## **DIVISION OF SPEECH AND HEARING SCIENCES**

# **Degree Programs**

MASTER OF SCIENCE (MS), SPEECH-LANGUAGE PATHOLOGY DOCTOR OF AUDIOLOGY (AUD) DOCTOR OF PHILOSOPHY (PHD)

SCHOOL OF MEDICINE Allied Health Sciences

### **QUALITY OF LIFE AND LEARNING**

UNC-Chapel Hill, founded in 1793, is the nation's first public university. It is considered a research university as classified by the Carnegie Foundation, serving over 28,000 students on a 750-acre campus considered to be one of the most beautiful in the nation. UNC-CH's academic offerings span more than 100 fields, including bachelor's, master's, and doctoral degrees as well as professional degrees in dentistry, medicine, pharmacy, and law. Five health schools, with UNC Hospitals, comprise one of the nation's most complete academic medical centers, integrated with liberal arts, basic sciences, and high-tech academic programs. Centrally located in the heart of the Research Triangle, Chapel Hill offers a rich intellectual and cultural community with the advantages of mild climate, scenic beauty, and easy driving distance to both the mountains and the coast.

#### **PROGRAM HIGHLIGHTS**

- Nationally/internationally recognized faculty at a world-acclaimed university
- Strong research focus across all programs
- Outstanding clinical and internship sites
- Experienced clinical preceptors
- Located in North Carolina's Research Triangle

### AFFILIATED PROGRAMS AND CENTERS

- UNC Hospitals (speech-language pathology and audiology services, pediatric and adult services, genetics, otolaryngology)
- Carolina Institute for Developmental Disabilities (research with special populations; multi-disciplinary team evaluations; leadership education)
- Center for Literacy and Disability Studies (research and professional development in reading, writing, and literacy for people with disabilities)
- Carolina Children's Communicative Disorders Program (pediatric cochlear implantation; speech-language evaluation and intervention for children with hearing loss)
- UNC Hearing and Communications Center (community-based learning and aural rehabilitation services)
- FPG Child Development Institute (child and family research; professional development)
- UNC School of Dentistry (research in craniofacial disorders and their effects on speech and communication)

• Center for Aphasia and Related Disorders (research, practice, community partnerships, education in the area of aphasia)



### **DEGREE PROGRAMS**

*Our programs are top-ranked, according to U.S. News & World Report.* 

## Master of Science (MS), in Speech-Language Pathology

• Individualized programs of study within the curriculum that meet all requirements for certification and license

Opportunities to participate in research

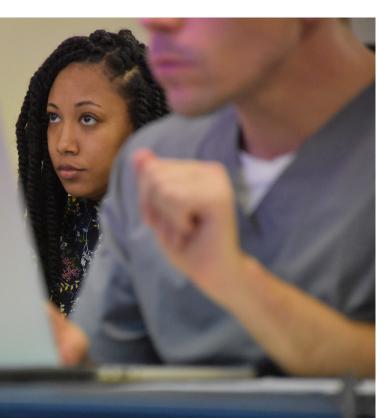
• Focused commitment to linking research, teaching, and clinical practice

### Doctor of Audiology (AuD)

- Exemplary teaching facilities designed to maximize student learning
- Large and varied clinical populations
- Cochlear implant programs serving children and adults
- Participation in adult community-based hearing rehabilitation programs using the most advanced hearing aid technology

### Doctor of Philosophy (PhD)

- Strong mentorship in research, teaching, writing, grant participation, and professional development
- Interdisciplinary collaboration with research programs and centers on campus
- Genuine commitment to the career goals of each student



# UNC HEARING AND COMMUNICATION CENTER

The HCC is a nonprofit, nationally recognized, audiology faculty practice. It features the following:

Distinguished faculty committed to excellence in teaching, research, and clinical service.

Nationally recognized model for providing individualized, comprehensive, compassionate hearing care.

Clinical preceptors skilled and dedicated to patient service and student learning.





#### THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

DEPARTMENT OF ALLIED HEALTH SCIENCES BONDURANT HALL, CB #7120 CHAPEL HILL, NC 27599-7120



#### **ADMISSIONS**

Applications for all three programs can be accessed online. Our division is one of seven within the Department of Allied Health Sciences within the UNC School of Medicine. Established in 1969, it has grown to an enrollment of more than 100 graduate students. All three programs are recognized for excellence in education, research, and professional service.

**LEARN MORE** med.unc.edu/ahs/sphs

# Training, Leadership, and Service Grants, 2018-2019

**Interdisciplinary Leadership Preparation Focused on Meaningful Outcomes and Replicability Research. Personnel Preparation Grant.** U.S. Department of Education. Elizabeth Crais, Harriet Able, and Nancy Bagatell (Co-Directors). Prepares six PhD-level leaders in higher education with a focus on improving outcomes for individuals with disabilities and their families including those in high-need areas, and the replicability of evidence-based research to improve services for children with disabilities and their families. 2018-2023.

Preparation of Pediatric Audiologists and Speech-Language Pathologists to Serve Children with Hearing Loss and Developmental Disabilities. U.S. Department of Education. Jackson Roush and Cara McComish (Co-Directors), 2018-2022.

**Leadership Education in Neurodevelopmental and Related Disabilities (LEND).** Carolina Institute for Developmental Disabilities. U.S. Maternal and Child Health Bureau, Jackson Roush and Cara McComish (Co-Directors). Interdisciplinary leadership, clinical service, technical assistance, and research related to children with developmental disabilities and their families, 2016-2021.

**Pediatric Audiology Supplement, North Carolina LEND.** U.S. Maternal and Child Health Bureau, Jackson Roush, (Director), NC-LEND, Section Head for Audiology, Carolina Institute for Developmental Disabilities. To prepare future pediatric audiologists for leadership roles related to children who have autism spectrum disorders or other developmental disabilities, in addition to hearing loss. 2016-2021.

**Bridging the Gap Between Research and Practice.** U.S. Department of Education, Elizabeth Crais, (Project Director), Harriet Able, and Nancy Bagatell (Co-Directors). Preparation for six (two speech and hearing, two occupational science, two special education) PhD students with a focus on the replicability of evidence-based research to improve services for children with disabilities and their families, including those from underrepresented groups, using translational, community-engaged, and implementation principles and practices. 2016-2021.

Preparing Interdisciplinary Leaders to Collaborate with Stakeholders in Developing, Implementing and Disseminating Effective Practices for High-Need Children and Youth with Disabilities and Their Families. Personnel Preparation Grant. U.S. Department of Education. Elizabeth Crais, Harriet Able, and Nancy Bagatell (Co-Directors). Prepares six PhD-level leaders in higher education with a focus on guiding research, practice, and policy related to developing, implementing, and disseminating evidence-based research to generate effective and sustainable practices for children and youth with disabilities and their families. 2018-2023.

**Interdisciplinary Leadership in Autism Spectrum Disorder: Optimizing Research-Practice Partnerships for Evidence-Based Outcomes.** U.S. Department of Education, Elizabeth R. Crais, Project Director, Harriet Able, Grace Baranek, and Linda Watson Co-Directors. This leadership preparation project is designed to create a cadre of six scholars (two scholars in each of three PhD programs: speech/hearing sciences, occupational science, and special education) to fulfill leadership roles in higher education with a specific focus on autism spectrum disorders with expertise in evidence-based research and application to children with ASD and their families, some of whom are from underrepresented populations. 2013-2019.

# **Teaching Faculty and Research Mentors, 2017-2018**

## **Division Director:**

Sharon Wallace Williams, PhD, Division Director and Associate Professor. Research interests: older adults and their families who live with potentially life-limiting illnesses (i.e., stroke, dementia); end-of-life (EOL) communication and advance care planning (ACP) within families and with health care providers; and incorporation and education of EOL, palliative care, and ACP into training and education of communication disorders professionals and pre-professionals. *(919) 966-9462, shwillia@ad.unc.edu* 

**Emily Buss,** PhD, Professor (Hearing Sciences, Department of Otolarygology). Research interests: psychoacoustics; effects of hearing loss on auditory perception. *(919) 966-8926, ebuss@med.unc.edu* 

**Lindsey Byom,** PhD, Assistant Professor. Research interests: social communication after traumatic brain injury (TBI) that can be applied to assessment, treatment and research across the adult lifespan; relationships between communication and cognition in older adults with and without TBI, *lindsey\_byom@med.unc.edu* 

**Elizabeth Crais**, PhD, Professor and coordinator of PhD studies. Research interests: communication development in children with typical/atypical skills; early identification and intervention with children with autism spectrum disorders; family-centered assessment. *(919) 966-9458, bcrais@med.unc.edu* 

Jamie Daut, AuD, Adjunct Professor. Research and clinical interests: Noise-induced hearing loss and hearing conservation. (919) 372-8508, jaidaut@gmail.com

Margaret Dillon, AuD, Assistant Professor, Department of Otolaryngology. Research interests: Cochlear implants, hearing preservation, middle ear implants, signal processing outcomes. (984) 974-6484, mdillon@med.unc.edu

**Lisa Domby,** MS, Associate Professor. Clinical Education Coordinator for Speech-Language Pathology. Clinical and professional interests: Global English speaking; bilingual speech and language development and disorders; global engagement. (919) 966-0104, *lisa\_domby@med.unc.edu* 

Karen Erickson, PhD, Professor. Director, Center for Literacy & Disability Studies. Research interests: assessment of reading and writing; literacy instruction. (919) 966-8828, karen\_erickson@med.unc.edu

Hannah Eskridge, MSP, LSLS Cert AVT, Department of Otolaryngology) Co-Director, Children's Cochlear Implant Center at UNC Hospitals . Research interests: Listening and spoken language for deaf and hard-of-hearing children. (919) 419-1449, hannah\_eskridge@med.unc.edu

**Douglas Fitzpatrick,** PhD, Associate Professor (Hearing Science, Department of Otolaryngology). Research interests: anatomy and physiology of the auditory system; preservation of residual hearing during cochlear implantation; binaural hearing, *douglas\_fitzpatrick@med.unc.edu*  Lynn Fox, MS, Assistant Professor (School of Dentistry), Craniofacial Center. Clinical interests: craniofacial disorders and fluency disorders. (919) 966-1466, lynn\_fox@dentistry.unc.edu

Philip Griffin, AuD, Assistant Professor. Clinical interests: Balance assessment and treatment, management of hearing loss in adults. (919) 493-7980, philip\_griffin@med.unc.edu

John Grose, PhD, Professor (Audiology and Hearing Science, Department of Otolaryngology). Research interests: psychoacoustics; auditory electrophysiology. (919) 966-9777, jhg@med.unc.edu

**Katarina Haley,** PhD, Associate Professor (Speech-Language Pathology). Research interests: speech perception and production; adult neurogenic communication disorders. *(919) 966-9460, khaley@med.unc.edu* 

**Penelope Hatch,** PhD, Research Associate, Center for Literacy & Disability Studies. Research interests: literacy issues in children and adolescents with physical disabilities. (919) 843-2524, penelope\_hatch@med.unc.edu

Andrea Hillock Dunn, AuD, PhD, Adjunct Assistant Professor. Educational Audiology Clinical and research interests: Educational audiology; pediatric audiology; newborn hearing screening; audiovisual speech perception. *andrea\_dunn@med.unc.edu* 

Adam Jacks, PhD, Associate Professor. Research interests: neural substrates of speech; neuromotor speech disorders; speech acoustics; speech perception. (919) 966-9464, adam\_jacks@med.unc.edu

Leslie W. Johnson, PhD, CCC-SLP, Department of Otolaryngology, Head and Neck Surgery, UNC Health Care. Professional interests: Neurogenic difficulties related to communication and swallow disorders. (984) 974-8872, Leslie.Johnson@unchealthcare.unc.edu

**Patricia Johnson,** AuD, Assistant Professor. Clinical interests: adult diagnostics and aural rehabilitation, hearing and assistive technology, aging and communication, community outreach. (919) 493-7980, patricia\_johnson@med.unc.edu

Nancy Jones, AuD, Chief of Audiology and Speech-Language Pathology, Veterans Administration Medical Center, Durham, North Carolina.

Brian Kanapkey, MA, CCC-SLP, Department of Otolaryngology, Head and Neck Surgery, UNC Health Care. Professional interests: Head and neck cancer, neurogenics, airways, voice restoration, trismus, swallowing disorders. (984) 974-6484, Brian.Kanapkey@unchealthcare.unc.edu

**Cara McComish,** PhD, Assistant Professor and Coordinator of Master's Studies. Research interests: communication and feeding skills development in infants and toddlers; early identification of children with autism spectrum disorders. *(919) 966-8153, cara\_mccomish@med.unc.edu* 

Nancy McKenna, PhD, Associate Professor. Research interests: audition in aging; hearing loss prevention; tinnitus and genetics of aging. (919) 966-9468, nancy\_mckenna@med.unc.edu

**Brenda Mitchell**, PhD, Associate Professor. Associate Chair for Student Services and AHEC. Research interests: aphasia; adults with closed-head injuries and communication disorders; multi-cultural issues; community re-entry. *(919) 966-9437*, *Brenda\_Mitchell@med.unc.edu* 

Martha Mundy, AuD, Associate Professor and Coordinator of Audiology. Research interests: educational audiology; pediatric audiology; otitis media research. (919) 966-9457, mmundy@med.unc.edu

Lisa R. Park, AuD, Research Assistant Professor (Department of Otolaryngology) (919) 419-1449.

**English R. King,** AuD, Audiology Clinical Supervisor (Department of Otolaryngology) (919)-699-0642, english.king@unchealth.unc.edu

**Deborah Reinhartsen,** PhD, Adjunct Associate Professor. Carolina Institute for Developmental Disabilities. Research interests: autism; low incidence disabilities; augmentative communication; clinical supervision. (919) 966-4138, debbie.reinhartsen@cdl.unc.edu

Jackson Roush, PhD, Professor (Audiology), Director, North Carolina LEND Program. Research interests: pediatric audiology; newborn hearing screening; early intervention; hearing loss in children with multiple disabilities (919) 966-9467, jroush@med.unc.edu

**Patricia Roush,** AuD, (Professor, Department. of Otolaryngology). Clinical and Research interests: pediatric audiology; auditory neuropathy spectrum disorder; hearing aid fitting/management of infants and children (*984*) *974-3662*, *proush@unch.unc.edu* 

Hannah Siburt, AuD, PhD, Assistant Professor. Research and clinical interests: Hearing aids, cochlear implants, bimodal hearing, audiologic rehabilitation, clinical education. *(919)* 445-0339, hannah\_siburt@med.unc.edu

**Stephanie Sjoblad,** AuD, Professor. Clinical Coordinator, Hearing and Communication Center. Clinical and Professional interests: Aural rehabilitation; hearing instrument technologies; affordable hearing care. (919) 493-7980, ssjoblad@med.unc.edu

Jessica R. Dykstra Steinbrenner, PhD, CCC-SLP, Research Scientist, Frank Porter Graham Child Development Institute. Research interests: Autism spectrum disorders with a focus on school-based interventions and individuals on the spectrum with significant communication needs. (919) 962-3982, jessica.dykstra@unc.edu

Holly Teagle, AuD, (Associate Professor, Dept. of Otolaryngology). Research interests: pediatric cochlear implantation. (919) 419-1449, holly\_teagle@med.unc.edu

Gina R. Vess, MA, CCC-SLP, Duke Voice Care Center, Duke University School of Medicine. Professional interests: Evaluating and treating people who have medically complex and multifactorial voice conditions including the aging voice and spasmodic dysphonia. (919) 684-1556, gina.vess@duke.edu

Linda Watson, EdD, Professor. Research interests: early development and identification of infants and toddlers at risk for autism; predictors of language outcomes in children with spectrum disorders; early intervention in ASD; language disorders in preschool children. (919) 966-9466, Linda\_Watson@med.unc.edu

**David Zajac,** PhD, Professor (School of Dentistry). Craniofacial Center. Research interests: speech aerodynamics; developmental aspects of speech production; cleft palate speech; behavioral management of cleft palate speech. (919) 966-1362, david\_zajac@dentistry.unc.edu

# **Emeritus Faculty**

**Lee McLean,** PhD, Professor Emeritus. Research interests: communication development and intervention in individuals with severe-profound disabilities; early intervention and child language research.

**David Yoder,** PhD, Professor Emeritus. Senior Associate & Director Emeritus, Center for Literacy and Disability Studies; Executive Director Emeritus, Council for Allied Health in N.C. Research interests: literacy issues related to persons with complex communication needs.

Melody Harrison, PhD, Professor Emeritus. Research interests:

assessment of speech, language, literacy and social development in infants, toddlers, and children with hearing loss; aural rehabilitation of children with cochlear implants. *(919) 966-9459, melody\_harrison@med.unc.edu* 

## Research Grants, 2017-2018

**Tar Heel Shared Reader.** U.S. Department of Education, Office of Special Education Programs, Karen Erickson, PI, 2017-2021. This technology implementation project will develop a new shared reading interface for the popular Tar Heel Reader library of books (http://tarheelreader.org), create an implementation model to support its effective use, and study the impact of its use on communication and literacy outcomes for students significant cognitive disabilities.

A Test of Children's English/Spanish Speech Perception in Noise or Speech Maskers. NIH/NIDCD, Emily Buss (Department of Otolaryngology), Co-Pl. 8/10/16 - 7/31/21. The goal of this project is to develop a clinical test for evaluating masked speech perception in English and in Spanish, in either a complex speech or a steady noise background.

**Susceptibility to and Release From Masking in Infancy and Childhood.** NIH/NIDCD. Emily Buss (Department of Otolaryngology), Co-Investigator. 3/1/11 - 6/30/21. The long-term aim of this project is to identify and explain the factors responsible for the development of hearing in complex acoustic environments that contain multiple sources of sound.

**Evaluation of a Novel Intervention for Infants at Risk for Neurodevelopmental Disorders.** NIH-NICHD. Linda Watson, Lead PI; Elizabeth Crais, Investigator. 2018-2020. This project involves a proof-of-concept evaluation of a newly developed intervention, "Parents and Infants Engaged," for infants identified as at-risk for neurodevelopmental disorders through a community screening.

**Factors Influencing the BehavioralAassessment of Hearing During Infancy and Childhood.** NIH/NIDCD. Emily Buss (Department of Otolaryngology), Pl, 4/1/15 -3/31/20. The long-term goal of this research is to identify the factors responsible for immature auditory behavior in infants and children and to develop techniques for differentiating the contributions of these factors in individual listeners.

**Project Core.** U.S. Department of Education, Office of Special Education Programs, Karen Erickson, PI, 2015-2020. This five-year project is designed to develop products and services that support the implementation of a core vocabulary approach to augmentative and alternative communication for school-aged students with significant cognitive disabilities who also have complex communication needs.

**Promoting ASAP Collaboration through Technology (PACT).** Institute of Education Sciences, Elizabeth Crais and Linda Watson, Co-Investigators, 2016-2020. Our goal is to enhance the existing "Advancing Social-communication And Play" (ASAP) intervention through better home-school collaboration. We plan to develop and pilot test a website that generates individualized implementation recommendations, and facilitates communication about ASAP between school providers and parents.

Supporting Paraprofessionals' Use of Evidence-Based Practices for Students with Autism Spectrum Disorder (STELAR). Institute of Education Sciences, Jessica Dykstra Steinbrenner, Investigator, (PIs: Sam Odom, Ann Sam, and Ann Cox) at Frank Porter Graham Child Development Institute), 2017-2020. This grant is developing and testing online learning modules to support paraprofessionals in learning key evidence-based practices for working with elementary school children with autism spectrum disorder in school settings.

Preparing Interdisciplinary Practitioners for Working with Young Children with Autism who have High Intensity Needs and Their Families. U.S. Department of Education. Cara McComish (Director), and Harriet Able (Co-Director), 2019-2023.

### **Autism Speaks**

Aysenil Belger, (PI); Linda Watson, Clare Harrop, Alana Campbell (Co-PIs); 2018-2019. Understanding pathways to auditory processing disorders in infants at high risk for ASD.