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CHAIRMAN'S CORNER



Anand K. Sharma, M.D., Betsy K. Davis, D.M.D., Wendy C. H. Wellin, Terry A. Day, M.D., and MUSC President David J. Cole, M.D.

Opening of the Wendy and Keith Wellin Head and Neck Oncology Center

he grand opening of the Center was celebrated on December 3, 2015. Planning for this space began more than two years ago with a generous multi-million dollar gift from Wendy and Keith Wellin. Phase I, consisting of approximately 5,200 square feet, has been completed and is occupied. Phase II will provide an additional 5,000 square feet and is scheduled to be completed in 12-18 months.

The Head and Neck team, led by **Terry A Day**, **M.D.**, consists of more than 40 specialists. This new space now allows for these individuals (surgeons, radiation oncologists, medical oncologists, maxillofacial prosthodontists, speech and swallowing specialists, nutritionists, and social workers) to provide point of service coordinated care from initial encounter through treatment and survivorship.

2015 Statistics

New HNO patient evaluations: 1,623 Tumor Board patient reviews: 728 Head and neck surgeries: 1,077 Free flap reconstructions: 130

Head and Neck Oncology

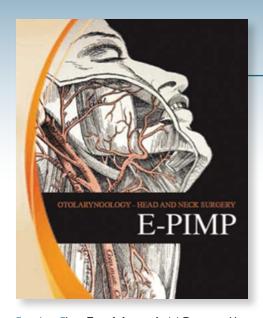
Terry A. Day, M.D.
M. Boyd Gillespie, M.D., MSc
Joshua D. Hornig, M.D., FRCS(C)
Eric J. Lentsch, M.D.
David M. Neskey, M.D.
Andrew T. Huang, M.D.
Roy B. Sessions, M.D.

Maxillofacial Prosthodontics

Betsy K. Davis, D.M.D. J Rhett Tucker, D.M.D. "I have never heard patients and their families so complimentary of a waiting room and clinic area as they have been since the Wellin Clinic opened," said Dr. Day.

"It provides an opportunity for patients to appreciate the care and hope that is so needed during the cancer journey without traveling from building to building or office to office, " says Mrs. Keith S. Wellin.

Paul R. Lambert, M.D.
Paul R. Lambert, M.D., Professor and Chair
Otolaryngology - Head & Neck Surgery



hen Eric J. Lentsch, M.D. started his academic career, he faced a dilemma that many academic physicians face. He wanted to be a great teacher, but what was his method of teaching going to be? To answer this, he thought back to his best educational experiences as a student. Nearly always they were when teachers used a form of the Socratic Method and "pimped" him. "It often - actually almost always - made me uncomfortable when it was happening. But when I looked back on things, I always felt like I learned the most from getting pimped." But the caveat here, Dr. Lentsch admits, is to do it right. "It can't be an interrogation. It should be done in a non-threatening manner. I remember most of my best teachers to this day - Jeff Bumpous, Frank Miller, Bill Cheadle and Mike Edwards and others. These were men who were great surgeons and even better teachers. They used pimping methods and they were tough, but I always knew they wanted to teach me, not embarrass me, and that was important." Dr. Lentsch, chose to emulate their method - eschewing PowerPoint lectures for interactive "pimp sessions" which he used for both the lectures he gave as part of the official curriculum and the impromptu weekly sessions

ContinuingEducation

he gave to all residents who wished to come. As Dr. Lentsch progressed in his career, he also started thinking about how education was evolving - that is, to more computer and online interfaces rather than face to face teaching. With this in mind, he made a plan for taking pimping into the modern era, and created his own form of 'online pimping.' It began innocently enough when he would ask his residents to email him the answers to questions they had missed in the operating room that day. They would have to email him the answers by midnight or risk losing operative privileges the next day. Somewhere in the intervening years, it morphed into his asking periodic questions to his entire group of residents via email. (This is when one of the residents, now an academic physician herself, coined the phrase "E-Pimp.") Later, as the concept developed, it took its current form - a daily question, taken from the current literature or knowledgebase, sent via email to subscribers; with the answer and explanation electronically provided once the question is answered by the subscriber. It also took its current name, Otolaryngology – Head and Neck Surgery E-Pimp. "I think of E-Pimp as a "Word of the Day" concept" says Dr Lentsch. "You only need to spend a few minutes each day on it, but you would be surprised how much

Initially, his email list included current and past residents, and the process was very informal – "often with arguments over answers being debated in long email chains," said Dr Lentsch. Somewhere along the way though, residents at other institutions wanted in on the learning experience. "It certainly wasn't Facebook-like growth, but over two years I went from having 15-20 subscribers to having over 1000 resident subscribers from institutions

learning that adds up to over the course of a

around the country and even abroad," says Dr Lentsch. "I have to say, E-Pimp allows me to be a part of the educational life of so many residents, and that is thrilling and humbling at the same time."

Eventually, some of the residents were graduating and wanted to continue their E-Pimp experience. A few even asked if CME was available for E-Pimp. "That was an interesting question that I debated for a while," said Dr Lentsch. "I worked closely with our CME office and came up with a plan to create a service that kept the basic format, but added a monthly guiz that subscribers must take and pass." This then allows subscribers to get 2 CME credits per month - 24 per year - enough to satisfy most state medical boards. Like the resident version this service has grown, slowly but steadily, over the three years since it was instituted, and now Dr Lentsch has over 700 subscribers to his CME service. "I believe it is the easiest, most informative and most economical way for practicing physicians to get their CME," says Dr Lentsch. "I had a subscriber tell me it was like attending a short Journal Club every day. I liked that description since I always loved Journal Clubs as a resident: and it is apropos since most of my questions come from current journal articles. I probably review 4-5 articles per week to explain my

In the end, Dr Lentsch maintains that his only goal with E-Pimp is to provide an educational experience for as many people as he can. "I'm very proud of what E-Pimp has become. I think I reach a lot of people and hopefully can share with them the little bit of knowledge I have about our profession. In the long run though, you know what? I'm the one who learns the most, and that is part of the reason that I love doing this."

"I want to change the way people learn and keep up with all we have to know in Otolaryngology. Instead of cramming for quizzes and tests with long tedious study sessions, I want learning to be a fun short, daily process. For residents my goal is to make the preparation for In-Service or Board Exams easier. And for practicing physicians I want to help them keep up with the current literature and maybe help them pass things like to Maintenance of Certification test."

A native of New York City, **Dr. Eric J. Lentsch** received his medical degree from the University of Louisville. After completing a residency in otolaryngology - head and neck surgery at the University of Louisville, he served as a fellow in head and neck surgery at the M.D. Anderson Cancer Center in Houston, Texas, from 1999 until 2001. In 2001, he returned to the University of Louisville as the Louisa Bumgardner Professor of Otolaryngologic Research. In 2006, Dr. Lentsch moved to Charleston to join the Department of Otolaryngology - Head and Neck Surgery at the Medical University of South Carolina.



Research twards



Federally Sponsored Active Awards* \$15,687,161

PI	Sponsor	Project
Dubno, J.	NIH/NIDCD	Interdisciplinary Research Training in Otolaryngology and Communication Sciences
Dubno, J.	NIH/NIDCD	Auditory Analysis & Speech Recognition
Dubno, J.	NIH/NIDCD	Experimental & Clinical Studies of Presbyacusis
Eckert, M.	NIH/NIMH	Effects of Locus Coeruleus Activation
Eckert, M.	NIH/NIDCD	Methods for Retrospective Multi-site Research
Harris, BM	Johns Hopkins University	Standardization of Videofluroscopic Swallow Studies for Bottle-Fed Children
Harris, BM	NIH/NIDCD	Dysphagia Phenotypes and Physiologic Models of Swallowing Impairment
Harris, K.	NIH/NIDCD	Neural Determinents of Sound Encoding in the Aging Ear and Brain
Soler, Z.	NIH/NIDCD	Offactory-specific Measures of Inflammation and Disease Severity in Chronic Rhinosinusitis
Soler, Z.	NIH/NIDCD	Determinants of Medical and Surgical Treatment Outcomes in Chronic Sinusitis
Young, R.	NIH/NCI	Immunotherapy to prevent oral premalignant lesion recurrence and oral cancer

Professional Foundation/Society Active Awards* \$1,034,336

PI	Sponsor	Project
Carroll, W.	AAO	Vitamin D3 Deficiency and Fibroblast Proliferation in Chronic Sinsuitus
Discolo, C.	SC DHEC	Craniofacial Anomalies and Cleft Lip and Palate
Dubno, J.	Duke University	Resources for the Mentorship of Clinician Scientists in Hearing and Balance Disorders
Dubno, J.	Knowles	Knowles Fund for Hearing Research
Halstead, L.	SC Physicians Care Charity	Video Package for Noraxon EMG System
Mulligan, J.	FAMRI	Effects of Second Hand Smoke on Dendritic Cell Regulation and Function in Chronic Rhinosinusitis
Mulligan, J.	FAMRI	Effects of Second Hand Smoke on Dendritic Cell Regulation and Function in Chronic Rhinosinusitis
Schlosser, R.	FAMRI	Smoke Impaired Epithelial Function
Soler, Z.	FAMRI	Cognitive Function and Chronic Rhinosinusitis: Exploring the Impact of Second Hand Smoke Exposure
Soler, Z.	ARS/AAO	Sleep Dysfunction in Chronic Rhinosimusitis
Vaden, K.	Hearing Health Foundation	Adaptive Control of Audtory representation in Listeners with Central Auditory Processing Disorder

Industry Sponsored Active Awards* - Expended \$403,796

PI	Sponsor	Project
Camposeo, E.	Med El Corp.	The effoects of Lowering Stimulation Rate for Older Adults with Med-El Cochlear Implants
Dubno, J.	Comm Disorders Technology, Inc	Speech Perception Training
Gillespie, B.	Olympus	Radiofrequency Ablation for Multi-level Obstructive Sleep Apnea: A single-arm, Multicenter study.
Gillespie, B.	Inspire Medical Systems	Inspire Upper Airway Stimulation (UAS) System: Post Approval Study
Gillespie, B	Surgical Specialties Corp.	Barrbed Suture Sling Lift Suspension for Snoring and Mild Obstructive Sleep Apnea: A Single-arm, Pilot Study for Safety and Effectiveness
Gillespie, B.	Inspire Medical Systems	Effects of the Inspire Implantable Nerve Stimulation System on Obstructive Sleep Apnea
Holcomb, M.	Med El Corp.	ESRT and Behavioral MCL Correlations in Older Adults with MED-EL Cochlear Implants
Lambert P.	RHO, Inc.	A 1-Year Multicenter, Phase, 2, Open-Label
Lambert P.	MedPace, Inc.	AN-101-CL-12-03
Lambert P.	Entellus Medical Inc.	Xpress Eustachian Tube Dilation Study
Lambert P.	Otonomy, Inc	A prospective, randomized, double-blind placebo-controlled, multicenter, phase 2 study of OTO-104 given as a single intratympanic injection in subjects with unilateral meniers disease
Lambert P.	MedPace, Inc.	Efficacy and Safety of AM-101 in the Treatment of Acute Peripheral Tinnitus 2 (TACTT2)
Nguyen, S.	Duke University	CHEER NETWORK Infrastructure Grant and Retrospective Data Capture
Schlosser, R.	Intersect ENT	The Resolve II Study Clinical Evaluation of the Safety and Efficacy of the the Steriod Releasing S8 SI
Schlosser, R.	Pharmanent	PROTOCOL - OPN-FLU-CS-3203
Schlosser, R.	Inventiv Clinical LLC	A 3-Month Open-Label Multicenter Study Evaluating the Safety of Intranasal Administration of 400 mcg of Fluticasone Propionate Twice a Day (BID) Using a Novel Bi-Directional Device
Soler, Z.	Entellus Medical Inc	Xpress Device and PathAssist Confirmation
White, D.	Alcon	Safety and Efficacy
White, D.	Alcon	Single Dose, Pharm
Young, R.	Merck	PD 1 Inhibition to Prevent Oral Premalignant Lesion Recurrence and Progression to Oral Cancer

*All awards reported are active for 2015-2016.

Clinical Update

Computer-aided Design and Manufacturing in Head and Neck Reconstruction: from Virtual Reality to Reality

Andrew T. Huang M.D.

econstruction of segmental bony defects of the maxilla and mandible following traumatic injury or oncologic resection has been revolutionized by the introduction of microvascular free

tissue transfer. Specifically, since its first description by Hidalgo et al¹, the osteocutaneous fibula free flap (OFFF) in reconstruction of maxillary and mandibular deficits has been demonstrated to result in superior functional and aesthetic outcomes compared to pedicled flap and prosthetic reconstructions^{2,3}. The OFFF is ideal as a donor site for these reconstructions due to its provision of an ample length of thick bicortical bone, well-vascularized fasciocutaneous tissue for intraoral resurfacing, and the ability to harvest muscular tissue from the flexor hallucis longus or soleus for more extensive cavitary defects.

As OFFF reconstruction for complex defects of the maxilla and mandible becomes standard practice, limitations and pitfalls in its use have been encountered. Standard OFFF procedures involve intraoperative conformation of titanium reconstruction plates to the native mandible or maxilla prior to resection in order to construct patient-specific anatomic templates

for freehand shaping of the fibula. No matter the skill of the surgeon, this intraoperative freehand technique can result in shaping inaccuracies that not only translate to increased operative time needed for correction of these errors, but can also ultimately lead to poor bony apposition, malunion, fracture, and negative cosmetic appearance. In addition, in cases of large tumors or trauma that distort or destroy a patient's normal bony anatomy, the ability to construct intraoperative templates that accurately restore native anatomic relationships can be difficult to impossible.

To remedy these issues, new surgical protocols involving computer-aided design and computer-aided manufacturing (CAD/CAM) for OFFF reconstruction have been devised and are now available commercially. This technique utilizes high-resolution computed tomography (CT) scan imaging of both the surgical resection site and fibula donor site

to pre-operatively plan and develop patient-specific models, cutting guides, and reconstruction plates used in OFFF reconstruction. CAD/CAM protocols consist of three stages: 1.) Virtual surgical planning

(VSP); 2.) Rapid manufacture of the customized surgical devices; and 3.) The surgery itself. VSP requires the cooperation of the ablative surgeon, reconstructive microsurgeon, and a biomedical engineer to precisely map and detail the extent of surgical resection based on CT imaging which, in turn, allows the planning and development of specific fibular cutting guides and reconstruction plates used to exactly contour a straight fibula bone into a 3-D neomandible or neomaxilla. In cases where there is loss of native bony anatomical references needed for planning a reconstruction, a major benefit of VSP is the ability

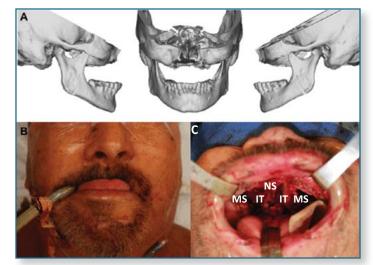


Figure 1. Preoperative planning of a total palatectomy defect secondary to osteonecrosis and osteomyelitis. A. 3-D model of the total palatectomy defect. B. Frontal view of the patient pre-operatively. Note loss of upper lip projection. C. Intraoperative view of the total palatectomy deformity (NS=nasal septum, IT=inferior turbinate, MS=maxillary sinus).

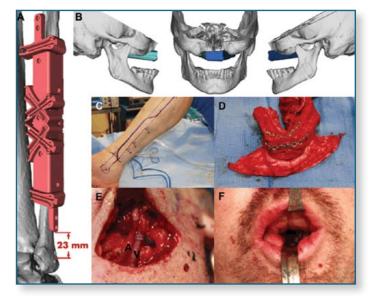


Figure 2. CAD/CAM plan and intraoperative technique. A. Virtual cutting guide on the left fibula bone. Slots allow easy placement of an oscillating saw to create precise shaping osteotomies. B. Virtual model showing the shaped fibula in place. C. Left leg donor site marked for flap harvest. D. OFFF harvested, contoured, and ready for inset. E. Microvascular anatomosis between the peroneal and facial vessels (A=Artery, V=Vein). F. OFFF inset with skin paddle exposed for monitoring.

to develop fibular constructs that mirror contralateral bony landmarks, or, when all reference points are absent, develop constructs that adhere to ideal facial measurements and geometry. Rapid manufacture of the customized models and guides can take eight business days, and although this may seem negative, it should be noted that the reconstruction plates created are milled, bent, heat-treated, and can be specifically engineered with increased individual bar widths, ultimately conferring an up to 40% improved fatigue strength compared to standard reconstruction bars⁴. Surgical harvest of the OFFF is unchanged compared to standard techniques. Once harvested, however, utilization of the customized cutting guides allows precise shaping of osteotomies and expedient bony inset which has been demonstrated to significantly decrease flap ischemia operative time^{5,6}.

Indications for CAD/CAM use are not universal yet, but at our institution it is reserved for complex bony reconstructions of the head and neck where normal anatomic landmarks are abnormal or absent, and in cases where extended length of fibula bone is required, necessitating minimization of error and discarded bone during shaping. Pre-operatively planning complex surgical defects of the maxilla and mandible allows the surgeon, with the integral assistance of a biomedical engineer, to develop patient-specific reconstructive plans, maximizing both functional and aesthetic outcomes while minimizing flap ischemia operative time. Although not yet proven, the utilization of stronger, milled reconstruction plates may reduce postoperative plate fracture, reducing re-operation rates.

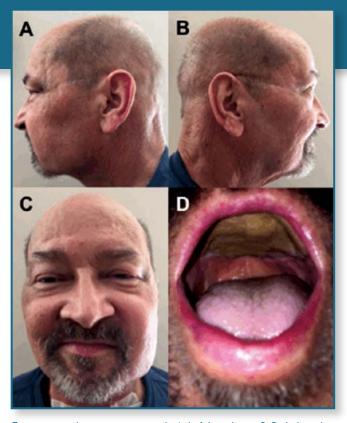


Figure 3: 6 week post-operative result. A. Left lateral view. B. Right lateral view. C. Frontal view. D. Intraoral view of skin paddle healed in place.

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- 3. Talesnik A, Markowitz B, Calcaterra T, Ahn C, Shaw W. Cost and outcome of osteocutaneous free-tissue transfer versus pedicled soft-tissue reconstruction for composite mandibular defects. Plast Reconstr Surg. 1996;97:1167-1178.
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- Gangopadhyay N, Villa MT, Chang EI, Selber JC, Liu J, Garvey PB. Combining preoperative CTA mapping of the peroneal artery and its perforators with virtual planning for free fibula flap reconstruction of mandibulectomy defects. Plast Reconstr Surg. 2015;136(4 Suppl):8-9.
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Andrew T. Huang, M.D. is a head and neck oncologic surgeon specializing in microvascular free tissue transfer reconstruction and microsurgery. Born in North Carolina and raised in Richmond, Virginia, Dr. Huang graduated from the Honors Program in Medicine at the University of Miami, Florida, completing both undergraduate and medical studies in six years. He returned to Richmond to complete his Otolaryngology - Head and Neck Surgery residency training at Virginia Commonwealth University before participating in a three-year head and neck surgical oncology and reconstruction fellowship at the University of Texas M.D. Anderson Cancer Center.

Dr. Huang has devoted his clinical practice to the care of head and neck cancer patients, particularly regarding their reconstructive needs. Areas of expertise include microvascular free tissue transfer reconstruction of complex head and neck deformities, Mohs defect reconstruction, repair of facial trauma, and lymphedema supermicrosurgical therapies. Trained in the utilization of new technologies such as CAD/ CAM techniques and near-infrared fluorescence imaging in vascular and



lymphatic reconstructions, Dr. Huang brings a wealth of reconstructive experience to head and neck cancer patients. With numerous publications and national and international presentations given, Dr. Huang's research interests are focused on functional outcomes following free tissue transfer reconstruction, improvement in head and neck lymphedema therapies, and development of novel reconstructive modalities and technologies.

ResearchRealm

Novel Metrics to Evaluate Image-Guided Cochlear Implant Programming Outcomes

Theodore R. McRackan, M.D.

ochlear implantation (CI) is the standard of care for patients with bilateral severe-to-profound sensorineural hearing loss. To date, more than 300,000 patients have been implanted worldwide with 50,000 implanted last year. Modern Cls contain between12-22 electrodes. which are spaced with the intention of each electrode stimulating a unique area of the spiral ganglia. Threading of the electrodes into the cochlea is largely done blindly with limited post-operative knowledge of the geometric relationship between electrode array and the neural interface within the cochlea. This information is critical because suboptimal electrode positions within the cochlea have been shown to decrease speech understanding due to channel interaction.

Image-guided CI programing (IGCIP) has recently been developed by our collaborators at Vanderbilt University to more precisely locate CI electrode position with respect to the neural interface. This provides a means to systematically deactivate suboptimally placed electrodes that result in channel interaction and may impair hearing outcomes (Figure 1). Preliminary data have shown that IGCIP results in clinically and statistically significant improvements in speech understanding as compared to conventional programming procedures. Image guided CI programming represents one of the most substantial changes in CI programming in the past 30 years and

we are excited to evaluate it in our patient population. While IGCIP represents a major programming development, the metrics we use to measure CI outcomes have not advanced in a similar fashion. In addition, some CI users whose measured speech recognition did not improve significantly following IGCIP nevertheless reported substantially increased benefit from their newly programmed device.

Word and sentence recognition scores are the primary measures that have been used to guide CI programming and assess CI outcomes for the past 20-30 years. However, these scores do not capture the wide range of subjective listening and communication experiences of Cl users. The overall goal of our research is to expand outcomes related to cochlear implantation beyond the traditional measures narrowly defined by speech understanding.

First, increased listening effort and related fatique reported by individuals with mildto-moderate hearing loss may be especially relevant for Cl users who have severe-toprofound hearing loss and are listening to unfamiliar speech representations. Importantly, listening effort can vary among individuals with similar magnitude of hearing loss and speech recognition abilities and, therefore, could explain large and unexplained individual differences in outcomes for Cl users and differences between measured and selfreported outcomes. Pupillometry has been used in the cognitive sciences to characterize

mental effort where effort is defined as an increase in pupillary dilation with increasing task difficulty (Figure 2). Characterizing listening effort through the use of pupillometry has been a focus of the MUSC Hearing Research Program. However, pupillometry has not been widely applied to CI users and IGCIP represents an ideal opportunity to do so.

Second, health related quality of life (HRQOL) instruments have become increasingly important in understanding the impact of a medical intervention on a patient's life. Numerous studies have shown the positive effect of Cls on HRQOL, but there is no universally accepted and validated QOL measure for CI patients. In fact, this has been identified as a research gap in the American Academy of Otolaryngology-Head and Neck Surgery's upcoming "Minimal Reporting Standard for Adult Cochlear Implantation." We are currently developing the first CI QOL metric using patient centered focus groups and the strict methods of the NIH's Patient Reported Outcomes Measurement Information System. In doing so, we will create an instrument that correlates with patients' subjective experience, is more responsive to intervention and changes in patient performance, and meets modern outcome reporting standards.

Our immediate goals are to develop and apply innovative clinical and research tools for CI outcomes and broaden our understanding

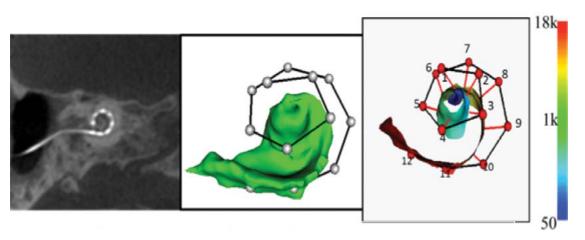


Figure 1: Left panel displays the Cl electrode array in the cochlea in a post-operative CT. Middle panel shows the modiolus (green) with respect to the CI electrode channels (grey spheres). Right panel shows the distance (red line) from the electrode channels (red circles) to the cochlear/neuronal interface (color mapped based on frequency). Used with permission from Jack Noble, Vanderbilt University

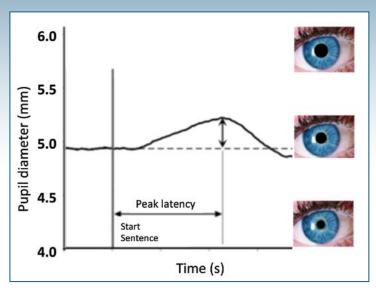


Figure 2: Graph depicting the change in pupil diameter as a patient attempts to correctly identify a word or sentence during a task. The degree of pupillary dilation corresponds to the effort a patient applies to complete the listening task. Used with permission from Stefanie Kuchinsky.

of the benefit of IGCIP through analysis of relationships among listening effort, QOL, speech recognition, and other hearing-related outcomes. In the longer term, we aim to evaluate listening effort and QOL in bilateral CI recipients and patients undergoing implantation with residual hearing. Additionally, we will work to apply pupillometry in the pediatric CI population as an early objective measure of hearing performance. Through the multidisciplinary expertise of Dr. Judy R. Dubno and Dr. Mark Eckert in the Department of Otolaryngology-Head and Neck Surgery's Hearing Research Program, Dr. Craig Velozo of the MUSC College of Health Professions, and Dr. Robert Labadie and our other collaborators at Vanderbilt University, we have the capability of expanding a new area of research that may have significant clinical benefit for CI patients.



Ted R. McRackan, M.D. joined the Neurotology division in the Department of Otolaryngology-Head and Neck Surgery in 2015. Dr. McRackan was born in Virginia and moved to Charleston to attend the College of Charleston. He received his medical degree from the Medical University of South Carolina and completed his residency at Vanderbilt University in Nashville, TN. Afterward he moved to Los Angeles, CA for a fellowship in Otology-Neurotology at the House Ear Clinic.

Dr. McRackan's clinical practice is focused on comprehensive management of ear, hearing, balance and skull base disorders in adults and children. Specific areas of interest include, but are not limited to, cochlear implantation, chronic ear surgery (cholesteatoma, chronic otitis media), acoustic neuroma and other skull base lesions, otosclerosis, facial nerve disorders and tumors, endoscopic ear surgery, implantable hearing aids, and vertigo.

Dr. McRackan has recently published a comprehensive Neurotology textbook and has written over 40 peer reviewed articles and book chapters. His research interests focus on the use of technology and outcome analysis to improve patient results in Neurotology. He has also appeared as a medical expert on national television.

Dr. McRackan is a member and serves on multiple committees of the American Academy of Otolaryngology-Head and Neck Surgery.

ContinuingEducation



The 30th Annual F. Johnson Putney Lectureship in Head & Neck Cancer

The Lectureship, directed by Terry A. Day, M.D. was held November 6, 2015 with guest of honor, Brian Burkey, MD, MEd, FACS, Vice Chair and Director of Head and Neck Oncology at Cleveland Clinic. His keynote lecture was entitled, An Algorithm in the Management of Supraglottic Laryngeal Cancer, including Surgical Refinements.

The opening ceremony also honored Dr. Putney, one of the founding leaders of head and neck surgery starting in the 1950s who played an instrumental role in bringing state-of-the-art head and neck care to South Carolina.

As part of the lectureship's tradition, Dr. Burkey spent the morning reviewing case presentations and participating in rounds with residents and fellows. The day was highlighted by MUSC lectures during the Research Session led by David M. Neskey, M.D.

The evening culminated with the annual reception held at the newly opened Hilton Waterfront Rooftop during a beautiful Charleston November sunset.



Sherry Cannon, Erin Bailey, Jon Hufnagle, David Hoyle, and Drs. Krishna Patel and Chris Discolo

The Cleft & Velopharyngeal Dysfunction Interactive Conference

The MUSC Cleft and Craniofacial team held a national multidisciplinary cleft lip and palate conference this past December co-directed by **Dr**. Krishna G. Patel (MUSC director of facial plastics within Otolaryngology). The conference had a full attendance and was represented by attendees across the nation. It offered the unique opportunity of being interactive, with hands-on courses, as well as small break-out sessions that allowed well-known experts in the multiple disciplines to come together and discuss the pertinent topics of treating children born with cleft lip and palate. The course was dedicated to celebrate the life of one of our most treasured craniofacial team members, Katy Hufnagle, speech pathologist. We miss her dearly.

2015-16 Publications

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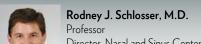


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Upcoming CME Events

The Charleston Pediatric ENT Update

March 12, 2016 MUSC Campus

A comprehensive full day course designed to provide pediatricians, family practioners, and otolaryngologists with up-to-date guidelines to implement in their daily practice, promote quality and efficient care, and tackle challenging ENT diagnosis with confidence.

Guest Speakers:

Karen B. Zur, M.D., Children's Hospital of Philadelphia

Steven L. Goudy, M.D., Children's Healthcare of Atlanta, Emory University

Carlton J. Zdanski, M.D., University of North Carolina

Southern States Rhinology Course

April 20 - 23, 2016 Kiawah Island and MUSC Campus

This course is intended for practicing Otolaryngologists and will feature presentations on topics for the practicing rhinologists and sinus surgeons. A hands-on laboratory dissection is available, featuring state-of-the-art endoscopic instrumentation, video, and image guidance systems.

Pediatric Audiology Conference

April 29, 2016 Courtyard Marriott, Mount Pleasant, SC

This is a one-day conference designed for all providers (audiologists, speech pathologists, teachers of the deaf, early interventionists, hearing aid specialists, physicians, NPs, PAs, etc) involved in the care of hearing impaired children. The course will cover many key topics in the management of children with hearing loss.

Guest Speakers:

Jace Wolfe, Ph.D., CCC-A, Oklahoma City, Oklahoma Terry Zwolan, Ph.D., CCC-A, University of Michigan

Temporal Bone Dissection Course

May 6 - 7, 2016 MUSC Campus

Lectures & hands on labs focused on procedures for chronic ear disease. For practicing otolaryngologists.

16th Annual Charleston Magnolia Conference

June 3 - 4, 2016 Mills House Hotel

Two half-day sessions covering the broad spectrum of Otolaryngology - Head & Neck Surgery. The lectures and round table discussions are specifically aimed at the practicing otolaryngologist. Guest Speakers:

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