

# The Ear Institute



New York  
Eye and Ear  
Infirmiry of  
**Mount  
Sinai**

*Ear Institute*



## About Us



NYEE circa 1820

For more than two centuries, the Ear Institute at New York Eye and Ear Infirmary of Mount Sinai has been at the forefront of diagnosis, treatment, and research in the field of otology and skull-based disorders. Part of the oldest multispecialty hospital in the nation, our program has helped fuel the engine of discovery that has transformed the way people live with hearing loss. It is this storied history of innovation and experience -- coupled with success in treating every possible hearing and balance condition over such an extensive period of time -- that allows us to offer the most sophisticated ear care available today.

Nearly 48 million Americans suffer from some type of hearing impairment that interferes with their daily life at home, work, or school. At the Ear Institute, our unmatched breadth of services reflect the comprehensive and multidisciplinary nature with which we treat everything from common to rare and complex conditions.

Our highly skilled team of experts, which includes otolaryngologists (ear, nose, and throat physicians), otologists-neurotologists, audiologists, speech-language pathologists, early interventionists, and other professionals, work together to create an individualized treatment plan with the goal of improving each patient's quality of life. Our surgeons frequently collaborate with other specialties such as neurosurgery, using the latest minimally invasive techniques to treat rare and complex tumors. Additionally, our pediatric team is continuously working to ensure that our youngest patients thrive and every newborn has the best possible start in life.

Technology evolves rapidly in the field of otology; and we have long been pioneers in evaluating the latest implantable and hearing-assisted devices.

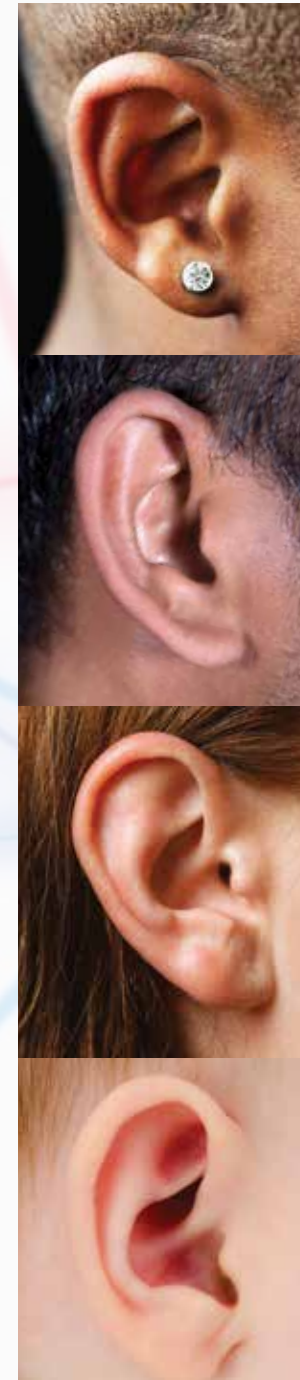
Continued

Our vastly experienced audiologists and surgeons quickly adapt to this ever-changing environment, offering the newest advancements as soon as they become available. Additionally, research investigators at the Ear Institute are constantly exploring new ways to diagnose and treat patients.

**At the Ear Institute, our patients have unparalleled access to:**

- Superior medical and surgical therapies for all balance, hearing, and skull base disorders
- Leading minimally invasive surgical techniques
- State-of-the-art diagnostic technology
- Latest advancements in cochlear implantation and hearing-assisted devices
- Comprehensive group of specialists, conveniently located under one roof
- Convenient telemedicine appointments with all members of the ear care team
- Groundbreaking clinical trials and research projects as supported by the NIH and FDA
- Close and coordinated partnership with neurosurgery, neurology, genetics, craniofacial pediatrics and geriatrics

## Conditions We Treat



The specialists at the Ear Institute treat the full spectrum of conditions related to chronic ear disease, hearing loss, tumors, dizziness, and facial nerve disorders. They are widely recognized for their extraordinary expertise treating all types of hearing loss and conditions.

### Hearing and Balance Disorders

- Acoustic neuroma
- Acute otitis media or ear infections
- Auditory neuropathy spectrum disorder (ANSI)
- Autoimmune inner ear disease (AIED)
- Benign paroxysmal positional vertigo (BPPV)
- Cancers of the ear
- Cerebrospinal fluid leak
- Cervicogenic dizziness
- Cholesteatoma
- Chronic ear infection
- Concussion
- Glomus tumors
- Hearing loss
  - Conductive
  - Sensorineural/neural
  - Mixed conductive and sensorineural
- Imbalance from aging
- Meniere's disease
- Microtia
- Migraine
- Otosclerosis
- Perilymphatic fistula
- Tinnitus
- Superior semicircular canal dehiscence (SSCD)
- Tympanic membrane perforation
- Vestibular neuronitis and labyrinthitis

## Services

### Audiology

The Ear Institute has an impressive history of identifying, evaluating, and treating hearing loss across the lifespan. We provide the highest level of care in all aspects of diagnostic audiology, including the following sub-specialty areas:

- **Pediatric Hearing Loss:** our pediatric audiologists are dedicated to diagnosing hearing loss in children of any age, including newborns or those with special needs or developmental delay, with both behavioral and electrophysiologic testing.



- **Diagnostic and vestibular balance:** in our state-of-the-art hearing and vestibular balance testing facility, we use the latest diagnostic technology, including the rotational chair, vestibular evoked myogenic potential (VEMP) testing, and videonystagmography (VNG).



- **Cochlear implantation:** our cochlear implant audiologists' experience is unmatched. They partner with patients to decide what modality is right for them, program the device after surgery, and train them to use the technology to optimize their hearing.
- **Hearing aids:** an overwhelming number of hearing aid options are available today. Our experts understand this rapidly changing technology, guiding patients to select a hearing aid that best fits their particular lifestyle, condition, and budget. Together, we develop a plan that meets patients' goals and maximizes their ability to hear and communicate in different environments.

## Services



### Vestibular (Balance Disorders) Rehabilitation

Vestibular or balance disorders, which cause dizziness, vertigo, or disequilibrium, can affect as many as 35 percent of adults over age 40 in the United States. When medical or surgical therapies fail to relieve symptoms, an exercise-based therapy known as vestibular rehabilitation can significantly improve quality of life. Our specially trained therapists, who are board certified in neurological or geriatric rehabilitation, use balance activities and positioning maneuvers to improve the function of three critical bodily systems that impact balance: the inner ear, eyes, and leg muscles. A comprehensive, personalized home exercise program is also created for every patient to maximum results.

### Pediatric Hearing Loss

Our multidisciplinary team develops a family-centered plan to help each of our youngest patients thrive during this critical period of learning and development. Committed to identifying at-risk newborns from the very start of life, we work closely with families throughout the process from diagnosis to treatment and beyond. In addition to surgeons, pediatric audiologists, speech and language therapists, and social workers, we also have a dedicated education coordinator who focuses on maximizing the school and learning environment of each child.

### Speech Therapy

Because of the close relationship between hearing and speech development, our facility has dedicated speech pathologists who treat patients (adults and children) with hearing loss, including after cochlear implantation. We also have one of only two specialists in New York who is certified in auditory verbal therapy for young children with hearing loss.

## Surgical Techniques

### Endoscopic

The surgeons at the Ear Institute of New York Eye and Ear Infirmary of Mount Sinai are at the forefront of adopting and evaluating minimally invasive techniques in otology and neurotology. We perform the vast majority of procedures endoscopically, using the ear canal as an access point instead of an incision. Research shows that patients who undergo endoscopic surgery recover faster, experience less pain, and have excellent overall outcomes. The Ear Institute is one of only a handful of institutions nationwide that uses this approach to treat conditions like acoustic neuroma and cholesteatoma, as well as difficult-to-reach complex glomus tumors.



### Exoscope

Mount Sinai surgeons were the first in the world to pioneer the use of the exoscope -- a robotically controlled digital microscope -- for otologic procedures. The exoscope, which improves visualization and offers increased mobility and flexibility, facilitates a multidisciplinary experience by allowing both neurosurgeons and ear, nose, and throat specialists to see high-quality imaging in real time. The highest possible safety standards remain our top priority for our patients, even as we push boundaries for advancing the field of neurotology.

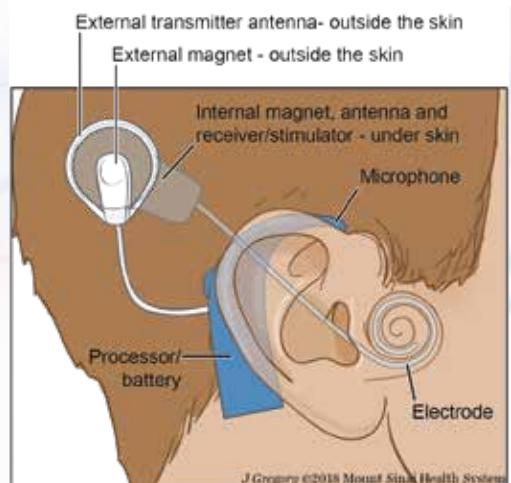
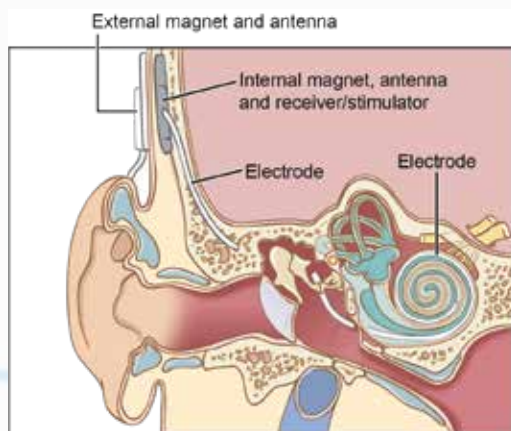
## Implantable Auditory Devices

### Cochlear Implants

The Ear Institute offers a level of unprecedented expertise and resources in our Cochlear Implant Program. Our team has unparalleled experience in cochlear implant evaluation, surgery and programming for both adults and children. Recognized for our successful outcomes, our

surgeons receive referrals worldwide for patients with significant residual hearing, prior ear surgery, inner ear malformations, and other rare conditions such as Meniere's disease.

We offer all FDA-approved devices and work in tandem with the manufacturers to test new technologies that offer insights into the next generation of life changing devices.



### Bone-Anchored Hearing Aids

Technology and fitting are the cornerstones of our dedicated Bone Anchored Hearing Aid Program. Our audiologists and surgeons are continuously evaluating the newest devices on the market so patients can benefit from the most recent advances. Additionally, we are reputable for complex cases such as microtia and atresia.

## Complex Ear Tumors

A prominent distinction of the Ear Institute at New York Eye and Ear Infirmary of Mount Sinai is the team's excellence in minimally invasive treatments of complex otologic conditions. Our surgeons have forged new technologies and surgical techniques focused on minimizing patients' scarring and recovery, while maximizing their hearing preservation. The team's expertise in diagnosis, treatment and rehabilitation enables them to provide truly comprehensive care.

At the Ear Institute, we employ endoscopic surgery - through the ear, versus external incisions - whenever possible for the following:

- **Acoustic neuroma/vestibular schwannoma:** a noncancerous tumor affecting the vestibular/balance nerve, which connects the ear to the brain.
- **Cholesteatoma:** a cyst-like skin growth in the middle ear or behind the eardrum or mastoid.
- **Glomus tumor:** a slow-growing benign tumor made of blood vessels in the middle ear or skull base.
- **Skull base tumor:** a growth or collection forming in the bones at the base of skull that can manifest, such as meningioma, schwannoma or chordoma.

Our team also treats all stages of squamous cell carcinomas/cancers affecting the ear.

Patients may undergo an audiogram and exam by a General ENT physician prior to the consultation with one of our otologists. All treatment plans are thoroughly discussed with our patients and detailed information is shared about the surgery and pre and postoperative care.

## Research



The unique Ear Institute team is poised to investigate the relationship between hearing and balance in the following areas:

**Cochlear Implants:** As leaders in the field of cochlear implantation, our researchers are constantly looking for new ways to use and optimize different devices and settings to improve the quality of life for patients. We track outcomes in a variety of candidacy groups, including elderly patients and young children, while exploring the impact of different auditory environments. Another important focus of our research is hearing preservation. While it was once thought that patients with cochlear implants would lose remaining function in their inner ear, our data shows that certain techniques can help preserve hearing function in both adults and children with cochlear implants.

**Complex Ear Tumors:** We specialize in the diagnosis and treatment of complex ear tumors of the skull base and temporal bone, including vestibular schwannomas, glomus tumors, meningiomas, encephaloceles/ CSF leak and cholesteatomas. Our research investigates advanced diagnostic techniques intraoperative navigation, minimally invasive surgical techniques, and improvement in quality of life following surgical resection.

**Virtual Reality:** Our physicians and researchers have received multiple NIH-sponsored grants to explore the relationship between hearing and balance. The two primary areas of study are:

- Measuring the effectiveness of virtual reality as a platform to identify and treat balance disorders
- Exploring the mechanism through which hearing loss effects balance and falls using virtual reality

Participants in these trials use head-mounted virtual reality displays to simulate environments that cause spells of vertigo such as a subway platform. We are then able to record multiple data points with the goal of creating strategies to deflect falls and increase stability.

## Meet the Team



### **George Wanna, MD**

*Otologist/Neurologist; Site Chair, Mount Sinai Downtown Chief, Otolaryngology*  
Dr. Wanna is an international leader and pioneer in neurotology and skull base surgery techniques and technology. Fellowship trained

and specializing in complex ear surgeries and implantable devices, he is one of the few surgeons internationally utilizing endoscopic (minimally invasive) surgery for acoustic neuroma, cholesteatoma and glomus tumor removal. His research focuses on structural preservation and technological advances in acoustic neuromas, lateral skull base surgery, and cochlear implantation. He has received funding from the National Institute of Health (NIH) and NIDCD and spearheads the annual Endoscopic Middle Ear Dissection Course, one of the few internationally renowned training courses on this technique.



### **Maura Cosetti, MD**

*Otologist/Neurologist; Director, Ear Institute at New York Eye and Ear Infirmary of Mount Sinai*  
Fellowship trained in neurotology and skull base surgery, Dr. Cosetti's clinical expertise spans the gamut of all pediatric and adult

hearing disorders, with an emphasis on complex cases. This includes cochlear implantation, cholesteatoma, acoustic neuroma, cerebrospinal fluid (CSF) leak, chronic ear disease and infections, aural atresia, lateral skull base surgery and endoscopic ear surgery. Her research focuses on outcomes in cochlear implantation and the use of virtual reality to understand how hearing loss affects posture, falls and balance. She receives funding from the NIH, Hearing Health Foundation (HHF) and previously from the DOD.

## Meet the Team



### Enrique Perez, MD, MBA

Otologist/Neurotologist; Director of Otolaryngology, The Mount Sinai Hospital Fellowship trained in neurotology, Dr. Perez specializes in the management of adult and pediatric hearing disorders, as well as cochlear implantation, endoscopic middle ear surgery, otosclerosis,

balance disorders, facial nerve disorders, lateral skull base tumors, Neurofibromatosis Type II, CSF leak and encephalocele repairs. His research is focused on novel translational techniques for hearing preservation in cochlear implantation and skull base surgery, as well as outcomes and cost-effectiveness in otologic/neurotologic care.



### Bryan Hujsak, PT, DPT, NCS, MBA

Administrative Director, Ear Institute  
Clinical Director,  
Vestibular Rehabilitation

Dr. Hujsak has specialized in the rehabilitation of patients with vestibular disorders for the past 20 years. He is extensively published in peer-reviewed journals, authored various textbook chapters and is a frequent speaker on peripheral vestibulopathy both nationally and internationally. His research focuses on use of virtual reality to promote compensation from vestibular disorders and has multiple funded studies from the NIH and HHF.

## How to Reach Us



New York  
Eye and Ear  
Infirmary of  
Mount  
Sinai

Ear Institute



### Ear Institute New York Eye and Ear Infirmary of Mount Sinai

380 Second Avenue (at 22nd Street)  
9th Floor  
New York, NY 10010

5 East 98th Street, 8th Floor  
New York, NY 10029

Office hours: Monday – Friday, 8am – 5pm

### For Patients

#### Make an Appointment:

**212-979-4200** (Downtown)  
NYEEentreprs@mountsinai.org

**212-241-9410** (Uptown)  
ENTPatientServices@mountsinai.org

**Request a Video Visit:**  
ENTtelemedicine@mountsinai.org

**Learn more:** [www.nyee.edu/earinstitute](http://www.nyee.edu/earinstitute)

**Contact Audiology, Speech Therapy  
and Vestibular Rehabilitation:**  
einstitute@nyee.edu

### For Physicians

#### Make a Referral:

Physician Access Services  
**800-TO-SINAI** (800-867-4624)  
access@mountsinai.org

#### Make a Donation:

Thomas P. O'Brien  
**646-605-8779**  
thomas.obrien@mountsinai.org  
<http://giving.mountsinai.org/earinstitute>