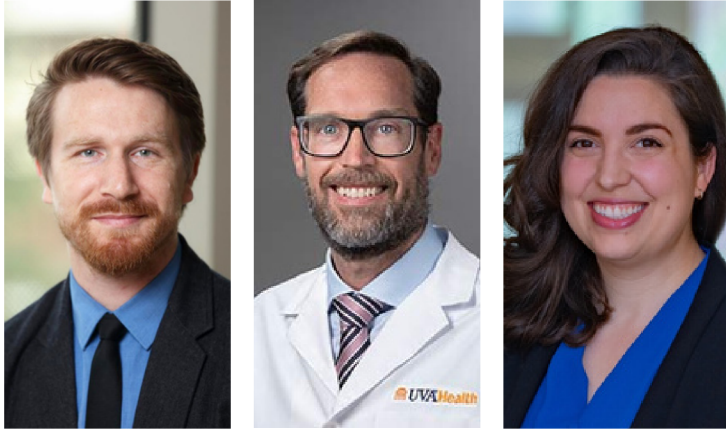
Dr. Saez: Take time to invest, work with, and support your colleagues. It is a relatively small field and the only way to ensure longevity is through creating a strong community around you. Collaboration and communication.



Congratulations, Class of 2023!



Dr. James Daniero, in Collaboration with Donald Griffin & Kazlin Mason, Secure NIH Grants Totaling \$3.1 Million



Donald Griffin, PhD (Left), James Daniero, MD, MS (Center), and Kazlin Mason, PhD (Right).

Dr. Daniero and his collaborators have recently been awarded two NIH grants totaling \$3.1 million to study the ability of advanced biomaterials to restore voice and speech function. Dr. Daniero is a Co-PI with Donald Griffin, PhD (Biomedical Engineering) on an R-01 titled, "Translating a biostimulatory implant for the long-term treatment of glottic insufficiency". The novel formulation of porous hydrogel called Microporous Annealed Particle Hydrogel (MAP gel) was designed in collaboration with Dr. Griffin to reproduce the dedicated tissues of the vocal cord that produce one's voice. The proposal aims to

develop assays of the delicate new tissue purposefully built in the voice box and lay the groundwork for a first-in-human clinical trial of vocal cord reconstruction. This work is supported by the National Institute on Deafness and other Communication Disorders (NIDCD).

In a related study, Dr. Daniero is also Co-PI with Kazlin Mason PhD, SLP-CCC (Communication Disorders, School of Education) on an R-21 titled, "Novel Implementation of Microporous Annealed Particle HydroGel for Next-generation Posterior Pharyngeal Wall Augmentation". (<https://reporter.nih.gov/search/HMTogh9VJkOQRn9HNvk4QQ/project-details/10727361>). This proposal uses 3D modeling to assess MAP gel's ability to treat the velopharyngeal insufficiency associated with cleft and craniofacial conditions, particularly related to pharyngeal wall augmentation. This work is supported by the National Institute of Dental and Craniofacial Research.

Internal Research Funding

ROBERT W. CANTRELL MD, RESEARCH GRANT / PAUL A. LEVINE, MD RESEARCH GRANT

This grant supports innovative basic science, translational and clinical research by residents and faculty OR worthy proposals that were not selected for funding by external mechanisms. One award cycle per year providing 2 grants up to \$8,000 each.

SUBINOY DAS OTORHINOLARYNGOLOGY INNOVATION GRANT PROGRAM

This grant fosters translational research partnerships linking medicine, law, regulatory governance, and business disciplines to provide immersive faculty and resident-driven product development experiences early in an Otolaryngologist's career. One award cycle per year providing 1 grant up to \$10,000 total.

The Miller Family Resident Education Fund

This grant supports higher training for residents and junior faculty in the area of Facial Plastic Surgery, especially facial trauma.

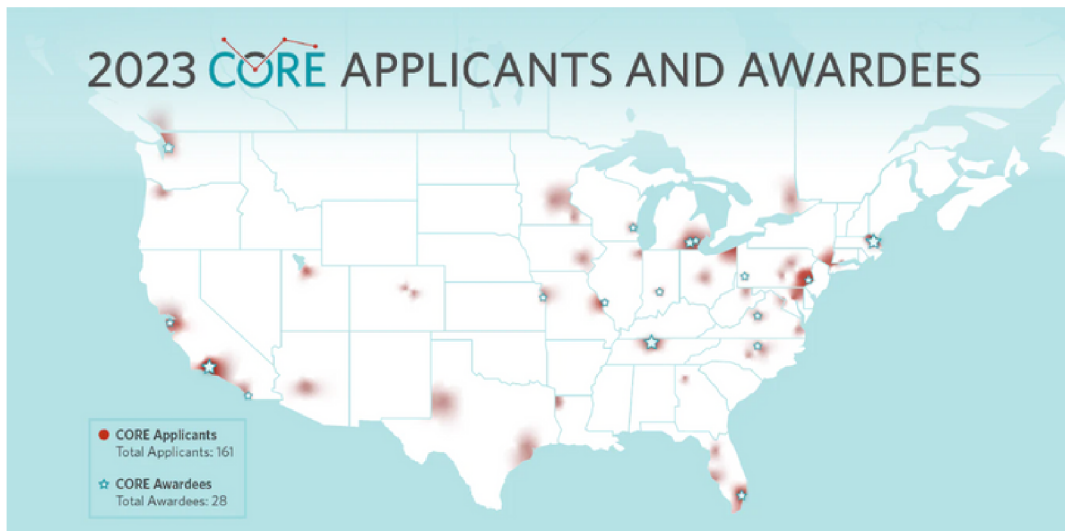
Dr. Claudia Gutierrez (PGY-4) Putting us on the Academy CORE Grant Map



Claudia Gutierrez, MD



Claudia Gutierrez, MD, MS is a PGY-4 otolaryngology resident. She was awarded the prestigious Centralized Otolaryngology Research Effort (CORE) Grant for her proposal entitled "Nanoscale Mechanical and Molecular Characterization of Augmented Vocal Fold for the Treatment of Glottic Insufficiency". Glottic insufficiency is a condition secondary to vocal fold (VF) immobility that presents as dysphonia and dysphagia, which can significantly impair one's quality of life. This condition is often treated with the injection of a biomaterial into the paralyzed vocal fold in an attempt to restore its complex structure and function. During her PGY-3-year research block she established a collaboration between Dr. James Daniero's Laryngeal Reconstruction Laboratory and Dr. Patrick Hopkins' ExSiTE Lab (Experiments and Simulations in Thermal Engineering) in the Department of Mechanical and Aerospace Engineering. Under their continued mentorship, her project will focus on the development of new assays for the preclinical investigation of novel biomaterials designed to address glottic insufficiency.



Goodbye 2022-2023 Research Fellows!



Research Fellow Julian De La Chapa, MD (Left) and Adithya Reddy, MS4 (Right).

Thank you to our 2022-2023 research fellows, Julian and Adithya, for all of your hard work over the past year. You grew as research clinicians with your innovative projects, contributed greatly to the department's research endeavors, and enhanced our fellow program with your ideas and participation. Your futures are bright, and we hope to stay in touch as you further the field of Otolaryngology. All the best in the next chapter of your careers!

Julian was accepted into a preliminary surgical residency at the University of Texas in Austin.

Adithya is completing his fourth year of medical school and will be an Otolaryngology residency applicant in the upcoming cycle.



Welcome 2023-2024 Research Fellows!



Research Fellow Naushin Ali, MS (Left) and Keerthi Kurian, BS (Right).

We would like to welcome our incoming 2023-2024 Research Fellows who have joined at a particularly exciting time to be involved with our department.

One of our new Research Fellows is Keerthi Kurian. Raised in Arizona, she pursued her undergraduate degree at the University of Arizona with a major in Neuroscience & Cognitive Science and minors in Studio Art and Chemistry. Her academic journey continued at California Northstate University College of Medicine. Keerthi's research interests include gender affirming surgery, patient safety and improving surgical outcomes. Outside of research, Keerthi finds joy in artistic expression through painting and makeup, and exploring bakeries in every town she visits.

Our other Research Fellow is Naushin Ali. She received her undergraduate degree in Pathobiology from the University of Toronto and her MS in Medical Sciences from Boston University School of Medicine. Since then, she has steadily moved down the East Coast and worked as a Clinical Research Coordinator in New

York City before moving to Richmond to attend Virginia Commonwealth University School of Medicine. Naushin's research interests include biotechnology, healthcare delivery in low-resource settings, and improving surgical- and patient-reported outcomes. In her free time, Naushin enjoys playing the ukulele, traveling, photography, and brewing coffee.



Publications Thus Far, 2023



Christopher Harryman, MD

Harryman, C., Park, S. and Oyer, S. (2023), Should Systemic Antibiotics be Used Regularly for Mandible Fractures?. *The Laryngoscope*.
<https://doi.org/10.1002/lary.30810>

Pappal RB, Burruss CP, Witt MA, Harryman C, Ali SZ, Bush ML, Fritz MA. Risk factors for developing subglottic and tracheal stenosis from the medical intensive care unit. *Laryngoscope Investig Otolaryngol*. 2023 Apr 20;8(3):699-707. doi: 10.1002/lio2.1051. PMID: 37342110; PMCID: PMC10278098.

De La Chapa, J.S., Harryman, C.J., McGarey, P.O. and Daniero, J.J. (2023), Clinical Characteristics of the Cervical Inlet Patch: A Case Series. *OTO Open*, 7: e24.
<https://doi.org/10.1002/oto2.24>



Claudia Gutierrez, MD

Mandava S, Gutierrez C, Mukherjee S, Hashisaki G. Traumatic pneumolabyrinth without temporal bone fracture causing sudden hearing loss. *Am J Otolaryngol*. 2023 Jun 9;44(5):103945. doi: 10.1016/j.amjoto.2023.103945. Epub ahead of print. PMID: 37329693.

Gutierrez, C., Zaninovich, A., Vozzo, R. and Daniero, J. (2023), Ultrasonic Pin Placement for Resorbable Rigid Fixation of a Thyroid Cartilage Fracture. *The Laryngoscope*, 133: 1470-1472. <https://doi.org/10.1002/lary.30591>



Katherine Webb, MD

De La Chapa, J.S., Webb, K., Stadlin, C., Reddy, A., Schoeff, S.F., Reed, R., McColl, L.F., Thiele, R.H. and Daniero, J.J. (2023), Evolving Endotracheal Tube Preferences and Practices: Intensivist Knowledge Gaps and Sex Disparities. *The Laryngoscope*. <https://doi.org/10.1002/lary.30744>



Jeffrey Mella, MD

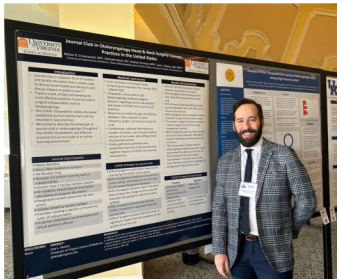
Mella, J., Oyer, S. and Park, S. (2023), Functional Rhinoplasty—What Really Works?. *The Laryngoscope*. <https://doi.org/10.1002/lary.30575>

Event and Conference Highlights

47th Annual Fitz-Hugh

This year's 47th Annual Fitz-Hugh Symposium was a huge success! Over the course of three days, our residents presented their research projects and held 33 lectures and 7 panels over the two-day didactic lecture series. This was followed by an all-day cadaver lab taught by our faculty and guest surgeons!

The symposium ended with a beautiful banquet honoring our incredible graduating chief residents Dr. Rachel Jonas, Dr. Annesha Basu, and Dr. Neil Saez. We wish them all the best! This year they awarded the Reibel Faculty Teaching Award to Dr. Samuel Oyer (*seen on the far right in lower right corner*).

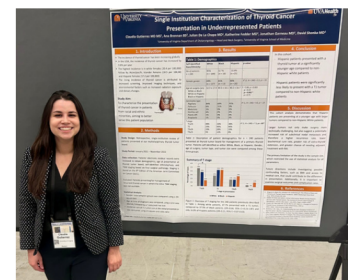
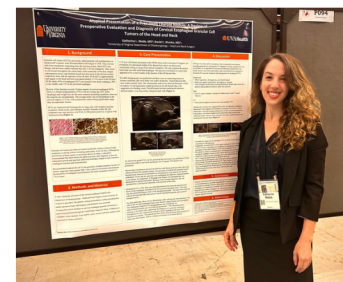


Triological Society Combined Sections Meeting 2023

Several of our residents, medical students, and research fellows had the honor of traveling to California this spring to represent the Department of Otolaryngology at the annual Triological Society Combined Sections Meeting. Our team gave an oral presentation, presented several posters, and our very own PGY-3 Dr. Claudia Gutierrez and MS4 Andrew Zaninovich, under the mentorship of Dr. Daniero, took first place in the "Laryngology & Bronchoesophagology" category for their poster!

AHNS 11th Annual International Conference

This year, several of our H&N Faculty, OTO residents, and medical students traveled to Montreal, Canada for the AHNS 11th International Conference on Head and Neck Cancer. Dr. David Shonka made 2 appearances as a speaker and as a panelist during the conference. Dr. Katherine Fedder co-led an open forum on Advanced Sialendoscopy Education as part of an annual collaborative. Lastly, our own PGY-4 Dr. Nelson Gruszczynski and medical student Ana Brennan won 2nd place in the Endocrine Surgery category with their poster titled, "Oncocytic Cell Thyroid Carcinoma: Conclusions from a 20-year Patient Cohort".





Save The Date!
Fitz-Hugh Symposium
June 20-21, 2024

48th Annual Fitz-Hugh Symposium
June 20-21, 2024 at Boar's Head Resort in Charlottesville, VA

Honoring

George Hashisaki, MD Daniel Landes, MD

Course Directors

John Mason, MD Brad Kesser, MD Stephen Park, MD

UNIVERSITY OF VIRGINIA
Department of Otolaryngology - Head and Neck Surgery

48th Annual Fitz-Hugh Symposium

Save the date for next year's Fitz-Hugh Symposium taking place at Boar's Head Resort on **June 20-21, 2024**. For our 48th Annual Fitz-Hugh Symposium, we will be honoring the career, service, and impending retirement of Dr. George Hashisaki and Dr. Daniel Landes whose combined service surpasses 50 years with the department!

More updates to follow in the coming weeks and months.

Pediatric ENT Visiting Professor

We were honored to have Dr. Ken Kazahaya MD, MBA, FACS as our summer visiting professor to deliver a Grand Rounds on "Management of Thyroid Nodules in Children and Adolescents".

Dr. Kazahaya is an attending physician in the Division of Pediatric Otolaryngology, director of Pediatric Skull Base Surgery, medical director of the Pediatric Cochlear Implant Program, and co-lead surgeon in the Pediatric Thyroid Center at Children's Hospital of Philadelphia. He also has an appointment as Associate Professor of Clinical Otorhinolaryngology: Head and Neck Surgery at the Perelman School of Medicine at the University of Pennsylvania.

Dr. Kazahaya is a member of the American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS), North American Skull Base Society, American Society of Pediatric Otolaryngology (ASPO), American Thyroid Association, and a Fellow of the American College of Surgeons. He has been appointed to committees in both AAO-HNS and ASPO.



Group photo of Dr. Ken Kazahaya MD, MBA, FACS, (Middle) with residents, fellows, and medical students following his Grand Rounds lecture.

Jahrsdoerfer Visiting Professor



Please mark your calendars for Thursday, **October 12, 2023** for the Fall Jahrsdoerfer Visiting Professor. Seilesh C. Babu, MD from the Michigan Ear Institute will be joining us for didactics and hopefully temporal bone drilling all day on Thursday.

Dr. Babu was Dr. Garrett Casale's fellowship mentor, so it will be fun to hear more "Beast" stories about Garrett!

Learn more about Dr. Babu here: [Seilesh C. Babu, M.D. | Neurotologist, Otology, Skull Base Surgeon in Farmington Hills \(michiganear.com\)](https://www.michiganear.com)

AAO-HNSF 2023 Annual Meeting

The best and brightest otolaryngologist-head and neck surgeons from across the globe will come together **September 30 – October 4, 2023**, in Nashville, Tennessee, for the AAO-HNSF 2023 Annual Meeting & OTO Experience. This year's event will take place at the Music City Center and Omni Nashville Hotel in downtown Nashville, Tennessee.

We already have several of our residents planning to attend and one who will be presenting at the conference!

AAO-HNSF 2023 ANNUAL MEETING & OTO EXPERIENCE

SEPTEMBER 30 - OCTOBER 4
NASHVILLE, TENNESSEE



Resident Alums Dr. Phil Chen (Left), Dr. Dane Barrett (Middle), and Dr. Jared Christophel (Right) at this year's Fitz-Hugh Symposium.

Alumni Reception at the AAO

This year's UVA Otolaryngology Alumni Dinner will take place after the 2023 AAO-HNSF Annual Meeting Monday, **October 2, 2023**. Join us at the River House - Hollywood Room for cocktails and food. Please register online by Tuesday, September 26 to attend.

Agenda:

Cocktail Reception from 6:30 - 7:30 p.m.

Plated Dinner from 7:30 - 9:30 p.m.

Business casual attire.

Registration:

<https://www.uvamedalum.org/register-2023-uva-otolaryngology-alumni-dinner/>

If you have any questions, please contact:

Wendy Baldwin at wdb4b@virginia.edu

Philanthropy

A gift to the University of Virginia Department of Otolaryngology- Head and Neck Surgery Resident Education Fund exclusively supports resident education at different levels including books, conferences, etc.

Please consider supporting the next generation of Otolaryngologists. If you would like to make a philanthropic investment in UVA Oto-HNS visit our website.

<https://www.uvamedalum.org/giving/department-of-otolaryngology/>

WHAT YOU OTO KNOW

