

# Speech and Hearing Science (Translational Genetics of Communication Abilities), PhD

NHSHSTGPHD

Take your career further with the ability to investigate the genetic foundations of communication behaviors and understand communication abilities, from typical processes to disorders.

## Program description

**Degree awarded: PHD Speech and Hearing Science (Translational Genetics of Communication Abilities)**

The PhD program in speech and hearing science with a concentration in translational genetics of communication abilities provides doctoral students with training in an innovative approach to the clinical sciences that has been pioneered at ASU. In this approach, the concepts of precision medicine are applied to all disciplines within communication sciences and disorders.

Training in molecular genetics and bioinformatics equips students to investigate the interactions among genetic, brain-based and behavioral traits. Prior training in genetics is not required. Knowledge of genotype-phenotype associations provides the foundation for the translational components of this program:

- early identification and intervention
- individualized management
- interprofessional approaches

Students have the option to focus primarily on basic sciences aspects or clinical translations, or to explore both.

This program leverages strong research and clinical expertise at the College of Health Solutions across clinical linguistics and its expertise in the biosciences and translational clinical sciences. Collaborating units at ASU include the Biodesign Institute, the School of Life Sciences and many subspecialty areas, such as bioinformatics and psychology.

Students in this doctoral program are taught the skills to discover and understand networks of genotype-phenotype associations and to contribute to more effective clinical management of communication disorders using preventive, targeted and interprofessional methods.

## At a glance

- **College/School:** [College of Health Solutions](#)
- **Location:** [Tempe](#)

## Degree requirements

84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation

### **Required Core (2 credit hours)**

SHS 701 Scientific Writing and Presentation in Communication Sciences and Disorders I (1)

SHS 702 Scientific Writing and Presentation in Communication Sciences and Disorders II (1)

### **Concentration (12 credit hours)**

### **Research (21 credit hours)**

SHS 792 Research (12)

research methods and statistics (9)

### **Electives or Additional Research (28 credit hours)**

### **Other Requirements (9 credit hours)**

professional seminars (9)

preliminary exam (0)

comprehensive exams (0)

### **Culminating Experience (12 credit hours)**

SHS 799 Dissertation (12)

### **Additional Curriculum Information**

Students entering the doctoral program with a master's degree in a related discipline may count up to 28 credit hours from the master's degree toward the total credit hours, with program approval.

Concentration coursework focuses on issues related to translational genetics and is selected in collaboration with faculty. All doctoral graduates with this concentration are required to have foundational knowledge in genetics. Students must fulfill teaching, grant writing, and career development competencies through the professional seminars requirement.

The preliminary exam research project is to be within the field of translational genetics of communication abilities. This formal research experience during the first three semesters of the program provides students with a jump start into research, preparing the student for their subsequent dissertation.

Prior to commencing dissertation research, the student must pass written and oral comprehensive examinations covering their field of study.

## Admission requirements

Applicants must fulfill the requirements of both the Graduate College and the College of Health Solutions.

Applicants are eligible to apply to the program if they have earned a bachelor's degree in a related field and do not wish to earn a clinical master's degree, or if they have earned a master's degree or equivalent in speech and hearing science, psychology, linguistics or a related discipline from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. personal statement
4. three references (academic or professional)
5. resume or curriculum vitae
6. proof of English proficiency

### Additional Application Information

An applicant whose native language is not English must provide proof of [English proficiency](#) regardless of their current residency.

The personal statement, typically one to two double-spaced pages, should include an explanation of the student's motivation to pursue a PhD with a specific faculty mentor in the program, evidence of potential to succeed in a research-intensive doctoral program, and goals for the future. Examples of evidence of potential to succeed include technical skills, clinical experiences, and research achievements and interests.

An optional writing sample (6 to 10 pages) may be submitted with the program application. Writing samples include publications, research manuscripts or a sample of academic writing.

Contact information of three references is required. References will be contacted via email to submit a letter of recommendation and respond to a series of questions about the applicant. References should be

individuals who can speak to one or more of the following: academic performance, clinical performance or potential to succeed in a research-intensive doctoral program. They are typically faculty, clinical or research supervisors. If the applicant has spent some time away from research or academia, it is still recommended that they include references from experiences that preceded their absence, in addition to a more recent clinical or research supervisor.

## Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

## Application deadlines

Fall

[expand](#)

## Career opportunities

Doctoral-level scientists in the field of speech and hearing science are well situated to pursue positions in which they can lead independent research programs, such as a university professor or research scientist in the private or public sector.

There is a particular need for doctorate-level scientists with speech-language pathology or audiology backgrounds in tenure-track academic positions.

Career examples include:

- medical science liaison
- professor or community college teaching faculty
- program officer in a nonprofit or government agency
- research scientist in for-profit or nonprofit entities

## Contact information

[College of Health Solutions](#) | HLTHN 401AA

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