



University of Colorado **Anschutz Medical Campus**

# Hearing & Balance Research Cluster

Department Research Retreat



# Hearing & Balance Faculty- Cluster Leads

## **Nate Greene, PhD**

- mechanics and physiology of the auditory system
- hearing restoration devices and hearing protective devices
- mechanisms of hearing loss during high level sound exposure.



## **Katie Rennie, PhD**

- electrophysiological properties of type I and type II vestibular hair cells
- synaptic transmission and firing in vestibular afferents
- how peripheral vestibular mechanisms change with age



# Hearing & Balance Faculty

## -Department of Physiology & Biophysics

### Anthony Peng, PhD

- mechanotransduction in the auditory and vestibular systems
- aging mechanisms in the vestibular periphery



### Dan Tollin, PhD

- sound localization in the auditory system
- central mechanisms of sound localization in older adults



### Achim Klug, PhD

- processing of sound information in the auditory brainstem



# Hearing & Balance Faculty/Labs

## -Department of Otolaryngology HNS

Anna Dondzillo, PhD

- age-related sensory loss in the auditory and vestibular systems of rodents and humans.
- efferent mechanisms in the cochlea



# Hearing & Balance Faculty

-Department of Otolaryngology-Neurotology

**Samuel Gubbels, MD**

- imaging of cochlear implants, hearing preservation in cochlear implantation and skull base surgery, and cochlear implant indications



**Stephen Cass, MD MPH**

- medical and surgical treatment of adult and pediatric ear disorders



-Department of Pediatrics, Neurology & Pharmacology

**Tim Benke, MD PhD**

- Synaptic mechanisms in the inner ear and CNS, neurodevelopmental disorders



# Hearing & Balance Faculty

## -Department of Otolaryngology-Cluster Affiliates

### **Regie Santos-Cortez, MD PhD**

- genetic and epidemiologic factors that influence risk for otolaryngologic diseases, such as otitis media, hearing loss, vestibular disorders and obstructive sleep apnea/sleep-disordered breathing.



### **Vinaya Manchaiah, AuD PhD**

- improving accessibility, affordability, and outcomes of hearing healthcare services for older adults with hearing loss



## -Department of Physical Medicine and Rehabilitation

### **Kristin Uhler, PhD**

- language development in children with and without hearing loss

