Bridging the Language Barrier in Audiology

"Hearing loss can be a significant disadvantage for any child, but particularly for Spanish speaking children who are faced with learning English. Evaluating speech perception in a child’s native language is critical for diagnosing and treating hearing loss."

UNC-Chapel Hill Professor, Emily Buss, PhD, writes:

A multi-center team, including UNC’s Hearing Research Laboratory and Boys Town National Research Hospital, was recently awarded a 5-year R01 grant to develop a pediatric speech perception test that can be administered in English or Spanish. Over 15% of children in the US are raised in Spanish-speaking homes. However, clinical assessment of speech perception in preschoolers and school-age children is generally performed using English materials. Speech perception scores are better when testing is performed in the patient’s language. Therefore, when a Spanish-speaking child performs poorly we don’t know whether that is because of a hearing problem or limited familiarity with English.

The goal of this project is to develop a test that can be administered in the child’s dominant language – English or Spanish. Importantly, testing is fully automated, so the audiologist administering the test doesn’t need to be fluent in Spanish to obtain valid results for a Spanish dominant child. This test is a four-alternative, forced-choice picture-pointing task. Target words are two-syllabic nouns familiar to young children, and background maskers are either speech-shaped noise or two-talker speech.

In the first two years of this project we will refine the test materials and procedures, and establish threshold norms for 4- to 12-year-olds. These norms will include Spanish/English bilingual and monolingual English speakers, as well as children with hearing loss.
We’ve had a fabulous first half of the academic year in our department with great progress in every area.

Dr. Emily Buss has been awarded another R-01 to establish a universal hearing test for our Spanish speaking as well as English speaking children, which will be a huge asset to our research and clinical program.

We’ve launched our facial plastic fellowship with Brittany Howard, who is an outstanding fellow. Additionally, Dr. Wade McClain has joined our Division of Pediatric Otolaryngology after completing his fellowship with the division.

We will also have a number of our students’ present wonderful projects at student research day in Dallas, TX, and one of our residents will complete her facial plastic rotations through an esteemed “away rotation” program.

We’re looking forward to great things this spring and will keep you posted on our progress!
The final three years of the grant will evaluate the test procedures in seven busy pediatric audiology clinics, including The Children’s Cochlear Implant Center at UNC. Clinician feedback will be solicited to further improve test procedures. The end result is expected to improve our ability to audiolologically evaluate and manage children who speak English, Spanish or both languages.

Meet the Research Team

UNC-Chapel Hill
- Emily Buss, PhD, Co-Principal Investigator
- Holly Teagle, AuD, CCC-A, Associate Professor
- Heidi Lang, Research Specialist

Boys Town National Research Hospital
- Lori Leibold, PhD, Co-Principal Investigator
- Ryan McCreery, PhD

Case Western Reserve University
- Lauren Calandruccio, PhD

Participating Clinical Sites
- University of Iowa
- The University of Tennessee
- The Children’s Hospital of Philadelphia
- University of Miami Health System
- Weill Cornell Medical College
- Stanford University Medical Center

Dr. Amelia F. Drake was voted President-Elect of the American Cleft-Plate-Craniofacial Association.

Margaret T. Dillon, AuD, CCC-A was recently voted President-Elect for the North Carolina Association of Audiology.

Dr. Austin Rose was appointed Professor in August 2016.

Visiting Professor – Dr. Brendan O’Connell was here on Dec. 21, 2016 giving Grand Rounds Presentation titled "The Impact of Electrode Location on Audiologic Outcomes in Cochlear Implantation".
New Faculty Appointment

WADE G. McCLAIN, DO
Assistant Professor of Pediatric Otolaryngology

Undergraduate Education: University of Oklahoma
Medical Education: Oklahoma State University College of Osteopathic Medicine
Residency: Oklahoma State University Medical Center
Fellowship: Pediatric Otolaryngology, University of North Carolina at Chapel Hill

Conditions Dr. McClain Treats
- Congenital Malformations of the Head and Neck
- Stridor and Airway Disorders
- Adult and Pediatric Sleep Apnea
- Disorders of the Salivary Glands
- Disorders of the Thyroid and Parathyroid Glands
- Chronic Ear Disorders
- Diseases of the Nose and Paranasal Sinuses

Dr. Wade McClain practiced general Otolaryngology in his hometown of Tulsa, Oklahoma for two years while serving as an Assistant Clinical Professor of Otolaryngology at the OSU Medical Center. In 2016 he completed a fellowship in Pediatric Otolaryngology at the University of North Carolina at Chapel Hill. He joined the Division of Pediatric Otolaryngology mentored by Amelia Drake, MD, Carlton Zdanski, MD, Austin Rose, MD, and Lauren Kilpatrick, MD in July of 2016. His practice at UNC will be divided between Pediatric Otolaryngology at the UNC Hospitals and General Otolaryngology at Granville Medical Center in Oxford, NC.

Upcoming Events

8th Annual Carolinas’ Pediatric Airway Course
February 23 & 24, 2017
Visiting Professor, Paul Krakovitz, Cleveland Clinic, Cleveland Ohio

World Voice Day
April 16, 2017
Keep an eye out for the concert date and time!

Head and Neck Cancer Awareness Week
Free Screenings!
April 5, 2017
1 – 4 pm | ENT Clinic

Newton D. Fischer Society Meeting
Saturday, June 3, 2017
7:30 am – 3:45 pm
Register Online by May 19!
http://tinyurl.com/zra2x9p
This year I have the extreme pleasure and honor of working under the mentorship of Dr. Shockley and Dr. Clark as the first Facial Plastic and Reconstructive Fellow at UNC. Simply put, this has been a dream come true for me. Since deciding to pursue a Head and Neck Fellowship, I hoped to find an opportunity afterward to attain additional training in Facial Plastic and Reconstructive Surgery. Together, these two sub-specialties create a continuum of head and neck reconstruction that compliment and enhance each other. As a result, I was interested in expanding my knowledge and skills in both areas following residency. This desire could never have been realized without the support and open-mindedness of the entire team at the UNC Otolaryngology Department. This process began with Dr. Hackman and the Head and Neck faculty who were willing to consider and support a fellow with such aspirations even if they were somewhat unconventional. Dr. Shockley and Dr. Clark then took the leap of faith to welcome me as a trainee into their lives and practices. Finally, this could never have occurred without Dr. Pillsbury who supported the entire process and gave me a home at UNC to train for two years of fellowship.

Now halfway through the year, I can attest to the exceptional experience and training that Dr. Shockley and Dr. Clark have created for Facial Plastic and Reconstructive Surgery. Through their clinical and directed didactic teaching, trainees obtain a comprehensive understanding of evaluation and management of the nasal airway, aging face, rhinoplasty, local and regional flap reconstruction, orbital reconstruction, and trauma reconstruction. However, more than any skills I have gained, I appreciate the mentorship and role models that the UNC Otolaryngology Department has provided. Dr. Clark’s un-ending enthusiasm for the practice of medicine and his belief in putting the patient’s interest above all other considerations are characteristics that I hope to emulate in my own life. Similarly, from observing Dr. Shockley I think I am finally beginning to understand the true meaning of scholarship. His daily dedication to learning is humbling to observe. Even as a master surgeon, he continues to actively pursue knowledge and growth through reading, practice, and partnership with colleagues. This is the definition of a well-rounded fellowship and life experience.

Brittany Howard, MD
Fellow

Drs. Lewis Overton, Rounak Rawal, Michelle Tanner and Sarah Hodge will be attending the 2017 AAOA Resident Forum in Dallas, February 10-11, 2017.

Dr. Grace Austin will be doing esteemed facial plastic “away rotations” in California, New York and Korea in April, May and June respectively prior to graduation.
Faculty

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
Brent A. Senior, MD, FACS, Vice Chair for Clinical Affairs, Sheila and Nathaniel Harris Distinguished Professor of Otolaryngology/Head and Neck Surgery
Adam M. Zanation, MD, FACS, Vice Chair for Academic Affairs, Harold C. Pillsbury Distinguished Professor of Otolaryngology/Head and Neck Surgery
Carolyn Hamby, Associate Chair for Administration

The Division of Head and Neck Oncology, Cancer Research
Mark C. Weissler, MD, FACS, Professor and Chief, Joseph P. Riddle Distinguished Professor of Otolaryngology/Head and Neck Surgery
Trevor G. Hackman, MD, FACS, Associate Professor
Andrew F. Olshan, PhD, Professor
Brien R. Pace, ACNP-BC, Nurse Practitioner
Samip N. Patel, MD, FACS, Assistant Professor
William W. Shockley, MD, FACS, Professor
Brian D. Thorp, MD, Assistant Professor
Adam M. Zanation, MD, FACS, Associate Professor
Jose P. Zevallos, MD, MPH, FACS, Associate Professor

The Division of Pediatric Otolaryngology
Carlton J. Zdanski, MD, FACS, FAAP, Associate Professor and Chief
Ameila F. Drake, MD, FACS, Newton D. Fischer Distinguished Professor of Otolaryngology/Head and Neck Surgery
Lauren A. Kilpatrick, MD, Assistant Professor
Wade G. McClain, DO, Assistant Professor
Austin S. Rose, MD, Professor

The Division of Facial Plastic and Reconstructive Surgery
William W. Shockley, MD, FACS, Professor and Chief, W. Paul Biggers Distinguished Professor of Otolaryngology/Head and Neck Surgery
J. Madison Clark, MD, FACS, Associate Professor
Andrea Jarchow-Garcia, MD, Assistant Professor

The Division of Rhinology, Allergy, and Endoscopic Skull Base Surgery
Brent A. Senior, MD, FACS, Professor and Chief
Charles S. Ebert, Jr., MD, MPH, FACS, Associate Professor
Austin S. Rose, MD, Professor
Brian D. Thorp, MD, Assistant Professor
Adam M. Zanation, MD, FACS, Associate Professor

The Division of Otolaryngology/Neurotology and Skull Base Surgery
Kevin D. Brown, MD, PhD, Associate Professor and Chief
Harold C Pillsbury, MD, FACS, Professor

Sleep and Snoring Surgery
Brent A. Senior, MD, FACS, Professor

General Otolaryngology/Head and Neck Surgery
Peter G. Chikes, MD, FACS, Assistant Professor

The Division of Voice and Swallowing Disorders/UNC Voice Center
Robert A. Buckmire, MD, Professor and Chief, March Floyd Riddle Research Distinguished Professor
Rupali N. Shah, MD, Assistant Professor
Mark C. Weissler, MD, FACS, Professor
Heather Davis, MA, CCC-SLP, Speech Pathologist
Brian Kanapkey, CCC-SLP, Speech Pathologist
Elizabeth Ramsey, MS, CCC-SLP, Speech Pathologist

The Division of Auditory Research
Emily Buss, PhD, Professor and Chief, James and June B. Ficklen Distinguished Professor of Otolaryngology/Head and Neck Surgery
Meredith Anderson, AuD, Assistant Professor
Margaret T. Dillon, AuD, Assistant Professor
Douglas C. Fitzpatrick, PhD, Associate Professor
John H. Grose, PhD, Professor
Paul B. Manis, PhD, Professor
Patricia A. Roush, AuD, Professor, Director, Pediatric Audiology

Computational and Clinical Research
Julia Kimbel, PhD, Associate Professor

The Division of Research Training and Education
Paul B. Manis, Professor and Chief, Thomas J. Dark Distinguished Research Professor of Otolaryngology/Head and Neck Surgery

The Adult Cochlear Implant Program
Meredith Anderson, AuD, CCC-A, Audiologist
Margaret T. Dillon, AuD, CCC-A, Audiologist
English R. King, AuD, CCC-A, Audiologist

W. Paul Biggers Carolina Children’s Communicative Disorders Program
Kevin D. Brown, MD, PhD, Associate Professor, Medical Director
Harold C. Pillsbury, MD, FACS, Professor, Executive Director
Carlton J. Zdanski, MD, FACS, FAAP, Associate Professor
Holly F. B. Teagle, AuD, CCC-A, Associate Professor, Program Director
Hannah R. Eskridge, MSP, Assistant Professor, Director of CASTLE

Wake Med Faculty Physicians
Michael O. Ferguson, MD
Stuart Ginn, MD
Allen F. Marshall, MD
James T. O’Neil, MD

UNC REX Healthcare
Esa A. Bloedon, MD
Brett E. Dorfman, MD
Parth Shah, MD
Sat Sreenath, MD
Michelle Tanner, MD
Nick Thompson, MD
Christopher Welch, MD

Residents

Grace Austin, MD
Bryan Brandon, MD
Nathan Calloway, MD
Andrew Coniglio, MD
Zainab Farzal, MD

Douglas Farquhar, MD
Lauren Fedore, MD
Gita Fleischman, MD
Tatyana Fontenot, MD
Sarah Hodge, MD
Adam Kimple, MD

Mohammed Mamdani, MD
Justin Miller, MD
Lewis Overton, MD
Elizabeth Perkins, MD
Rounak Rawal, MD
Morgan Selleck, MD

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