Salivary gland disorders have a variety of causes, but very few therapeutic options. Patients present with impacted salivary stones (sialolithiasis) resulting in sialadenitis (a painful swelling and/or infection of the gland secondary to this obstruction), radioactive iodine (RAI) induced sialadenitis after treatment for thyroid cancer and other various forms of chronic salivary inflammation, including autoimmune diseases. Untreated sialadenitis can lead to chronic pain, xerostomia (dry mouth), and recurrent infections with abscess formation being the most severe end of the inflammatory spectrum.

With the rising incidence of antibiotic resistance and risk for abscess formation, long term or repeat antibiotic therapy is not an adequate solution for an obstructive phenomenon, such as sialolithiasis. Historic therapy for obstructive disease involved salivary gland excision via an external approach, which controlled the infection and prevented abscess formation, but at the cost of a loss in saliva formation, a neck scar, and in cases of parotid disease the risk of facial nerve damage resulting in facial paralysis. The negative downstream consequences of decreased salivation, including increased dental caries and limited ability to lubricate a food bolus, are well documented. In addition, the medical therapies, such as sialogogues, massage and prescription salivary stimulants, for patients with RAI and chronic inflammatory disease, while conservative, are often ineffective.

Prompted by a desire for less morbid and more effective therapies, and aided by technological advances, physicians, such as Frances Marchal in Geneva, devised an endoscopic approach to treat inflammatory and obstructive salivary gland disorders, whilst sparing and hopefully restoring gland function – a procedure coined sialendoscopy.

Since its inception, sialendoscopy has shown promising results in treating sialolithiasis and sialadenitis in both the adult and pediatric population, allowing for preservation of glands and restoration to normal gland function, i.e. saliva production. Recently, sialendoscopy has expanded from Europe and is growing across the U.S. A few major medical centers have trained specialist in this novel technique. At UNC Hospitals, Dr. Trevor Hackman, a fellowship trained head and neck/microvascular surgeon, has grown a prolific sialendoscopy practice over the
Early summer is a particularly bitter-sweet moment for us in the academic arena. We are finishing residents and fellows from our program and we are bringing in new residents and fellows all of whom have tremendous promise and fabulous credentials. Our graduating residents and fellows all have excellent opportunities to further their careers and make substantive contributions to the specialty. These eminently qualified otolaryngologists have been extremely well prepared to embark on the next phase of their careers. For the incoming residents and fellows, the credentials they possess are incredible and we absolutely look forward to learning as much from them as they learn from us.

Clearly, one of the things that the incoming residents and fellows will be able to participate in is the ongoing expansion of the envelope of what we hope to accomplish in the clinical research arena. Drs. Hackman and Buchman are two prime examples of the ongoing things we do here that expand the frontier of our specialty. Sialendoscopy, robotic sialolithotomies, and cochlear implants in young people who have no cochlear nerves (an auditory brainstem implant) are new and innovative techniques that really change the game for our specialty and enhance opportunities for our patients. I am very proud of Drs. Hackman and Buchman for taking on these clinical challenges and coming up with innovative solutions to these problems.

Surgeons at UNC Health Care recently performed the first-ever auditory brainstem implant done in a child. Three-year-old Grayson Clamp from Charlotte, N.C., was born with no cochlear nerves and as a result could not hear.

The surgery, performed by Craig Buchman, MD, Professor Otolaryngology/Head and Neck Surgery, and Matthew Ewend, MD, Chair, Department of Neurosurgery, is the first of its kind performed in the United States as part of an FDA clinical trial.

The device was originally used for patients with deafness due to auditory nerve tumors, which impact hearing, but is now being considered to help restore hearing in children.

View the story by WRAL online at go.unc.edu/k3W4P.

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med.unc.edu/ent

Summer 2013 Heads Up is designed and edited by Nicolette DeGroot.
past 3 years, treating obstructive and inflammatory salivary gland disorders of the parotid and submandibular glands.

The procedure involves serial dilations of the natural punctum with lacrimal probes or Selinger technique using guidewires and dilators followed by introduction of the sialendoscope under hydrostatic guidance. Saline and steroid irrigations are used to treat inflammatory disorders, while graspers and wire baskets can be used to extract stones.

Dr. Hackman has performed this procedure on a weekly basis over the past 3 years, and is one of the first physicians in the US to offer office-based sialendoscopy under local anesthesia, which he performs on his clinic procedure mornings along with ultrasound-guided fine needle aspiration of neck and thyroid masses. Patient’s previously suffering for years with salivary gland disorders now have a viable therapeutic option.

Since adopting this procedure, Dr. Hackman has been able to spare patients the morbidity of gland excision, except in one case, where the patient’s initial presentation was marked by a floor mouth and submandibular gland abscess.

A highly successful procedure for sialoliths < 7 mm and chronic sialadenitis with partial to complete response rates over 80%, sialendoscopy is limited as an unimodality therapy in patients with megaliths, stones larger than 7 mm. For parotid disease, often, combined approaches are employed. The sialendoscope is used to localize the stone, after which a direct facial incision or parotid/ facelift incision is used to approach the stone externally. The surgeon dissects parallel to the course of the nerve following the light of the scope. The buccal nerve is easily identified and spared.

Megaliths in the submandibular gland require a transoral approach to spare gland function. Recently Dr. Hackman has combined his breadth of experience in sialendoscopy with his expertise in transoral robotic surgery to offer robotic sialolithotomy for large “megalith” stones. Stones greater than 1 cm within the duct and even hilum of the gland can be removed via a short (<30 minute) minimally invasive robotic sialolithotomy, whilst still sparing gland function.

The advances in both techniques and technology have opened the therapeutic options for patient’s suffering from obstructive and inflammatory salivary gland disorders in the adult and pediatric population.

The Office of Information System for the UNC School of Medicine has rolled out an improved web experience. This took place on May 16th, and affects all UNC SOM and UNC Health Care site, including our Department’s (med.unc.edu/ent).

The goals include creating a modern, professional web system and identity across all areas of the Med School and Health Care system, meeting ADA 508 and W3C Priority 1 requirements, and enabling a responsive design that any mobile device will accommodate.

Check it out, and send any feedback to OHNS Communications Director, Nicolette DeGroot at ndegroot@med.unc.edu.

In the present health care environment, clinical income and federal grants are no longer adequate to meet the overall mission of our Department. Additional private and corporate funds are needed to ensure our future growth. Private gifts allow us to continue making research breakthroughs that form the foundation of new and improved methods of patient care. They also make it possible for us to attract and retain the best teachers, clinicians and promising scientists to train future surgeons.

There are many giving options available to support the efforts of our Department. Please contact our Director of Development for more information on how you can help.

Leslie H. Nelson
Director of Development

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880 MLK Jr. Boulevard | Chapel Hill, NC 27514-2600
919-843-5734 | Leslie_Nelson@med.unc.edu
Jessica Smyth, MD  Not often are we privileged to so publically proclaim our gratefulness, but it is with a heart filled with gratitude that I depart Chapel Hill. I would be remiss if I didn’t start by thanking Dr. Pillsbury for selecting me. From the moment I first drove through campus and met the staff, faculty, and residents, I wanted to train at UNC. After five years, I haven’t been disappointed. The opportunities afforded me during my training have been incredible. All of the faculty have, in some way, mentored and educated me. I would especially like to thank Dr. Shores for allowing me to travel with her and share in the work she is doing in Malawi. The work done at UNC is benefiting not only the residents of North Carolina, but also individuals throughout the world.

Finally, I want to thank you for being my “military family.” Your support during my husband’s deployments and our geographic separation has been amazing. As I transition back to the military, I intend to continue to build on the foundation I’ve developed here and carry forward the excellent patient care I’ve come to know at UNC. It is truly my hope that I will be able to give back after so much has been given to me.

Yu-Tung Wong, MD  North Carolina has given me growth in every way. In particular this expansive otolaryngology program has grown my scope of thinking. I feel fortunate to have opened my eyes to subspecialty fields that were not at my forefront before. I attribute this directly to the faculty’s intensity for excellence. It has been a distinct pride to train at UNC.

My opportunity to maintain an engineering mentality also contributed to my future growth as a researcher. Without exception, every person who knew my background encouraged me to mix technical thinking with medical practice. I unexpectedly learned new technical skills in new arenas over the last five years. It has been a distinct pride to work with Dr. Buckmire.

Most notably my family grew here in North Carolina. My two “Carolina Girls” are wonderful, happy, healthy, and safe. I am so happy to have found the perfect neighborhood in Chapel Hill for them to run, play, ride, learn. Gianna will never forget volleyball camp, Lego Engineering, the BLT store, and Scroggs Frogs. It has been a distinct pride to grow as a daddy here in Chapel Hill.

Scott Shafar, MD  Farewells are often bittersweet. I anxiously began roaming the halls of UNC hospital in 2008. This was the start of my intern year, far from my home in Oklahoma. I knew the path would be demanding, but to what extent was unpredictable. The relationships I have developed and solidified during my training at UNC have been invaluable, and drove my ability to thrive here in North Carolina. These interactions are what make UNC what it is today.

Navigating life through residency has not been easy, nor should it. However, after finding myself surrounded by such gifted, industrious, courageous humans beings, I can safely say we have persevered. I am grateful to all my friends, operating room and clinic teams, colleagues, faculty, and mentors who have invested any of their time, life, and energy in making me the best physician I could be. As I embark on future endeavors I will honor and embrace being a graduate of UNC. I will miss everyone as I begin my fellowship in facial plastic and reconstructive surgery in Indianapolis, Indiana. I wish you all the best.

Mihir Patel, MD  Einstein defines Insanity: doing the same thing over and over again and expecting different results.

seven years of mentorship, forging friendships, my Wife and an Ariya later . . . feel free to call me insane.
Christopher Welch, MD, PhD grew up in Campobello, South Carolina and attended Clemson University, obtaining degrees in Biological Sciences and Chemistry. A variety of research experiences during college led him to pursue a medical scientist training program at the University of North Carolina. Dr. Welch’s PhD was in Pharmacology, and his dissertation focused on understanding the roles of Rho GTPases in cell migration, particularly as it applies to inflammation in disease. Chris and his wife, Erin, who works at Cree, Inc. in the Research Triangle Park, are excited to stay in the Triangle for this next phase of his training. In his spare time, Chris enjoys cycling, birding, hiking, fishing, and other outdoor activities, as well as playing the violin and cooking.

Lewis Overton, MD grew up in Greensboro, NC. He studied Biology at UNC-Chapel Hill and graduated in 2009. While at UNC, Lewis was active with the club lacrosse team, and earned an honors degree with research distinction for his thesis study in DNA repair mechanisms. Immediately following UNC, Lewis relocated to attend the Medical University of South Carolina in Charleston, SC. While living in South Carolina, Lewis became an avid sailor, found ways to surf whenever he had the chance, and enjoyed almost all of the great dining Charleston had to offer. Outside of medicine, he also likes to camp, mountain-bike and swim. He is extremely excited to be coming back home to pursue his residency with the UNC Otolaryngology department, and can’t wait to cheer on the Tar Heels from Chapel Hill again.

Rounak B. Rawal, MD grew up in the beautiful, great state of New Jersey. He is a graduate of the Boston University Seven-Year Combined BA/MD program. Between his third and fourth years of medical school, he took a leave of absence to complete a Doris Duke Clinical Research Fellowship under the guidance of Drs. Zanation, Ebert, and Senior at the UNC Department of Otolaryngology/Head and Neck Surgery. He is absolutely ecstatic to be back at UNC as a resident! Rounak has also been teaching in some capacity for years now and is looking forward to incorporating these skills into an academic medical career. Outside of medicine, he is an avid squash and tennis player, and a former member of the UNC Squash Team. He also enjoys traveling, running, cooking, seeing a live music show whenever possible, and rooting for his beloved Jets.

Stan McClurg, MD grew up Paola, KS, and obtained his bachelor’s degree in Chemical Engineering at Kansas State University. He completed medical school at The University of Kansas School of Medicine in Kansas City, KS, graduating Magna Cum Laude. He completed residency training at The Ohio State University in Columbus, OH. While at Ohio State, he conducted research on computational fluid dynamics and nasal airflow characteristics in pre and postsurgical nasal cavities. He has conducted extensive research on 3D-CT rendering of the nasal and sinus cavities, and has written a review article on posterior epistaxis. He has presented his research at multiple international conferences. His wife, Kelli Krase, MD, is an Ob-Gyn physician, and accompanies him to Chapel Hill. Some of Stan’s hobbies include playing with his dog, golfing, travelling, culinary cuisine, listening to music, barbecuing, and wine-making. Dr. McClurg joins us as the 2013-14 Rhinology and Skull Base Surgery Fellow.

Jason Roberts, MD I have had a good time in the Northeast while completing my residency at Albany Medical College, but my wife and I are very excited to come back to Chapel Hill. We met as UNC undergraduates and had our first child here. In addition to those important moments, the UNC Department of Otolaryngology played a formative role in my otolaryngology career. While in medical school, I received a NIH T32 Grant for auditory electrophysiology study with Dr. Fitzpatrick, and I worked with Drs. Shores, Rose, and Weissler. I am happy to be home and return to UNC to further develop my niche in Pediatric Otolaryngology. I am thrilled to work with the OHNS faculty again, and look forward to working with, teaching and learning from others at UNC. (Picture taken at NY Catskills)

David Ludlow, MD is originally from Reno, Nevada. He graduated from Stanford University on a gymnastics scholarship. His bachelor’s degree was in Psychology with a Neuroscience specialization. Following graduation he worked for two years in the Department of Anesthesia at Stanford hospital doing research on functional MRI and the processing of pain in the brain and spinal cord. David attended medical school at the University of Nevada School of Medicine and then successfully completed his residency at LSU in Shreveport, LA. David is married to Jennifer Ludlow and they have three beautiful children: Caleb (4), Levi (2), and Molly (2mo). They are all excited to be moving to North Carolina and to experience the new adventures this year will bring. When outside of medicine, David loves spending time with his family, exercising and being active outdoors, reading science fiction novels, and staying involved in his church.
Delegates from UNC’s Department of Otolaryngology/Head and Neck Surgery join with their colleagues from Duke to talk with Representative George Holding about reform of the Sustainable Growth Formula and other political issues as part of the 2013 Otolaryngology Advocacy Summit.

Residents Anand Dugar, Cristine Klatt-Cromwell, and Gita Madan-Fleischman along with medical student Robert Taylor participated in the 2013 AAO-HNS Board of Governors (BOG) Spring Meeting and Advocacy Summit May 5-7th. The BOG meeting brought together local, regional, and national otolaryngology—head and neck surgery societies from around the United States to identify issues affecting otolaryngologists, research and recommend solutions, and advocate for action from members and political leaders. Notable presentations included, “Quality in Otolaryngology: What the Public Expects from Us,” and, “Legal Implications of the Affordable Care Act on ENT Practice.” This led into the Advocacy Summit, where participants learned about the most significant legislative issues affecting the practice of otolaryngology and met with members of Congress and their staffs to discuss them. Key issues discussed included the Sustainable Growth Rate Formula, the Independent Payment Advisory Board, the Truth in Healthcare Marketing Act of 2013, and the Training Tomorrow’s Doctors Today Act.

Many thanks to everyone who made this unforgettable experience possible: UNC’s Department of Otolaryngology—Head and Neck Surgery, the North Carolina Society of Otolaryngology and Head and Neck Surgery, the American Academy of Otolaryngology—Head and Neck Surgery, and the ENT Political Action Committee.

For more information about issues affecting the practice of otolaryngology and resources to get involved, visit the ENT Political Action Committee at entpac.org.

Over 1400 professionals from 65 countries who practice in the area of cleft and craniofacial care participated in the 12th International Congress in May 2013, meeting in Orlando Florida. This was the first time in 44 years that the Congress returned to the USA since it was started in 1969. Talks demonstrated the enormous realm of care that is available for cleft lip/palate, one of the most common birth anomalies, throughout the world. Otolaryngologists were involved during sessions devoted to speech, sleep and hearing. One of the most controversial topics is airway management in the newborn with Robin sequence, which ranges from use of the nasopharyngeal airway to mandibular distraction, with strong and vocal proponents of each modality!

FROM LEFT TO RIGHT: Armando Uribe-Rivera, Amelia Drake and Krishna Patel
Announcements

Harold Pillsbury, MD was awarded a 2013 Order of the Golden Fleece, UNC’s oldest and most prestigious honor society. For his extraordinary research and leadership in the field of Otolaryngology, Dr. Pillsbury has developed a world-renowned children’s cochlear implant for children with hearing problems while making UNC a world leader. Dr. Pillsbury was also sixteenth Vietnam for the Academy of Otolaryngology in Baltimore, MD.

Carlton Zdanski, MD received the American Academy of Otolaryngology/Head and Neck Surgery (AAO-HNS) Honors Award, and was recognized during the AAO-HNSF Annual Meeting & OTO Expo on September 9-12, 2012. The AAO-HNS presents the Honors Awards to medical professionals in recognition of extensive meritorious service through the presentation of instructional courses, scientific papers, participation on any AAO-HNSF committee or in an Academy leadership position.

Speech and Audiology at Carolina Crossing scored among the TOP FIVE of all the ambulatory clinics during the most recent quarterly release of the UNCHCS Patient Satisfaction scores. In conjunction with the Commitment to Caring initiative, the Ambulatory Patient Experience Team (APEX) recognizes quarterly winners.

Oliver Adunka, MD was elected into the UNC Academy of Educators.

Carlos Ebert, MD passed the Fellow Exam for the American Academy of Otolaryngic Allergy in September of 2012.

Dr. Austin Rose gave a talk at University of Texas Medical Branch’s 2013 Pediatric Didactic Day. Former UNC-OHNS resident Dr. Harold Pine runs the program, and is also the head of Pediatric Otolaryngology at UTMB in Galveston, TX. Dr. Rose’s talk was entitled The Evolution in Surgical Treatment for Chronic Sialorrhea.

Craig Buchman, MD was a Visiting Professor in Bogota, Colombia on March 11, 2013.

Dr. Buchman was also an Invited Panelist for “Cochlear Implants---Which Device?” at the Triological Society’s 116th Annual Meeting, Orlando, FL April 12, 2013.

Other news from Trio:

- **Adam Zanation, MD** was a Triological Society Thesis Award winner of the Harris P. Mosher Award, and is a new fellow inducted into the Triological Society.
- **Harold Pillsbury, MD** was awarded the Triological Society Gold Medal.
- **Drs. Baishakhi Choudhury, Omar Awan, Maxwell Pike, Craig Buchman, Doug Fitzpatrick, and Oliver Adunka.** Physiologic consequences of electrode insertion in to a gerbil model of cochlear implantation featuring noise induced hearing loss.
- **Drs. Cristina Klatt-Cromwell, Adam Zanation, and three others won a first prize poster presentation for Post Operative Magnetic Resonance Imaging Characteristics of Vascularized Nasoseptal Flap Skull Base Reconstructions.**
- **Drs. Joseph Roche, Oliver Adunka, Harold Pillsbury, and Craig Buchman.** presented The cost of cholesteatoma care at a tertiary medical center.
- **Adam Campbell, MD** won the first price poster award for Correlation of Intraoperative Electrocochleography Measures and Speech Outcomes in Cochlear Implant Patients. Dr. Campbell was mentored by Drs. Adunka and Doug Fitzpatrick.
- **Drs. Grace Kim, Carlton Zdanski, Amelia Drake, and Robert Buckmire** contributed to Assessment of dysphagia after surgical treatment of Zenker’s diverticulum using the Eating Assessment Tool.

Dr. Brent Senior attended Boston University and Tufts University Alumni Day on June 14. He presented Advances in Pituitary Surgery, Revision Endoscopic Sinus Surgery, and was featured on a panel entitled, Technology in Rhinology.

Drs. Brent Senior, Carlos Ebert, and Kenneth Rodriguez attended the Joint Filipino USA Rhinology Summit on April 17, 2013. Thirty visiting physicians came for a one-day mini-conference at UNC.

Drs. Brent Senior was the Guest of Honor and was highly represented at the 2013 Lone Star Rhinology Course April 26 - 28. His keynote address was Past, Present, and Future of Sinus Surgery, and other talks include Rhinogenic Headaches and Management of FESS Complications.

Drs. Grace Kim, Cristine Klatt-Cromwell, Rupali Shah, and Robert Buckmire contributed to Assessment of dysphagia after surgical treatment of Zenker’s diverticulum using the Eating Assessment Tool.

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The Department hosted its annual **Newton D. Fischer Society Meeting** at the Paul J. Rizzo Conference Center in Chapel Hill on June 1st.

Drs. Adunka and Fitzpatrick secured funds for a graduate student, Chris Giardina, who will complete his biomedical engineering degree as part of his UNC MD PhD during the upcoming 4 years.

The **Adunka/Fitzpatrick** lab presented recent research data at the Midwinter Meeting of the Association of Research in Otolaryngology in Baltimore, MD.
The Department of Otolaryngology/Head and Neck Surgery

Harold C. Pillsbury, MD, FACS, Chair, Thomas J. Dark Distinguished Professor of Otolaryngology/Head and Neck Surgery
Craig A. Buchman, MD, FACS, Vice Chair for Clinical Affairs, Harold C. Pillsbury Distinguished Professor of Otolaryngology/Head and Neck Surgery
Brent A. Senior, MD, FACS, Vice Chair for Academic Affairs, Sheila and Nathaniel Harris Distinguished Professor of Otolaryngology/Head and Neck Surgery
Carolyn Hamby, Clinical Academic Departmental Administrator

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Adam M. Zanation, MD, Assistant Professor

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Austin S. Rose, MD, Associate Professor

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Andrea Jarchow-Garcia, MD, Assistant Professor, Facial Plastic Surgeon

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Adam M. Zanation, MD, Assistant Professor

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Oliver F. Adunka, MD, Associate Professor

Sleep and Snoring Surgery

Brent A. Senior, MD, FACS, Professor

General Otolaryngology/Head and Neck Surgery

Peter G. Chikes, MD, FACS, Assistant Professor

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Ellen S. Markus, MA, CCC-SLP, DMA, Coordinator
Linda F. Hube, MS, CCC-SLP, Speech Pathologist

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Shuman He, PhD, Research Assistant Professor
Margaret T. Dillon, AuD, Research Assistant Professor
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Dennis O. Frank, PhD, Postdoctoral Fellow

The Division of Research Training and Education

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Margaret T. Dillon, AuD, CCC-A, Audiologist

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