**Hearing loss** is a common condition. It can be present in three of every 1,000 babies born. About 60 percent of congenital hearing loss is due to changes in genes. Hearing loss in adults and older children is often caused by changes in genes. Overall, genetic changes are an important cause of hearing loss.

We know there are many genes which cause hearing loss. Hearing loss can be non-syndromic or syndromic. When hearing loss is the only symptom, it is referred to as **non-syndromic**. Non-syndromic hearing loss is more frequent (70-85%). Research of genetic factors in deafness has refined the molecular mechanism in human hearing.

**Syndromic** hearing loss means that the patients have additional features such as blindness or different colored eyes. Over 400 syndromes are known to include hearing loss. Fifteen to thirty percent of hearing loss is syndromic.

Our goal is to increase knowledge about genetic deafness. Finding the genetic changes that cause hearing loss helps us to understand how hearing works.
**What is our research goal?**

The John P. Hussman Institute for Human Genomics (HIHG) is conducting a study of the new genetic causes of deafness. What we learn from our research will help us to better understand how hearing loss happens. This will help us to better diagnose and treat individuals.

**What does participation involve?**

- Reading and signing a consent form
- A family and medical history interview
- Review of medical records
- Clinical exam specific to hearing loss
- A blood sample from:
  - the person with hearing loss;
  - both parents and siblings; and
  - other family members

**Study participation facts**

- Participation is voluntary
- There is no cost to participate
- All information is kept confidential
- Travel to the HIHG is not required.

**Will I get study results?**

When a significant result is found in your sample, you will be notified. You will also receive a newsletter periodically that describes our progress and discoveries related to genetic deafness.

**The research team**

Many different types of people are needed to make this research a success. Individuals with hearing loss, their families, physicians, audiologists, and specialists in genetics are all working together to find the genes that cause deafness.

Our team is led by Mustafa Tekin, M.D., Associate Professor in the Dr. John T. Macdonald Foundation Department of Human Genetics. Researchers at the HIHG have identified genes for more than 60 human illnesses, including hearing loss, neurological disorders, cardiovascular diseases, and eye diseases.

Researchers and individuals, within our community, working together can find the genetic causes of deafness and hearing loss.

**How can you help?**

The success of our research relies on the participation of families. For our research to be successful, we need many people to be part of the study. We are looking for people to participate who have deafness that was not caused by an injury or illness. We also need people who have familial hearing loss. Familial hearing loss is when two or more individuals are affected in the same family.