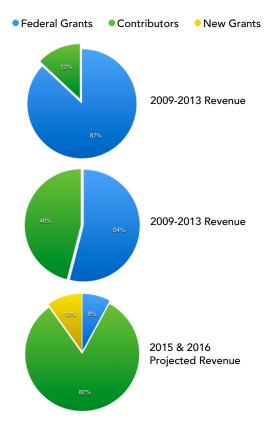
## **FINANCIAL STATS**

Seven years of preclinical studies were made possible by grants from the National Institutes of Health, the Office of Navel Research, and Oklahoma Center for the Advancement of Science and Technology. Until now, there has been little need for traditional fundraising or donor-based programs to support the research.



We are experiencing a major paradigm shift in our revenue model due to declining federal grant funding. We are planning on an 85% reduction in grants available for research and development from the federal government.

As a result, we're now seeking grants from private foundations, companies, and private donors to support critical research. Will you consider helping others Hear the Cure?

# WE ARE ON THE VERGE

of a cure!

We are currently looking for partners who will help with a \$3M project which will span the next three years. The regeneration of inner ear sensory hair cells is one of the biggest and most promising projects on the horizon. Inside of the project are numerous others which are occurring simultaneously, such as nerve ending regeneration, optimization of clinical delivery routes, and therapeutic formulation studies.

If you or someone you love suffers from hearing loss, you know the impact it has had on your life and theirs. You feel compelled to help because of this knowledge and we would like to partner with you so that all who have ears will hear.

## **EVERY DONATION MATTERS.**

Every donation counts.

It takes an army to win a battle. We are fighting to restore hearing loss and we need you to call or email us today and find out how you can join our army as we march forward. Those with hearing loss depend on us, and we depend on you.

Please, join us today as we find a cure for hearing loss.

## **CONTACT INFORMATION**

Hough Ear Institute 3400 NW 56th St. Oklahoma City, OK 73112

Phone: 405-639-2877 E-mail: info@houghear.org



A 26 year old Marine returns to his wife and children after four years in the military and two combat tours in Afghanistan. During training, he wore the mandated hearing protection devices—but not in combat where high decibel gunshots, IED blasts, and explosions are both common and unpredictable.

Along with severe ringing, his noise-injured ears now have the hearing of an 80 year old. He has difficulty performing his job, hearing his children, and most likely, experiences changes to his emotional and mental state due to erratic and disrupted conversation.

## NOISE INDUCED HEARING LOSS.

an estimated 26 million Americans are affected by Noise Induced Hearing Loss.

The most common cause is occupational noise experienced in construction, manufacturing, mining, oil and gas, or just being a normal teenager. We all know someone.

# **WORLDWIDE, 600 MILLION**

experience hearing loss.

The deaf are often socially isolated. They live with little opportunity in life for employment or education in developing countries.



# THE FUTURE SOLUTIONS

for deafness

The first is a pill to prevent and treat hearing loss caused by loud noise or explosions.

The second is a treatment to regenerate lost sensory hair cells, which will restore hearing for most causes of nerve deafness, thereby curing deafness for many people.

The results will be less need for cochlear implants and other hearing devices, if successful. We all know someone who needs to hear the cure.

At the Hough Ear Institute, research that led to improvement of hearing devices such as the cochlear implant and bone conductor implant is now leading to cutting edge biomedical solutions for hearing loss.

Hearing aids and cochlear implants are beyond the reach of many of the 600 million people affected by hearing loss. We are researching an affordable solution through an injection that would be administered in a clinic setting. Creating a treatment with availability to anyone – no matter what their location or socioeconomic background is – our goal as we move forward to help people worldwide.

Imagine if there was a pill that a soldier could swallow immediately after an explosion that would prevent or heal hearing loss.

Imagine if there was a treatment that could be administered in the clinic that would regenerate hair cells and restore hearing.

## WITH YOUR HELP

we're closer to curing deafness worldwide, one disease, one patient at a time.

#### 1979

HEI is one of the first clinical sites in the world to implant the cochlear implant.

### 1980

- HEI discovered the use of rare earth magnets as the magnetic coupling mechanism used today in all cochlear implants.
- HEI developed the first semi-implantable electromagnetic hearing device as an alternative to acoustic hearing aids.

### 1984

HEI researched and developed the first implantable bone conduction hearing device.

#### 1986

HEI performed the first successful Cochlear Implant surgery on deaf and blind patient, Jo Helen Mann.

### 2001

HEI received FDA approval on an alternative to acoustic hearing aids, the SoundTech/Maxum System.

### 2006

HEI is first to publish on drug delivery to the inner ear with magnetic nanoparticles.

### 2012

HEI is first to demonstrate that antioxidants can protect against hearing loss caused by exposure to high intensity blasts.

#### 2013

HEI is first to report mammalian inner ear hair cell regeneration in balance and auditory systems with nanoparticle technology.

#### 2014

- HEI discovers HPNO7 plus NAC reduces cochlear injury as well brain injury.
- Anticipate FDA Phase I study on the "Hearing/After Blast" treatment.

#### 2015

- Completion of FDA Clinical Trial Phase 1
- Research on Inner Ear Sensory Hair Cell Regeneration continues with good results