

Interdisciplinary Doctoral Program in Communication Sciences & Disorders

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The diversity and the quality of the classes that have been available to me during this degree have been phenomenal.

–Susan Leon, MA-SLP, doctoral candidate

Why is "interdisciplinary" important?

From the beginning, speech pathology and audiology have been interdisciplinary fields. To succeed, researchers in these fields need to incorporate research from such distinct fields as linguistics, engineering, acoustics, psychology, physiology, medicine, cognitive neuroscience, cognitive neuropsychology, education, music, exercise science and others. With the current funding emphasis on interdisciplinary research, particularly from federal agencies, this interdisciplinary trend will continue to be important.

To prepare our students to be future leaders in the various subfields of speech pathology and audiology, the faculty of the Department of Communication Sciences and Disorders (CSD) at the University of Florida strongly believe that doctoral education should provide the broadest and most comprehensive coverage of a topic possible. This can best be accomplished by encouraging students to pursue an interdisciplinary approach to their studies.

The doctoral program in Communication Sciences and Disorders at the University of Florida prides itself on its interdisciplinary character. With a faculty advisory committee, each doctoral student chooses a series of courses that suits their own particular needs and interests. The CSD faculty engage in their own interdisciplinary work, collaborating with a wide range of faculty from several departments across campus, Shands Medical Center and the VA Medical Center. This provides doctoral students with a strong advantage, as many will get the chance to interact with experts in a variety of related fields, as well as to participate in interdisciplinary research unavailable at many other institutions.

Message from the Chair

As Chair of the Department of Communication Sciences and Disorders, I enthusiastically invite you to engage in our doctoral program. Distinct from many of the other doctoral programs in the country, our students are provided with opportunity for interdisciplinary interactions. These interactions occur on **one** campus with interchange between students and faculty from UF's College of Medicine, Public Health and Health Professions, Engineering, Fine Arts and the research health scientists at our Veterans Health Affairs.

The interdisciplinary research relationships our students have with our own faculty as well as with others from multiple departments and colleges provides an enriched and diverse educational platform from which scientific questions and experimental designs spring board into dissertations supervised by these many talented faculty.

With barriers to potential collaboration removed, a true meeting of the minds takes place: one that expands the scope of your studies, generating novel and possibly unanticipated ideas. Come explore your potential and optimize your educational growth. We look forward to creating the best opportunities for you in line with your academic and/or clinical research goals.

– Christine Sapienza, PhD, CCC-SLP, Professor and Chair

Research Groups

Language & Brain

Many of our speech pathology faculty conducts research in areas that focus on the representation of language in the brain. Three faculty members primarily research issues in child language: Bonnie Johnson (preschool language disorders), Linda Lombardino (reading disorders), and Betsy Vinson (language disorders in children). Many CSD faculty primarily investigate language disorders in adults: Lori Altmann (neurolinguistics, psycholinguistics), Lisa Edmonds (aphasia, bilingual aphasia), Leslie Gonzalez-Rothi (adult neurogenic disorders, limb apraxia), Diane Kendall (neuromotor disorders, aphasia), Jamie Reilly (semantics, dementia, imaging) and Jay Rosenbek (adult neurogenic disorders). This latter group of faculty members is also associated with the Brain Rehabilitation Research Center at the North Florida-South Georgia VA Medical Center, just south of campus. Many of these individuals collaborate with each other and with other faculty in other departments and colleges. All of them are members of the campus-wide Language and Brain Interest group (www.csd.ufl.edu/langbrain/index.html).

The interdisciplinary focus of this program is ideal for students who want to be competitive in both research funding and in the job market.

Susan Leon, MA, CCC-SLP (doctoral candidate)

Voice & Speech Science

Many faculty members in speech-language pathology pursue interests that center on voice and speech science. Specialists in voice and speech include Ken Logan (fluency disorders), Christine Sapienza (voice and swallowing disorders), Judy Wingate (remediation of the aging and singing voice), Rahul Shrivastav (disordered voice quality), Michael Crary (voice, dysphagia), and William A. Williams (craniofacial anomalies).

Many of our speech scientists also investigate a variety of indexical properties of speech including voice quality, accents, speech intelligibility, emotions, stress and age. This group includes W.S. Brown Jr. (experimental phonetics, the aging voice), James Harnsberger (forensic phonetics, experimental phonetics), Harry Hollien (forensic phonetics), Howard Rothman (perceptual characteristics of the aging and singing voice), and Rahul Shrivastav (aging and impaired-voice perception). There are ongoing collaborations with the Movement Disorders Clinic at Shands Hospital developing new treatments for voice and swallowing disorders in Parkinson's Disease voice, projects with the Department of Electrical Engineering to develop better signal processing algorithms, and with the College of Architecture to understand the effects of environmental variables on speech. Drs. Sapienza and Shrivastav are also affiliated with the Brain Rehabilitation Research Center at the North Florida-South Georgia VA Medical Center, just south of campus.



CSD at UF is located in historic Dauer Hall on the main UF campus.

Audiology

The faculty associated with the audiology program pursue diverse interests in basic and applied auditory research. These faculty include Patrick Antonelli (otology), Ken Gerhardt (auditory physiology, noise induced hearing loss), Scott Griffiths (vestibular disorders, speech perception), James Hall (auditory processing disorders, tinnitus, electrophysiology), Alice Holmes (Cochlear Implant, hearing assistance technology), Pat Kricos (audiologic rehabilitation, gerontologic issues), Colleen LaPrell (central mechanisms of hearing), George Singleton (otolaryngology), Mini Shrivastav (speech perception, auditory processing, psychoacoustic abilities in older adults), and Mei Zhang (ototoxicity and otoprotective mechanisms). Our Ph.D. students have engaged in innovative interdisciplinary research through productive collaborations with others in speech and hearing as well as in psychology, otolaryngology, sociology, architecture, electrical engineering, and education.

The Student Perspective

“My interests in the linguistic and cognitive science aspect of speech pathology make it necessary that I have access to information and perspectives from a variety of disciplines. The professors and students I have met from around campus have been open about sharing their knowledge and providing advice from their point of view. My own personal interests are encouraged and developed through the interdisciplinary nature of my coursework. Not only have I had the opportunity to benefit from the resources available to me, but I feel as though I am also able to share information about speech pathology, a growing and changing field that is sometimes not fully appreciated.” –**Sarah Key-DeLyria, MA. (current doctoral student**

“The inter-disciplinary focus that the University of Florida offers was a major reason that I decided to attend UF. I have had the opportunity to collaborate with neurophysiologists, respiratory-physiologists, physical therapists, and exercise scientists. The relationships that I have formed with these respected researchers and fellow doctoral students have given me a better understanding of normal function and disease processes affecting cough, speech, and swallowing. Furthermore, conversations about research methods and ongoing experiments have helped me to approach research problems from different perspectives, leading to new and interesting questions.” –**Teresa Pitts, MA. (current doctoral student)**

“During my doctoral program, I had the opportunity to work and consult with faculty members in Gerontology, Psychology, Health Professions, Health Services Research Management and Policy, Architecture, and Education. The strong associations between faculty in Communication Sciences and Disorders and research faculty in a wide range of departments throughout the university helped broaden my experience as a doctoral student and provided outside perspective on my own studies in hearing. As I interviewed for faculty positions, I found that experience in inter-departmental collaboration and willingness to continue working across departments was a primary concern of search committees, chairpersons, and Deans I met. There is no question that taking advantage of these collaborative opportunities at UF helped me during my job search.” –**Andrew John (Ph.D. 2007, Audiology), Assistant Professor, University of Oklahoma Health Sciences Center, Department of Communication Sciences and Disorders**

“The PhD program at the University of Florida afforded me the opportunity to be in an academic research center and a hospital/clinical setting. The relationships that exist between the UF Department of Communication Sciences and Disorders, Shands at UF Hospitals, and the Malcom Randall VA Medical Center are truly exceptional. My coursework at UF enabled me to cross disciplinary lines and expand my knowledge base in areas including cognitive psychology, kinesiology, respiratory physiology, and neuroscience. This interdisciplinary atmosphere ultimately has allowed me to establish relationships with researchers outside of my “box” and to think critically about the current status-quo within my discipline. Because of the education, research opportunities, and training I received at UF, I graduated as a competent and confident scientist and academician. I am now employed in a research-academic setting and looking forward to continuing the interdisciplinary mode of research based on the model of my Alma Mater. Go Gators.” –**Karen M. Wheeler, Ph.D., CCC-SLP; Assistant Professor, Arizona State University, Department of Speech and Hearing Science**



*Karen M. Wheeler, PhD (2006)
Assistant Professor
Arizona State University
Dept. of Speech & Hearing Science*

Doctoral student support includes:

- *Stipend*
 - *Tuition*
 - *Full health insurance*
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Classes Taken by Previous CSD Graduate Students at UF

Courses of general interest

CLP 6527/8	Measurement, Research Design & Statistics I & II
CLP 6307	Human Higher Cortical Function
CLP 7934	Subcortical Functional Cognition
CLP 7934	Cognitive Bases of Behavior
CLP 7934	Experimental Methods in Clinical Neuropsychology (fMRI)
EDF 6481	Quantitative Research Methods
EEX 6936	Grant Writing
EXP 6099	Overview of Cognitive and Sensory Processes
HSA 5103	Introduction to The U.S. Healthcare System
HSA 6126	Perspectives in Health Service Administration
HSA 6930	Organizational Issues in Healthcare 1 & 2
GMS 5905	Introduction to Applied Biostatistics
GMS 6705	Functional Human Neuroanatomy
RSD 6110	Rehabilitation Science Theory and Application
RSD 6705	Rasch Analysis
RSD 6930	Clinical Trials Rehabilitation
SPA 6905	Topics in Sign Language: Deaf Culture
SPA 6905	Topics in Sign Language: Advanced Sign Language
STA 6126/7	Statistics for Social Sciences I & II
STA 6934	Biomedical Research Design and Analysis
VME 6767	Issues in Responsible Research

Electives for a program in Language and Brain

DEP 4930	Development of Language and Thought
EDF 6938	Cognitive Psychology of Reading
EDF 6938	Developmental Issues in Cognitive Psychology of Reading
EDF 6938	Individual Differences in Reading Processes
EXP 4505	Human Memory
EXP 6939	Language Production and Aging
LIN 6707	Advanced Psycholinguistics
LIN 6708	Methods in Psycholinguistics
LIN 6708	Sentence Comprehension
LIN 6796	Cognitive Neuroscience of Language
SPA 6938	Controversies in Adult Language Disorders
SPA 7415	Neurolinguistics of Adult Language Disorders

Electives for a program in Voice and Speech Science

CAS 6195	Medical Aspects Speech Language Pathology
CAS 6299	Dysphagia Management
CAS 6630	Management of Acquired Sensorimotor Deficits
CAS 7946	Clinical Practicum in Medical Speech Pathology
GMS 7795	Special Topics in Neuroscience
MUS 6905	Projects & Problems in Music
PET 6905	Exercise Physiology
PET 6905	Advanced Exercise Physiology
PET 6905	Muscle Physiology
PET 6905	Neurological Aspects of Exercise
VME 6905	Respiration Physiology
VME 6905	Advanced Respiratory Physiology
LIN 6932	Advanced Phonetics
EEL 6586	Automatic Speech Processing
EEL 6935	Advanced Speech Processing
SPA 6905	Topics in Sp. Sci.—Instrumentation for Speech Science
SPA 6905	Topics in Sp. Sci.—Digital Signal Processing for Speech & Hearing
SPA 6905	Topics in Sp. Sci.—Speech Production

Electives for a program in Audiology

CAS 6291	Cochlear Implants
CAS 6630	Advanced Seminar In Cochlear Implants
GMS 6421	Cell Biology
GMS 6635	Organization Of Cells And Tissues
HSC 6037	Philosophy And Principles Of Health Education
HSC 6668	Interpersonal Communication And Health
MHS 5005	Introduction To Counseling
PHA 5933	Auditory Pharmacology
PSB 7248	Neurobehavioral Relations
PSY 6905	Advanced Psychoacoustics

Timeline for application:

November: Investigate UF website. Compare doctoral programs.

December-January: Contact potential mentors. Prepare application.

February: Submit application

Sample Program Timeline:

Year 1 & 2: complete course requirements, participate in research

Year 3: Qualifying exam, Dissertation proposal

Year 4: Dissertation research & job hunt
