

ARO 2025 Travel Awards Brochure



ARO 48TH ANNUAL MidWinter Meeting

February 22-26, 2025

Renaissance Orlando at SeaWorld
Orlando, Florida

DON HENDERSON TRAVEL AWARD RECIPIENTS



Brianna Atto

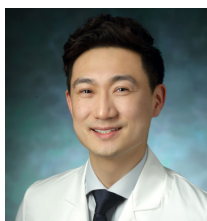
Brianna is an early-career research fellow at the University of Tasmania who established the first otitis media research program in Tasmania, Australia. She completed her PhD in 2022 and commenced post-doctoral research in 2023 (supported by the prestigious and highly competitive Garnett Passe Foundation Early Career Fellowship). Her expertise are in microbiology, molecular biology and cell culture models particularly in the context of host-pathogen interactions in the respiratory tract. Prior to this, she spent 7 years working in a diagnostic pathology laboratory with experience in the fields of hematology, clinical chemistry and transfusion science. Currently, her research is focused on elucidating key pathogenic determinants, improving diagnostics, and developing novel therapeutic molecules with the aim of preventing/improving treatment of otitis media.



Andrea DeFreese

Andie is a graduate student in the Department of Hearing and Speech Sciences at Vanderbilt University and a Cochlear Implant Audiologist at Vanderbilt University Medical Center. She began her academic journey at Vanderbilt University, where she earned a bachelor's degree in Neuroscience and Disabilities Studies. Under the mentorship of Dr. Mark Wallace, Andie conducted functional imaging research to explore multisensory integration in the cortex. She then continued her studies at Vanderbilt in the Doctor of Audiology program, working with Dr. René Gifford on research into cross-modal plasticity in cochlear implant patients. After completing her AuD, Andie joined the Jan Lab as a PhD student, where her research focuses on utilizing big data approaches to identify biomarkers in the central auditory system and explore their role in cochlear implant outcomes.

DON HENDERSON TRAVEL AWARD RECIPIENTS



Andy S. Ding

Dr. Andy Ding is an R25-funded resident physician in Otolaryngology at Johns Hopkins and a biomedical engineer with a strong interest in artificial intelligence and computer-assisted surgery. Since graduating with a degree in Computer Science from the University of California, Berkeley, he has cultivated a deep interest in applying computational methods to solve clinical problems and augment existing surgical techniques. During his training in medical school, he was fortunate to interact with residents and faculty members who share a passion for computer science and biomedical engineering. Under their guidance, he joined the Johns Hopkins Laboratory for Computational Sensing and Robotics to build computer-assisted microsurgical systems for otologic procedures. Eager to continue developing his technical skillset, he completed a master's degree in biomedical engineering with a focus on artificial intelligence in medicine. Through this program, he investigated atlas-based and deep learning methods for automatically labeling anatomical structures in temporal bone CT imaging. Dr. Ding's overarching research goals are to develop computer-assistance technologies for surgical procedures in otolaryngology. These endeavors include semi-autonomous and autonomous robotic systems; algorithms for medical image analysis; machine learning techniques for instrument tracking and anatomical labeling; and augmented or virtual reality frameworks for surgical simulation.



Laura Console-Meyer

Laura Console-Meyer is a third-year Ph.D. student under the supervision of Prof. Felix Felmy in the Department of Zoology at the University of Veterinary Medicine Hannover, Germany. She holds a B.Sc. in Biology and an M.Sc. in Biomedicine and Animal Biology from Leibniz University Hannover and the University of Veterinary Medicine Hannover, respectively. Throughout her academic career, Laura focused her research on auditory brainstem circuits, which has directed her to pursue a Ph.D. in auditory research. Her current research focuses on species-dependent biophysical adaptations and the mechanisms by which neurons integrate information from multiple synaptic sources to modulate the timing and fidelity of their outputs through whole-cell patch clamping. Laura looks forward to the opportunity to engage with the hearing research community at the MidWinter Meeting and anticipates meaningful discussions during the poster sessions.

ARO 2025 TRAVEL AWARDEES



Victor Adenis

My long-term research interests lie in the development and the understanding of efficient neuro-prosthetics to restore sensorineural loss. My PhD at University Paris-Saclay focused on the cochlear implant (CI) and the consequences of electrical stimulation on the auditory pathway through the prism of electrophysiology. I joined Mass. Eye and Ear in 2020 to transpose my skills and experience with CI on the auditory brainstem implant (ABI) and other hearing devices. I'm convinced that patients need tailored care that is only possible if the consequences of stimulation on the auditory pathways are exhaustively studied and defined. Thanks to conceptual and technical advances in electrophysiology and calcium imaging, I'm studying these brain/machine interfaces to characterize the neural responses at several levels of the auditory pathway (8th nerve, Inferior Colliculus, and Primary Auditory Cortex). I then work with manufacturers to improve the devices on several aspects (design, signal treatment, encoding, stimulation paradigms) to provide better hearing restoration and potentially increasing patients' performances. I am currently exploring exciting new stimulation strategies such as magnetic or optogenetic stimulation and rehabilitating old paradigms that were abandoned in the early CI development due to technical limitations. I also study the evolution of neural populations and evoked responses during learning to identify mechanisms that could be critical to observe long term optimal performances. The goal is to adapt the current healthcare standards and provide an efficient behavioral therapy in the months following activation that will insure the best performances possible in patients.

ARO 2025 TRAVEL AWARDEES



Aray Adylkhan

I am a third-year PhD student in Dr. Xiaowei Lu's lab at the University of Virginia. My research focuses on how phosphorylation regulates protein-protein interactions critical for planar cell polarity (PCP) and mechanotransduction in the inner ear. Central to my work is Protocadherin 15-CD2 (PCDH15-CD2), a protein essential for the structural integrity and function of hair bundles, primarily through its roles in forming kinociliary and tip links. Despite its importance, the regulatory mechanisms and binding partners of the PCDH15-CD2 cytoplasmic domain remain poorly understood. To address this, I conduct in vitro experiments to evaluate how phosphorylation affects CD2's interactions with known and potential binding partners important for hearing. Complementing these studies, I utilize CRISPR-engineered knock-in mouse models to explore how phosphorylation regulates PCDH15-CD2's roles in planar cell polarity (PCP) and mechanotransduction in vivo. I hope that my research will contribute to a deeper understanding of how post-translational modifications shape protein functions in hair cells.

ARO 2025 TRAVEL AWARDEES



Swapna Agarwalla

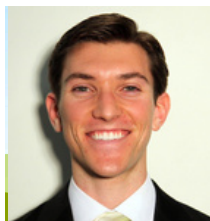
I am a postdoctoral fellow in Dr. Laurel H. Carney's lab at the University of Rochester, studying neural mechanisms that enable the auditory system to perceive sounds in diverse, complex environments. Using a multidisciplinary approach that combines physiological recordings with computational analysis, I investigate how the Inferior Colliculus—a key auditory processing center—responds to complex auditory stimuli. Our computational models, grounded in neural data, allow us to predict and compare behavioral outcomes, shedding light on auditory processing under noisy or impaired hearing conditions. I completed my Ph.D. at the Indian Institute of Technology, Kharagpur, India, under Dr. Sharba Bandyopadhyay. My doctoral work explored how social experience shapes the encoding of ultrasonic mouse vocalizations (USV) in the primary auditory cortex (A1), revealing that social exposure enhances cortical neurons' ability to distinguish predictable from random USV sequences. This plasticity is largely driven by changes in excitatory neurons and somatostatin-positive inhibitory neurons (SOM INNs), highlighting their importance in processing communication sounds. Currently, my research focuses on the role of cochlear efferent pathway and testing the neural fluctuation contrast (NFC) encoding mechanism, which measures changes along the tonotopic axis in the depth of slow fluctuations in auditory-nerve fiber rates (Carney, 2018, 2024), in contrast to the classical theories from average firing rates or temporal fine structure phase-locking (Sachs et al., 1988). My skills include in vivo extracellular recording, tetrode fabrication, two-photon imaging, surgical techniques, optogenetics, and computational modeling in MATLAB.



Syed Ahmad

My name is Syed (Ameen) Ahmad. I received my undergraduate degree from Duke University in Neuroscience, and I am a current MD candidate at the Johns Hopkins University School of Medicine. I am an incoming fourth-year medical student and am taking a dedicated research year with Dr. Bryan Ward in the Johns Hopkins Department of Otolaryngology-Head and Neck Surgery. Our primary research focus is using in-vivo 7T MRI and advanced post-processing techniques to evaluate for endolymphatic hydrops in patients with Meniere's Disease. We hope that our findings will serve as a potential bridge for diagnosing, managing, and treating Meniere's Disease. Additionally, I am excited to attend ARO and connect with hearing and balance research experts.

ARO 2025 TRAVEL AWARDEES



Gabriel Alberts

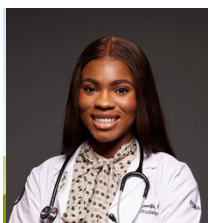
Gabriel Alberts is a sixth-year Ph.D. candidate in the Harvard University Program in Speech and Hearing Bioscience and Technology (SHBT). He earned his B.Mus. for violin performance and B.S. in physics in 2018 from the University of Florida while researching laser optics for axion-like particle detection. He followed his musical and scientific interests to pursue research on aeroacoustics also at the University of Florida before joining SHBT. Gabriel now conducts his research in cochlear mechanics at Massachusetts Eye and Ear under the mentorship of Sunil Puria. His research straddles both the computational and experimental sides of cochlear mechanics using finite-element models and optical coherence tomography to understand organ of Corti vibrations in the mouse apex. His goal in uncovering the details of these motions is to reveal fundamental knowledge about the nature of hearing and contribute to improved understanding, diagnoses, and treatment of human cochlear pathologies. Following his PhD, Gabriel hopes to develop expertise in other areas of the auditory system through postdoctoral research.



Shruthi Ananth

Shruthi Ananth is a senior Kinesiology and Computational Sciences student at The University of Texas at Austin. She conducts research in the Children's Auditory Research and Education Lab under the mentorship of Dr. Srikanta Mishra. Her work focuses on intersecting auditory sciences and computational methods, specifically studying the effects of extended high-frequency hearing loss across diverse demographics. During her undergraduate years, Shruthi has also contributed to research on the neurotoxicity impacts of alcohol on cortical balance and neural circuits. A recognized World Science Scholar by the World Science Festival, she is passionate about integrating computational approaches with biomedical applications. Shruthi plans to pursue graduate studies in Biotechnology in the fall, aiming to develop innovative diagnostic tools to enhance the precision and accessibility of audiology and physiological condition assessments.

ARO 2025 TRAVEL AWARDEES



Jennifer Anyanwu

Jennifer Anyanwu is a second-year medical student at The Philadelphia College of Osteopathic Medicine and serves as President of her institution's Student National Medical Association (SNMA) chapter. She also holds the position of Osteopathic Liaison for SNMA Region 8, amplifying the voices of underrepresented students in medicine. Jennifer is dedicated to advancing health equity, promoting cultural competence, and creating opportunities for URiM students. She has successfully advocated for Black maternal health legislation, led mentorship initiatives with local high school students, and organized programs to empower future healthcare leaders. Her commitment to underserved communities extends beyond her leadership roles. Jennifer volunteers at local health education fairs, highlighting common health disparities affecting the Black community, with a focus on hearing loss. She also provides free blood pressure screenings for individuals without primary care, helping to foster awareness and improve access to vital health information.



Sajana Aryal

Sajana Aryal is a doctoral student at the University of Texas at Austin. She holds an undergraduate degree in Audiology and Speech-Language Pathology from Nepal and a master's degree in Audiology from the All India Institute of Speech and Hearing, India. With three years of clinical experience as an audiologist in Nepal, she has also published multiple scientific papers in national and international journals. Her research focuses on extended high-frequency hearing, early identification of hearing loss, and the effect of peripheral auditory damage in speech perception.

ARO 2025 TRAVEL AWARDEES



Susan Arzac

My name is Susan Arzac, and I am a current third year Doctor of Audiology student at Montclair State University. In addition, I have two B.S.'s, one in Zoology from the University of Wisconsin – Madison and one in Speech and Hearing Sciences from Arizona State University. I grew up in Mexico City where I was exposed to many different languages and cultures. Understanding how people perceive and understand speech has been a fascination: how does the brain learn native speech sounds? How does it switch from one language to another when knowing more than one language? What is going on when we are trying to understand speech at various levels of noise? Why is it more difficult to understand speech-in-noise when we are multilingual? I am currently working in Dr. Subong Kim's Hearing Outcome and Neuroscience Lab, where we are trying to determine several aspects of speech perception including how bilinguals process speech differently than monolinguals. Last year, at ARO's 2024 Midwinter Meeting, I presented the results from a study about predicting noise tolerance using speech-in-noise testing combined with noise reduction algorithms. We expanded on the concept of individuals having an internal speech to noise ratio (SNR) that can predict that individual's tolerance to noise. Now my focus is on the neural mechanisms underlying auditory processing in bilinguals and monolinguals. This work is crucial for understanding how different linguistic backgrounds influence auditory perception and has significant implications for improving communication strategies and the technologies of hearing aids and cochlear implants.

ARO 2025 TRAVEL AWARDEES



Daniel Ballinas

My interest in neuroscience erupted in middle school when my grandfather with Alzheimer's moved in with my family. Seeing him struggle with this brain disease was the catalyst to my interest and engagement with neuroscience and medicine. At Johns Hopkins, I've been able to expand my interest in these fields thanks to the opportunities this university has to offer. This includes becoming involved in neuroscience and the medical field in various ways through volunteering, school clubs, and classes. In my freshman year, I joined Dr. Sadeghi and Dr. Deemyad's research lab, and have been involved in research since then. My work involves studying the sensory peripheral vestibular pathway in mouse models of autism. I will be presenting the vestibular data I have collected at ARO. I look forward to presenting as well as listening and learning from the experienced researchers attending this conference who do work related to the research I conduct. I hope this experience will help me in my future endeavors as a physician.



Vivien Barchet

Vivien Barchet is a second year PhD student at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, Germany, and Leipzig University, where she works with Prof. Gesa Hartwigsen. She holds a prestigious PhD fellowship awarded by the International Max Planck Research School on Cognitive Neuroimaging. With a background in psychology and professional training as a classical singer, Vivien has developed a deep interest in the human auditory system, leading her to conduct research at the Max Planck Institute for Empirical Aesthetics in Frankfurt, and at New York University. Her current research combines basic auditory neuroscience with applied investigations in human speech comprehension. In particular, she focuses on the challenges older adults face in everyday listening situations due to age-related changes in auditory processing and potential compensatory strategies. She is interested in the interplay between sensory and cognitive processes in human speech comprehension, which she investigates using EEG, behavioral methods, and machine learning.

ARO 2025 TRAVEL AWARDEES



Natalia Boaretto

Natalia Boaretto is a third-year Ph.D student in the Department of Physiology of the Faculty of Medicine of Ribeirão Preto, at the University of São Paulo (Brazil). Previously, Natalia obtained her bachelor's degree in Biological Sciences from the State University of Londrina. Under the supervision of Prof Dr. Ricardo M. Leão, she is interested in the development of the auditory system. Using electrophysiology techniques, her current research focuses on the development of glutamatergic synapses in the Dorsal Cochlear Nucleus. In ARO 2025 Midwinter Meeting, she is presenting an update on her research in a poster presentation.



Amanda Bonczkowski

Amanda Bonczkowski is a Biomedical Data Science Fellow at the National Institutes of Health (NIH). She works in the Section on Sensory Cell Biology at the National Institute on Deafness and Communication Disorders (NIDCD) while pursuing her graduate studies in data science at the University of Maryland, Baltimore County. Miss Bonczkowski was accepted into the second cohort of the Center for Alzheimer's and Related Dementias (CARD) Master of Professional Studies (MPS) in Data Science Fellowship in 2023. Prior to her graduate studies, she completed a Bachelor of Science in Bioinformatics and Computational Biology at Iowa State University of Science and Technology; utilizing computer science, statistics, and biology to formulate data-driven insights on large-scale biological data. Her current research involves exploration of the transcriptional landscape of cisplatin-ototoxicity in a clinically relevant mouse model through single-nucleus RNA sequencing and related computational tools. Through comparison of gene expression changes across timepoints she correlates differences in biological processes with cisplatin treatment; generating guiding hypothesis for the underlying molecular functions that pre-date cisplatin-induced hearing loss. Miss Bonczkowski will complete her MPS in Data Science in May of 2025. Upon graduation, Amanda plans to continue her research in an academic, government, or industry position. She is passionate about contributing her skillset to basic or translational science to expand treatment options, improve patient outcomes, and uncover preventative methods or medications for a variety of diseases.

ARO 2025 TRAVEL AWARDEES



Elin Bonyadi

Elin is a second-year PhD student in the Department of Speech, Hearing and Phonetic Sciences at University College London, and is completing her PhD in the Cognitive Hearing Lab, supervised by Dr Emma Holmes. She is interested in how central auditory cognition is affected by peripheral hearing loss. In particular, her PhD project aims to understand how people with and without hearing loss use information about semantic context ('what'), spatial location ('where'), and talker identity ('who') to understand speech in noisy environments, such as among competing speech. In her research, she is using behavioural and pupillometry methods. Elin previously completed her MSc in Cognitive Neuroscience and BSc in Psychology at University College London.



Agudemu Borjigin

I am a third-year postdoc, working with Dr. Ruth Litovsky at the University of Wisconsin-Madison. Prior to my postdoc, I obtained my PhD from Purdue University, where I worked with Dr. Hari Bharadwaj. I am an auditory neuroscientist as well as an Electrical and Biomedical Engineer. Throughout my research career, I have been investigating ways to improve speech-in-noise hearing for cochlear implant listeners, by both optimizing the sound coding strategy and developing front-end noise reduction solutions using state-of-the-art deep learning models. I am currently in the phase of looking for an assistant professor position and establishing my research lab in the near future.



Shrivaishnavi Chandrasekar

Shrivaishnavi Chandrasekar is a research assistant in the laboratory of Dr. Todd Mowery in the Department of Otolaryngology at Rutgers University in New Jersey. Her early research experience has focused on the use of adeno-associated viruses to develop an inner ear gene therapy to protect against noise induced hearing loss and to map out the neuroanatomical connectivity between the vestibular and auditory systems. These projects have also involved physiological assessment of auditory and vestibular function/dysfunction (ABR, DPOAE, c+VEMPs) and behavioral paradigms that reveal impairments in auditory and vestibular processing. As a future Ph.D. student, she hopes to utilize these skill sets to study developmental hearing loss, adult hearing loss, or vestibular disorders in the peripheral and central nervous system.

ARO 2025 TRAVEL AWARDEES



Kenechukwu Charles-Obi

Kenechukwu Charles-Obi is a rising fourth-year medical student at Drexel University College of Medicine who is currently partaking in a research year at the National Institute on Deafness and Other Communication Disorders (NIDCD) in the Auditory Development and Restoration Program under the mentorship of Michael Hoa, MD. He completed his undergraduate studies at University of Pittsburgh, earning a degree in Neuroscience and Chemistry. Following this, he pursued a graduate degree in Biomedical Sciences at Drexel University College of Medicine. Currently, he is involved in several key research projects, including studies on proteomics of human and mice cochlea. He aims to further impact the field of otolaryngology by continuing to involve in basic science research throughout his career.



Yao Chen

Yao Chen (M.S., CCC-SLP) is a doctoral student under the mentorship of Dr. Chang Liu in Speech Psychophysics Lab from Speech, Language, and Hearing Sciences Department, the University of Texas at Austin. She earned her bachelor's degree in English Language and Literature from Tsinghua University, China and her master's degree in Speech, Language, and Hearing Sciences from UT Austin. Her research interests include speech perception, and development of language and speech perception of special populations. She is from China.

ARO 2025 TRAVEL AWARDEES



Vishal Choudhari

I'm Vishal, a Ph.D. candidate in Electrical Engineering at Columbia University. My research combines neuroscience, engineering, and audiology to develop brain-controlled hearing devices. These devices interpret brain signals to identify the focus of auditory attention, selectively amplifying the target speaker while reducing background noise. In collaboration with neurosurgeons, I use data from epilepsy patients with implanted electrodes for testing. I've developed a framework for a binaural brain-controlled hearing device that performs well in real-world settings with dynamic soundscapes. My work also includes psychophysics studies with both normal-hearing and hearing-impaired participants, showing that these devices can reduce listening effort in challenging environments for both groups. Previously, I interned at Bose, where I worked on active noise cancellation. Outside of work, I enjoy experimenting with new smoothie recipes and learning best practices in various aspects of life.



Diana Correa

My name is Diana Correa, and I am a Colombian physician. I graduated from medical school at Universidad de Los Andes in 2023 and am currently a postdoctoral research fellow at the Otopathology Laboratory at Mass Eye and Ear. My research focuses on the complex challenges posed by otological diseases, particularly vestibular and hearing disorders such as Meniere's disease, genetic hearing loss, and the development and life cycle of human otoconia. I am passionate about bridging clinical practice and research because I believe meaningful progress in medicine comes from integrating these two fields. Growing up in Colombia, I experienced firsthand the challenges faced by researchers in low- and middle-income countries, where limited resources and support often restrict opportunities to contribute to global medical advancements. These experiences have fueled my determination to pursue a career as a clinician-scientist. My goal is to reduce healthcare disparities by developing innovative approaches that improve patient outcomes both in Colombia and around the world. Receiving the ARO Travel Award is an incredible honor and an important step in my career. I look forward to presenting my research, connecting with leaders in the field, and gaining insights that will help me address gaps in clinical and research practices in my home country.

ARO 2025 TRAVEL AWARDEES



Henry “Hank” De Hoyos

I was born and raised in San Antonio, TX. I completed my undergraduate studies at the University of Virginia, where I earned a degree in Biology with a minor in Art History in 2021. As an undergraduate researcher, I had the privilege of working in the labs of Dr. Todd Stukenberg at UVa and Dr. Kenneth Hargreaves at the University of Texas Health Science Center at San Antonio. My experience in undergraduate research sparked my deep fascination with microscopy, shaping my future research path. In 2021, I joined the University of Virginia's Medical Scientist Training Program (MSTP) as a first-generation physician in training. I discovered hearing research through Dr. Jung-Bum Shin, whose teaching on the science of hearing inspired me to join his lab in February 2023. This opportunity allowed me to combine my passion for microscopy with my lifelong love of music—particularly playing guitar—in pursuit of a deeper understanding of the auditory system and potential therapies for hearing loss. Ultimately, my career goal is to lead a hearing research lab and practice neuropathology, developing a unique interdisciplinary niche that bridges otolaryngology, pathology, and foundational science to advance the understanding and treatment of hearing loss.



Lauren Dillard

Lauren K. Dillard received her AuD, MS (Population Health) and PhD (Communication Sciences and Disorders) at the University of Wisconsin-Madison. She is currently a postdoctoral fellow at the Medical University of South Carolina. Her research is focused on topics related to the epidemiology of hearing loss, including hearing loss prevention and its treatment with hearing aids. Most of her research has been conducted in population-based cohort studies and also from electronic health records from the Department of Veterans Affairs.

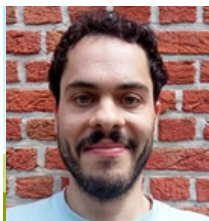
ARO 2025 TRAVEL AWARDEES



Hanna Dolhopiatenko

I am a PhD researcher specializing in auditory sciences, currently in my third year at the Medical School Hannover, Germany. With a strong foundation in biomedical engineering, my research focuses on the behavioral and electrophysiological (EEG) measurements in cochlear implant users. My recent work delves into the unique challenges faced by bimodal cochlear implant users—individuals who have a cochlear implant on one side and preserved natural acoustic hearing on the other. My primary research aims to elucidate how, and to what extent, these users integrate auditory information from two different listening modalities. By conducting behavioral assessments, such as speech understanding tests, alongside EEG measurements including cortical evoked potentials and selective attention decoding, my goal is to understand the mechanisms of electric-acoustic integration. Findings of my research hold a potential for improving speech perception and overall auditory outcomes for cochlear implant users with contralateral acoustic hearing.

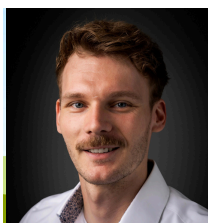
ARO 2025 TRAVEL AWARDEES



Fotios Drakopoulos

I am a passionate engineer interested in hearing and auditory perception. My research has been focussed on the application of advanced computational techniques to improve real-world applications such as hearing aids. My research interests include diverse audio-related topics such as audio signal processing, machine hearing, hearing loss, computational auditory modelling and psychoacoustics. In 2022, I received my PhD in Electrical Engineering from Ghent University. My PhD research focussed on the development of novel hearing-restoration algorithms for the compensation of hearing impairment, under the supervision of Prof. Sarah Verhulst. As part of my PhD project, I developed biophysically inspired and machine-learning based hearing-aid algorithms which can tackle various combinations of hearing deficits, including outer-hair-cell loss and cochlear synaptopathy. The design of these algorithms was based on computational models of the auditory system and on state-of-the-art deep neural networks, and the evaluation was performed on an individual basis using customised EEG and psychoacoustic experiments. Since 2023, I have been working as a Postdoctoral Research Fellow at the UCL Ear Institute under the supervision of Prof. Nicholas Lesica. My current work focusses on combining large-scale neural recordings and deep learning to model neural coding in the auditory brain with high resolution and accuracy. We are using the developed auditory models to design optimal hearing-aid algorithms that restore hearing-impaired neural activity back to normal.

ARO 2025 TRAVEL AWARDEES



Lukas Driendl

Lukas is a doctoral student and research assistant at the Technical University of Munich, working in Professor Werner Hemmert's Bio-Inspired Information Processing group since autumn 2021. After graduating from the German School Tokyo Yokohama (Japan) in 2014, he received his B.Eng. in Electrical Engineering from the Munich University of Applied Sciences (Germany) in 2019 and his M.Sc. in Electrical Engineering from the Technical University of Munich (Germany) in 2021. Lukas's research focuses on computational neuroscience, particularly on biophysical modeling of the human auditory nerve. By developing detailed models embedded in finite element reconstructions of the inner ear, he aims to advance the understanding of neural response dynamics in cochlear implant (CI) users. His work investigates how specific ion channels within the auditory nerve, which play key roles in adaptation and facilitation, affect the temporal response patterns under electrical stimulation. Additionally, he fits these models to human data through simulated and recorded electrically evoked compound action potentials (eCAPs) from CI users to further explore speech perception variability.



Tuba Ege

Tuba Ege is a postdoctoral fellow in Dr. Litao Tao's laboratory in the Department of Biomedical Sciences at Creighton University. She completed her Ph.D. in Biochemistry at Middle East Technical University in Turkey, where she investigated enzyme regulation and cellular pathways. Following this, she decided to apply her molecular biology expertise to the field of hearing research. Her current work focuses on understanding how genes are regulated at the transcriptional level through distal regulatory elements in the cochlea. This research is essential for advancing our understanding of gene regulatory networks in the cochlea, with the aim of identifying new targets for manipulating gene expression to treat deafness or regenerate sensory hair cells. Under Dr. Tao's mentorship, she is developing novel methods to address the challenges of identifying and manipulating regulatory elements in small cell populations, particularly in sensory hair cells.

ARO 2025 TRAVEL AWARDEES



Boaz Ehioqu

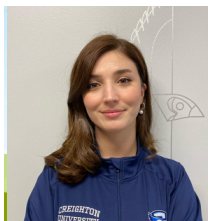
I am a PhD candidate in the Department of Laboratory Medicine and Pathobiology at the University of Toronto, where I conduct research under the supervision of Dr. Alain Dabdoub. My doctoral work focuses on investigating the transcriptomic and epigenomic signatures of auditory neurons and glial cells in the human inner ear. I aim to uncover the molecular underpinnings of these cell types to advance strategies for glia-to-neuron reprogramming, with the potential to enhance therapeutic approaches for hearing restoration. My research has been recognized by several prestigious funding agencies, including the Canada Graduate Scholarship for doctoral students and the Ontario Graduate Scholarship. In addition to my research, I am actively involved in my academic community. I serve as a research mentor for underrepresented students in Canada and have previously held the position of Vice President on my department's student council. Currently, I am co-chairing the 2026 Gordon Research Seminar, where I am working to foster engagement between trainees and leading scholars in the otolaryngology field. With a strong commitment to advancing scientific knowledge and promoting diversity in research, I aim to lead initiatives that push the boundaries of discovery and support the growth of the next generation of scientists.



David Elisha

David Elisha, B.S., is a medical student at the American Program of Tel Aviv University (New York State) and a Research Fellow at the Hearing, Cochlear Implantation, and Communication Disorders Laboratory in the Department of Otolaryngology at the University of Miami Miller School of Medicine. He earned his Bachelor of Science in Biology from Brandeis University and previously worked as a healthcare consultant, contributing to the launch of innovative drugs and medical devices. During his research fellowship, David has been actively involved in studying hearing loss and cochlear implants, with a focus on improving surgical outcomes and preserving residual hearing, particularly in rare genetic diseases such as Usher syndrome. Under the mentorship of Dr. Adrien A. Eshraghi, he has gained hands-on experience in microsurgical techniques and explored the application of drug therapies for otoprotection. His research aligns with his broader interests in advancing cochlear implant technology and investigating outcomes for rare disease subgroups within the field of hearing loss.

ARO 2025 TRAVEL AWARDEES



Iman Ezzat

Iman Ezzat is a second-year Ph.D. student from Kurdistan, Iraq, in the Biomedical Sciences Department at Creighton University, working under Dr. Marisa Zalocchi. Her research investigates the role of the integrin alpha 8 (Itga8) receptor in maintaining synaptic integrity within spiral ganglion neurons (SGNs) during cochlear development.



Emily Fabrizio-Stover

Emily Fabrizio-Stover is a second year post-doctoral fellow in the departments of Otolaryngology and Pathology at the Medical School of South Carolina in Charleston, South Carolina. Dr. Fabrizio-Stover graduated with a B.A. in biology from Wesleyan University in 2018. She completed her PhD in Neuroscience in the laboratory of Dr. Doug Oliver at the University of Connecticut in 2023, on the topic of developing electrophysiological tests for tinnitus in animal models and human patients. Her overarching research agenda focuses on neural plasticity, the origin and characterization of excitatory/inhibitor imbalance, how these imbalances can contribute to auditory dysfunction in human patients and animal models. Fabrizio-Stover's currently work with Dr. Kelly Harris and Dr. Hainan Lang focuses on spatial and temporal progression of age-related auditory central gain throughout the auditory system in both human patients and animal models.



Keelin Fallon

Keelin Fallon is a third year medical student attending UMass Chan Medical School, who intends to apply into Otolaryngology. Through her time in medical school, she has pursued research opportunities and clinical experiences that have fueled her interest in Otolaryngology. She is currently on a research year managing multiple projects at Boston Children's Hospital focused on middle ear mechanics, and middle ear pathology. Keelin grew up in the suburbs of Boston and graduated cum laude from Columbia University with a bachelor's degree in biology. Prior to starting medical school she worked as a life science management consultant in NYC. In her free time she enjoys playing with her dog, and trying new restaurants around the city.

ARO 2025 TRAVEL AWARDEES



Afagh Farhadi

Afagh Farhadi received her Bachelor degree in Electrical Engineering from Iran University of Science and Technology in 2015. She then continue her studies in Electrical Engineering moving to United States and earned her MSc and PhD from the University of Rochester. Under the supervision of Dr. Laurel Carney, she completed her PhD in 2023, focusing on computational modeling of the medial olivocochlear (MOC) efferent system. Her work included developing and validating the MOC efferent model, predicting human behavior thresholds, and studying the effect of MOC on vowel neural coding. Her current research investigates the impact of sensorineural hearing loss on neural coding, using neurophysiological responses from single unit auditory-nerve fibers and also noninvasive assays. Afagh also work on designing experiments to understand the MOC efferent system, trying to answer the questions she faced when modeling this system, using physiological methods. She is also involved with developing computational models for different types of sensorineural hearing loss. Afagh is passionate about advancing our understanding about hearing science, applying our knowledge for improving quality of life and also is dedicated to contributing to women's education and empowerment.



Wanying Feng

Wanying is a fifth-year Ph.D. student supervised by Professor Pingbo Huang in the Bioscience and Biomedical Engineering at the Hong Kong University of Science and Technology. Her researches mainly focus on functional studies of FLRT3 in the auditory hair cells, and variants and interactions of mechano-transduction complex components in mammalian cochlea hair cells in the inner ear.

ARO 2025 TRAVEL AWARDEES



Manda Fischer

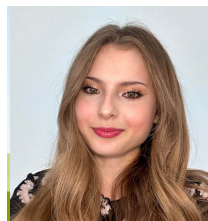
I am a cognitive neuroscientist and musician fascinated by how memory dynamically interacts with auditory perception. As a BrainsCAN Postdoctoral Fellow at Western University working with Dr. Ingrid Johnsrude, my research focuses on understanding how long-term memory for voices enhances speech perception in challenging listening conditions. This work is a component of my broader research program, which integrates key insights from memory research, hearing sciences, and music perception, and employs converging behavioural, neural (EEG), and statistical modeling techniques to characterize the relationship between memory and auditory perception. Specifically, I study memory-guided auditory perception through three main approaches: 1. Investigating how familiar voices enhance speech perception in noisy environments. 2. Using EEG to characterize the cognitive and neural processes that support auditory memory formation and retrieval. 3. Examining music as a structured and naturalistic setting to understand how acoustic factors and musical expertise contribute to real-world auditory perception. My research journey began with two honours theses exploring how acoustic factors influence sound segregation in orchestral music, working with Dr. Stephen McAdams (BSc, McGill University). After having been “bitten” by the research bug, I extended my research to study how cognitive factors like memory and attention shape auditory perception in real-world soundscapes, working with Drs. Claude Alain and Morris Moscovitch (PhD, The University of Toronto). This interdisciplinary background provides a solid foundation for my postdoctoral work, in which I am investigating the cognitive and neurophysiological mechanisms underlying the “familiar-voice benefit” that enhances speech intelligibility in noisy environments.

ARO 2025 TRAVEL AWARDEES



Jonathan Fleege

Jonathan Fleege is an MD/PhD candidate at Creighton University, where he is completing a PhD in Biomedical Sciences with a specialization in auditory and vestibular neuroscience. His research explores the impact of JAK inhibitors on hearing and vestibular sensitivity to ototoxic stressors, as well as their role in auditory and vestibular development. This work aims to advance understanding of how targeted therapies can mitigate sensory deficits. Jonathan is passionate about bridging clinical practice and basic science, with plans to pursue postgraduate residency training in otolaryngology. He aspires to establish a translational research lab focused on hearing and vestibular disorders, aiming to develop innovative interventions for patients affected by these conditions. Outside of academics, Jonathan enjoys outdoor activities such as skiing, hiking, and has recently embraced the pickleball craze.



Karen Galindo

Karen Galindo is a senior undergraduate researcher at the University of Texas at San Antonio (UTSA), pursuing a Bachelor of Science in Biology with a concentration in neuroscience. She works in Dr. Marina Silveira's lab, investigating how serotonin modulates the activity of neuropeptide Y (NPY) neurons in the auditory midbrain, specifically the inferior colliculus (IC). Her research aims to understand the role of serotonin in auditory processing and its impact on the balance of excitatory and inhibitory signaling within neural circuits. Karen has developed expertise in a variety of molecular biology and imaging techniques, including in situ hybridization, immunohistochemistry, confocal imaging, and stereotaxic surgery. She presented her research at the UTSA Research Symposium, as well as at national conferences like ABRCMS. In addition to her research, she mentors underrepresented students in STEM through the RISE program and served as a mentor for the NDRB pre-freshman experience program. A passionate advocate for diversity in science, Karen is committed to creating inclusive environments for students from underserved backgrounds, especially Hispanic women, in the field of neuroscience. She hopes to continue her studies in auditory neuroscience during her PhD and inspire the next generation of scientists to pursue careers in research.

ARO 2025 TRAVEL AWARDEES



Madan Ghimire

Madan Ghimire is a postdoctoral researcher in the Williamson Lab at the University of Pittsburgh. After earning his M.S. in Pharmacology, he joined the Pharmacology and Neuroscience graduate program at SIU Medicine. Under the mentorship of Prof. Donald Caspary, Ph.D., he investigated potential cortical mechanisms underlying tinnitus pathology in rodents, aiming to develop pharmacological interventions. Following the completion of his Ph.D., he joined the Williamson Lab, where he studies auditory processing by projection neurons of the auditory cortex during active and passive listening conditions.



Chetan Giduturi

Chetan Giduturi is a rising 4th year medical student attending the University of Colorado, School of Medicine. He received his B.S. in Biochemistry from the University of California, Berkeley. An avid musician, he worked closely with the Sound and Music Perception Lab at the University of California, San Francisco, where he studied the neural correlates of musical creativity and cognition. He also utilized his musical skills outside of the realm of science by creating a concert program that provided musical engagement and activities for individuals with Alzheimer's disease. Even when he moved to Colorado for medical school, he continued to pursue the intersection of the arts with science and medicine by working on arts programs for medical students with the goal of preventing burnout and improving observation skills. Chetan is an aspiring OB/GYN with a goal of specializing in gynecologic oncology. His research interests include prevention and screening of ovarian cancers as well as the use of art as a therapeutic intervention within healthcare. He hopes to continue integrating his love of music and the arts into his future career as a physician both for supplementing medical treatment through research and for enriching the lives of patients and fellow healthcare workers.

ARO 2025 TRAVEL AWARDEES



Megan Guidry

Megan Guidry is a senior undergraduate student pursuing a B.S. in Neuroscience and a B.S. in Speech, Language, and Hearing Sciences at The University of Texas at Austin. Over the summer, she worked as a research intern in Dr. Lisa Cunningham's lab at the National Institute on Deafness and Other Communication Disorders (NIDCD) under the mentorship of Dr. John Lee. During her internship, she worked on a translational project exploring the mechanisms by which statins confer protection against cisplatin-induced hearing loss. She continues to work on clinical audiology research at The University of Texas in Dr. Julia Campbell's lab, where she investigates cortical plasticity as it relates to hearing loss and tinnitus. Currently, she is completing an honors thesis on the characterization of sensory inhibition in central auditory processing disorder. She plans on attending Au.D. and Ph.D. programs following the completion of her undergraduate studies, with hopes to integrate her clinical audiology training with sensory neuroscience research.

ARO 2025 TRAVEL AWARDEES



Satoshi Hara

Satoshi Hara M.D., Ph.D. is a Postdoctoral fellow in Dr. Kathleen Gabrielson's lab within the Department of Molecular and Comparative Pathobiology at Johns Hopkins School of Medicine, and Board-Certified Assistant Professor in the Department of Otorhinolaryngology, Juntendo University Faculty of Medicine in Tokyo, Japan. Dr. Hara completed medical education, residency, fellowship, and Ph.D. all at Juntendo University. He is an expert in the treatment of ear conditions including idiopathic sudden sensorineural hearing loss, chronic otitis media, and cholesteatomas. He is trained in microscopic and endoscopic surgical approaches to treating the ear conditions and performs surgeries including myringoplasty, tympanoplasty, and facial nerve decompression. His current research interests are prevention and treatment of hearing loss. He is focusing on prenatal stress, which is caused by a psychiatric stress or poor nutrition of pregnant female during pandemics (such as COVID-19), genocide, famines and natural disasters. In the future, understanding mechanisms and prevention of prenatal stress will become more important in preventive medicine. In the ARO 2025 Midwinter Meeting, he is presenting his research about an audiological impact of prenatal stress on age-related hearing loss in a mouse model during a podium session. His other research topics are a treatment method of idiopathic sudden sensorineural hearing loss and the association between earwax genotypes and cholesteatoma. As an otology surgeon, he aims to combine clinical practice with biomedical research. Outside of the lab, he enjoys his family, 3 rumbustious sons, camping, snowboarding, and running marathons.

ARO 2025 TRAVEL AWARDEES



Yoani Herrera

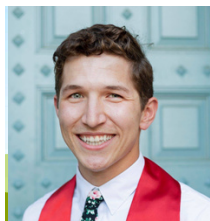
Yoani Herrera holds a bachelor's degree in biomedical engineering from the University of Michigan and is currently pursuing a doctorate in Neuroscience at the University of Michigan Medical School. For her graduate studies, she is working in the lab of Dr. Michael Roberts, investigating the synaptic and network mechanisms used by neural circuits in the auditory brainstem and midbrain to encode sound information. Utilizing whole-cell patch clamp electrophysiology and channelrhodopsin-assisted circuit mapping, her thesis examines the prevalence, strength, and short-term plasticity of T-stellate neuron input to specific classes of neurons within the central nucleus of the inferior colliculus (IC). She is also examining how T-stellate input shapes the ways that IC neurons encode features of sound. While in graduate school, Yoani has participated heavily in science education and outreach. In particular, she has spent several years participating in and leading Science Education and Enrichment for Kids, a student organization that creates and teaches science curriculum to underserved and underrepresented students in the greater Ann Arbor area.



Laura Jaxsens

Laura Jaxsens is an Otorhinolaryngology resident and PhD researcher at the University of Antwerp and Antwerp University Hospital. Her research focuses on auditory processing in individuals with sensorineural hearing loss, utilizing techniques like the Frequency Following Response (FFR), auditory brainstem responses, and cortical auditory evoked potentials to study sound processing from the brainstem to the cortex. Her passion for auditory neuroscience led her to collaborate with Professor Carles Escera at the University of Barcelona, where she developed skills in FFR acquisition and analysis. This collaboration has enriched her research, enabling the optimization of stimuli for FFR measurements and refining the understanding of auditory processing in patients with sensorineural hearing loss and vestibular schwannomas. In addition to her research, Laura is committed to her clinical practice as an ENT resident. She is honored to receive this travel award and looks forward to presenting her work at the ARO MidWinter Meeting, where she will connect with fellow researchers, exchange insights, and contribute further to the field of auditory neuroscience.

ARO 2025 TRAVEL AWARDEES



Conner Jansen

Dr. Conner Jansen is a PhD Candidate at The University of Texas at Dallas in the Speech, Language, and Hearing department. He joined the AuD program in 2019, was bitten by the research bug, and decided to join the PhD program in 2020. He received a Bachelor of Science at The University of Texas at Austin in Communication Sciences and Disorders with a specialization in audiology, and a minor in American Sign Language prior to joining The University of Texas at Dallas. Since beginning his graduate education, Conner has worked on several projects in the Never Overlook Intense Sound Exposure (NOISE) Lab under Dr. Colleen Le Prell. He completed his clinical externship at the Stanford Ear Institute as the Audiology Research Fellow. His research interests include hearing conservation, musician's hearing protection, and vestibular and balance function. He is currently completing his dissertation investigating the sound quality and music perception of custom passive and uniform fit electronic musician's hearing protection devices. He also loves running, playing board games, rock climbing, and playing with his dog, Lando.



Sohyang Jeong

Sohyang Jeong is a master's candidate in the Interdisciplinary Program in Neuroscience at Seoul National University. She is focusing on genetic hearing loss treatment using gene editing technology at the Department of Otolaryngology, Seoul National University Hospital (Professor: Sang-Yeon Lee). Her main research includes the establishment of a humanized MPZL2 c.220C>T knock-in (KI) mouse model and the successful correction of the MPZL2 founder mutation using a single PAM-flexible ABE, marking a significant step toward treating most cases of DFNB 111, a hereditary form of hearing loss. This treatment notably restored long-term hearing, improved histopathologic changes, and reversed gene expression profiles. In future research, she plans to enhance the safety and efficiency of gene therapy delivery using CRISPR-based technologies, with the goal of expanding the potential for treating hereditary hearing loss.

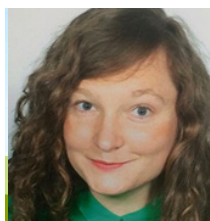
ARO 2025 TRAVEL AWARDEES



Gisselle Jimenez

Gisselle Jimenez is a third-year PhD candidate at Oregon Health and Science University (OHSU) in Bahareh Ajami's lab. Originally from Southern California, she earned her Bachelor of Science in Neurobiology from the University of California, Irvine, where she conducted research on the developmental role of microglia in the auditory brainstem. Now, her graduate work explores tissue-resident macrophages in the inner ear and their role in pathologies such as noise-induced and cytomegalovirus-induced hearing loss. As a first-generation Mexican American, Gisselle is deeply committed to advancing diversity and inclusion in science. She serves as Vice President of the OHSU chapter of SACNAS (Society for the Advancement of Hispanics/Latinos and Native Americans in STEM), working to make STEM careers more accessible to underrepresented students. Additionally, she holds a leadership position on the board of Women in Science-PDX, where she co-leads the DEI subcommittee, focusing on equity in scientific communities. Looking ahead, Gisselle is eager to continue her research in hearing loss while contributing to the ARO community and advocating for greater representation in STEM. She hopes to inspire the next generation of scientists, particularly those from historically underrepresented backgrounds, by fostering environments where diverse voices are celebrated.

ARO 2025 TRAVEL AWARDEES



Marlin Johansson

I am a postdoctoral researcher in medicine at the Department of Clinical Science, Intervention and Technology (CLINTEC) in Huddinge, Stockholm, Sweden. My work bridges pediatric medicine and neuroscience, with a focus on otolaryngology and audiology. Alongside my research, I hold a clinical role as a pediatric audiologist, dividing my time between patient care and scientific exploration. My research centers on understanding and improving hearing development, diagnostics, and intervention for newborns, infants, and toddlers. I have a particular interest in congenital unilateral sensorineural hearing loss, a condition that was the focus of my PhD thesis (2023). Currently, I am leading a longitudinal study evaluating the hearing, speech, and language development of children with this condition over their first 2.5 years of life. This project also investigates the impact of hearing aids during this critical developmental period. To date, I have published five peer-reviewed papers in Ear and Hearing, Hearing Research, Journal of Clinical Medicine and Journal of Pediatrics. I have published one paper of basic research. My other work is mainly focused on advancing evidence-based approaches to hearing care, with the goal of improving outcomes for children with hearing impairments. Through my combined clinical and research roles, I strive to make a meaningful difference in the lives of children and their families, addressing the challenges of early hearing loss with expertise and compassion.

ARO 2025 TRAVEL AWARDEES



Marina Kabirova

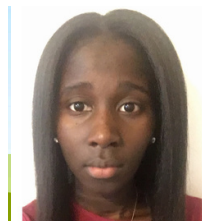
Marina Kabirova, originally from Ufa, Bashkortostan, Russia, holds a B.Sc. in Biotechnology, Master's in Neurobiological Engineering, and PhD in Molecular Neuroscience. Currently, Marina is a postdoctoral scholar in the Ruth Anne Eatock group at the University of Chicago. She uses calcium imaging in combination with whole-cell patch clamp to investigate the relationship between voltage changes and calcium responses in utricular hair cells and afferents. This research will compliment populational calcium recordings from the utricular epithelium in response to mechanical stimuli. The overall goal is to understand how the vestibular system represents motion on a moment-by-moment basis on the utricular epithelium. In the future, Marina hopes to open her own lab and to study aging of vestibular system.



Abby Kambhampaty

Abby Kambhampaty is a fourth-year undergraduate student at Dartmouth College, majoring in Human Biology and Anthropology. With a keen interest in the intersections of medical research and public health, Abby has been a dedicated member of the Dartmouth Space Medicine Innovations Lab for three years. Her previous work explored how second language learning has the potential to mitigate HIV's detrimental effects on central auditory processing in Tanzanian children, offering potential intervention insights. Her current research focuses on the effects of HIV on central auditory processing and cognitive function, particularly examining how factors like nutrition, tuberculosis infection, and HIV drug regimens impact this relationship. For her senior thesis, Abby is investigating the biological mechanisms through which HIV affects cognitive and auditory health, studying biomarkers such as BMI, galectin-9, and interleukin-6. This research has meaningful public health implications, as uncovering the links between HIV, co-infections, and nutrition could inform more targeted approaches to managing HIV's cognitive effects in resource-limited settings. By identifying biological markers associated with auditory and cognitive decline, this work also contributes to the development of preventive and supportive strategies that can enhance quality of life for individuals living with HIV. Abby's commitment to advancing knowledge in HIV epidemiology and audiology underscores her passion for addressing public health challenges through research.

ARO 2025 TRAVEL AWARDEES



Salimata Kane

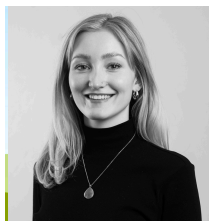
My name is Salimata Kane and I'm a second year PhD student in biomedical and pharmaceutical sciences at the GIGA Neurosciences Institute. I graduated in 2022 from Paris University with a master's degree in cellular and molecular biology and joined Maire-Sotiropoulos's team at the Cochin Institut where I completed my Master thesis internship. Under the leadership of Dr Pascal Maire and Dr Laura Ben Driss, I worked on determining LRRFIP2 deletion impact supposed to induces early embryonic lethality on cardiac developments as a cell autonomous process. This experience in developmental cardiology inspired me to join the GIGA developmental neuroscience unit where I'm currently working under the supervision of Pr. Brigitte Malgrange on screening protective molecules against cisplatin induced ototoxicity by in vitro cultivation of mice organ of corti explants and recording evoked potentials on a mice model. I believe my work will help re-adapt care protocols and limit the side effects of chemotherapeutic medicine on patients' hearing. Beside my academic interests, I enjoy playing volleyball and discovering new cultures and ways of thinking.



Mi-Jung Kim

Mi-Jung Kim completed her Ph.D. and first postdoctoral training in the laboratory of Dr. Shinichi Someya in the Department of Physiology and Aging at the University of Florida, where she investigated the roles of mitochondrial DNA mutations and oxidative stress in age-related hearing loss. She then joined Dr. Jing Zheng's laboratory in the Department of Otolaryngology – Head & Neck Surgery at Northwestern University to continue her postdoctoral training. Her current research focuses on exploring the role of calcium-binding protein in protecting cochlear outer hair cells from harmful substances with the aim of developing more effective approaches to prevent and treat hearing loss.

ARO 2025 TRAVEL AWARDEES



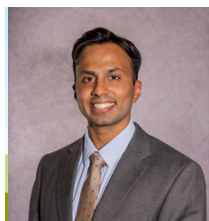
Darcey A. Kirwin

Darcey Kirwin completed her undergraduate degree at the University of Leeds before moving to UCL to complete her Neuroscience MSc where she developed an interest in auditory neuroscience. She is currently a second year PhD student working under the supervision of Professor Karen Steel at the Wolfson Sensory, Pain and Regeneration Centre at King's College London. Her PhD is focused on using molecular biology and in vivo physiology techniques to better understand what determines the limits for reversing genetic causes of hearing loss.



Meghna Kolluri

Meghna Kolluri is a second year PhD candidate at Karolinska Institute in Stockholm, Sweden, working under the mentorship of Dr. Francois Lallemend. By utilizing single-cell RNA sequencing in the vestibular system of mice, she identified novel cell types of vestibular primary afferent neurons and hair cells. Her work is focused on characterizing the morphological and electrophysiological properties of these cell types and providing a molecular census of cellular diversity in the primary vestibular pathways. Meghna grew up in Hyderabad, India and received a B.Sc. degree in Biotechnology, Zoology and Chemistry at St. Francis College for Women. She was then granted an M.Sc. degree at Ludwig-Maximilians-University in Munich, Germany and gained valuable research experience studying the plasticity of ocular circuits under the guidance of the late Prof. Dr. Hans Straka. In her free time, she enjoys knitting, cooking and hiking.



Pavan Krishnan

Dr. Pavan Krishnan is a second-year resident in the Department of Otolaryngology-Head & Neck Surgery at University of Miami/Jackson Health System, currently in his R25 research block. He studied Biochemistry at Case Western Reserve University before completing his medical degree at Virginia Commonwealth University School of Medicine. During a dedicated research year, he worked in Dr. John Carey's laboratory at Johns Hopkins Hospital investigating biomarkers for vestibular migraine. He currently works in Dr. Suhrud Rajguru's NeuroTherapeutics Laboratory, investigating the role of early mechanisms of cell death and the effects of therapeutic hypothermia on blast-induced vestibular dysfunction. His research interests include vestibular pathophysiology, cholesteatoma, history of surgery, and migraine.

ARO 2025 TRAVEL AWARDEES



Guanyu Li

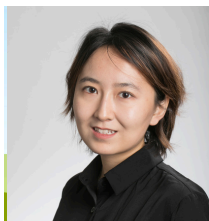
I am a postdoc scholar working at Dr. Ruili Xie's lab at Ohio State University. Before that, I acquired my Ph.D. in Physics from Oregon State University, where I studied how neurons communicate with each other from a biophysicist perspective. My Ph.D research triggered my interest in neuroscience research and thus after learning about the delicate signaling transduction mechanism in the auditory system, I decided to continue my research in the otolaryngology field. My current research focuses on understanding the impact on the endbulb of held synapses in the cochlear nucleus due to mitochondria dysfunction or aging. The long-term research goal would be to understand the role of endbulbs of held in age-related hearing loss and search for a medicine that can cure or alleviate the age-related hearing loss.



Joshua Lin

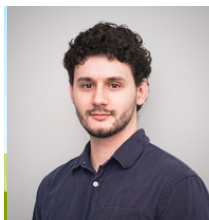
Joshua Lin is a first-year resident in the NIH/NIDCD (R25) Clinician Scientist Training Program (CSTP) at the Caruso Department of Otolaryngology – Head and Neck Surgery at the University of Southern California. His research career began with neuroimaging studies at Washington University in St. Louis, where he received a Bachelor of Arts in Biology (concentration in Neuroscience) and Economics in 2017. As a medical student at the Keck School of Medicine of USC, he joined Dr. Seiji Shibata's lab to optimize in vivo viral-mediated glia targeting in the inner ear. As a CSTP resident, he is currently co-mentored by Dr. Seiji Shibata and Dr. Ksenia Gnedeva, exploring the feasibility of in vivo direct cellular reprogramming of inner ear glia.

ARO 2025 TRAVEL AWARDEES



Yuesheng Ma

I am a second-year master's student at Columbia University, working under the mentorship of Dr. Nima Mesgarani. My research centers on auditory attention decoding (AAD) using electrocorticography (ECoG) data to investigate how the temporal lobe processes various frequency bands during auditory tasks. This work has unveiled significant patterns in auditory information processing, contributing to potential advancements in auditory prosthetics and bridging the fields of neuroscience and engineering. Receiving the ARO Travel Award is an honor and an important milestone in my journey as an emerging researcher. Attending the ARO MidWinter Meeting provides a unique opportunity to share my findings with the scientific community, gain insights from leading experts, and engage in meaningful discussions that will shape my future work in auditory neuroscience.



Anes Macić

Anes Macić has a background in applied mathematics (B.Sc.) and mechanical engineering (M.Sc.) and is currently pursuing a Ph.D. focused on imaging and vibration measurement for research in experimental cochlear mechanics. Their work integrates mathematical modeling and experimental methods to improve precision in vibrometry and related applications.

ARO 2025 TRAVEL AWARDEES



Jessica MacLean

Jessica MacLean is a board-certified music therapist and dual PhD student in Neuroscience and Speech, Language, and Hearing Sciences at Indiana University (Auditory Cognitive Neuroscience Lab, PI: Gavin Bidelman, PhD). She holds a master's degree in Music Therapy with Undergraduate Equivalency from the University of Miami and a bachelor's degree in Music (violin) with an Outside Field in Neuroscience from Indiana University. Prior to doctoral studies, Jessica worked in basic and applied research settings, spanning auditory neuroscience (PI: Nina Kraus, PhD) and music therapy intervention (PI: Sheri Robb, PhD, MT-BC) research. She remains involved at the Indiana University Indianapolis School of Nursing, where she works with Dr. Robb on research involving biologic mechanisms of music therapy interventions for children with cancer and their caregivers. Jessica's primary research interests include neural entrainment to music and speech, rhythmic facilitation of auditory streaming, and music-induced neuroplasticity. Clinically, her primary areas of expertise are pediatric hearing loss and developmental disorders and adult neurorehabilitation and chronic pain. Ultimately, Jessica hopes to combine her experiences in clinical practice and neuroscience to better understand and develop music-based interventions for speech, language, and hearing outcomes.



Kristine McLellan

I am a Ph.D. candidate in the lab of Jason Tait Sanchez in Northwestern University's Neuroscience program (NUIN). I graduated from the University of Chicago with a B.S. in Neuroscience and a Minor in Music — subjects which I've ultimately integrated in efforts to study the mechanisms of auditory transduction. In my thesis work, I investigate how neurotrophin signaling affects the development of auditory brainstem nuclei using ex vivo electrophysiology and functional auditory measurements in animal models. I aim to improve our knowledge of normal auditory circuit development, which we can then use to understand how deviant developmental signaling can lead to central auditory deficits.

ARO 2025 TRAVEL AWARDEES



Deanne Nixie Miao

Deanne Nixie Miao is a PhD student under the mentorship of Dr. Britt Drögemöller in the Department of Biochemistry and Medical Genetics at the University of Manitoba. Her research employs multiomic approaches to investigate changes in gene expression and chromatin accessibility in the inner ear at the single-cell level. By mapping gene dysregulation and identifying key biological pathways, genes, and cochlear cell types that are significantly associated with cisplatin-induced ototoxicity (CIO), she aims to develop predictive and preventative models to mitigate this adverse drug reaction. Deanne is committed to translating her findings into research that will guide clinical practices, ultimately improving patient outcomes and quality of life for those affected by this drug-induced hearing loss. Deanne has been recognized for her academic excellence and research contributions with prestigious awards, most notably the Caroline A. Coupe Award for Excellence in Oncology Research and the CIHR Strategic Master's Award (awarded to only three individuals across Canada). So far, her work has been featured in multiple local, national and international conferences, including the 2023 International Congress of Human Genetics. Over the last year, she has published two articles: one focused on advancing open science and knowledge in pharmacogenomics, and the other on developing a biologically informed polygenic score for CIO using genome-wide association studies and single-cell omics datasets. Outside of her academic pursuits, Deanne is an avid long-distance runner and a dedicated advocate for balancing personal wellness with professional excellence.

ARO 2025 TRAVEL AWARDEES



Kayla Minesinger

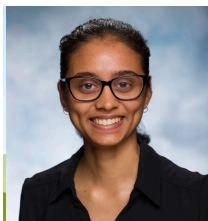
Kayla Minesinger is a 4th-year PhD candidate at the University of Miami, working in Dr. Suhrud Rajguru's Neurotherapeutics Lab. Her research focuses on inner ear pathology, with a particular interest in understanding the impact of noise exposure on cochlear implantation hearing preservation outcomes. Utilizing her biomedical engineering background, Kayla preclinically models clinically relevant research, aiming to unravel the mechanisms underlying poor auditory outcomes in CI patients with prior noise-induced hearing loss (NIHL). Kayla's work stems from clinical observations of patients, including veterans with high noise exposure histories, who experience suboptimal CI outcomes. These cases highlight the compounded effects of neural damage from noise exposure and surgical trauma. To address this, her research recreates these conditions in animal models, allowing for the exploration of functional changes and potential therapeutic interventions. Overall, Kayla's contributions to the field support the development of treatments to mitigate auditory trauma and improve quality of life for individuals with hearing loss. Her ultimate goal is to advance therapeutic strategies to address both temporary and permanent hearing loss through advanced translational research. When not in the lab, Kayla is passionate about mentoring young scientists and advocating for innovative approaches in auditory health research.



Lyn Miranda Portillo

Lyn Miranda Portillo is a second-year PhD student in the Stem Cell Biology and Regenerative Medicine Program and the Otolaryngology – Head & Neck Surgery Department at Stanford University School of Medicine. She currently works under Dr. Stefan Heller, investigating the pathways essential for cochlear hair cell regeneration in birds after ototoxic damage. She is also focused on studying the epigenetic landscape of supporting cells in the avian hearing organ. Her project aims to utilize this knowledge to push supporting cells to proliferate in the absence of damage. She hopes to apply her approach in birds to mammalian models and contribute to the development of a restorative treatment for hearing loss. Lyn also plans to use her training to uplift and empower underrepresented individuals in STEM through mentorship and related activities. Lyn grew up in Boston, Massachusetts and graduated with honors from Bowdoin College in Brunswick, Maine, where she received her B.A. in biology.

ARO 2025 TRAVEL AWARDEES



Sree Varshini Murali

I am a PhD candidate working in Dr. Kaur's lab, where I investigate the cellular and molecular mechanisms that regulate the survival of spiral ganglion neurons via fractalkine signaling following noise-induced injury. My research employs a variety of innovative approaches to test my hypothesis. Specifically, I explore cochlear inflammation, vascular pathology, and macrophage responses to understand how these factors contribute to neuronal survival when fractalkine signaling is intact after cochlear trauma, such as severe noise exposure. Additionally, my work aims to elucidate the molecular mechanisms in macrophages involved in neuroprotection. Outside of the lab, I enjoy painting, sketching, and photography as hobbies.



Sherylanne Newton

Sherylanne Newton is a senior postdoc at the Ear Institute, University College London. In 2017 she completed her PhD investigating gene expression changes in the spiral ganglion and cochlear nucleus following noise-induced hearing damage. Following this, she moved to the Mammalian Genetics Unit at the MRC Harwell Institute as a Postdoctoral research scientist investigating the genetics and pathobiology of deafness. Her current research is focussed around the genetics and molecular mechanisms of age-related hearing loss in the mammalian cochlea.

ARO 2025 TRAVEL AWARDEES



Carl Nist-Lund

Carl Nist-Lund is currently a fifth-year Ph.D. candidate in the Program in Neuroscience at Harvard University completing his thesis in the Koehler Lab at Boston Children's Hospital. Over the past eight years he has focused his research efforts on contributing to our molecular understanding of mechanotransduction complex proteins, auditory and vestibular gene therapy advancement, and now stem cell-derived models of the inner ear. From 2017 through 2021, he developed expertise in the field of gene replacement, editing, and manipulation in a variety of mouse models of deafness and vestibular dysfunction as a Research Assistant in the Géléoc and Holt Labs at Boston Children's Hospital. Now as a graduate student in the Koehler Lab, he focuses on stem cell and regenerative biology approaches where he has embarked on becoming an expert on stem cell-based models of human development. He works at the frontier of inner ear organoid models to model human-specific nuances of auditory development as well as apply these models to recapitulate auditory diseases and test novel therapeutics.



Gal Nitsan

I am a licensed audiologist and speech-language pathologist, currently pursuing a PhD under the joint supervision of Prof. Karen Banai (The Auditory Cognition Lab, University of Haifa) and Prof. Boaz Ben-David (Communication, Aging, and Neuropsychology Lab, Reichman University). My research focuses on understanding the marvelous ability of speech perception in older adults, particularly as it relates to age-related hearing loss and challenging environmental conditions, such as noise or rapid speech. What factors hinder this ability among older adults? What enhances it? My work aims to uncover individual differences in cognitive abilities that explain variability in speech perception among older adults. I use advanced eye-tracking and pupillometry technology to disentangle the contributions of various factors involved in speech comprehension. Beyond its scientific significance, my research seeks to promote a personalized approach to treatment in the field of communication disorders, with the goal of improving quality of life across the lifespan. I was honored to receive the National President's Scholarship for Innovation and Scientific Excellence in recognition of my work.

ARO 2025 TRAVEL AWARDEES



Jonathan Oliveira Luiz

Jonathan Oliveira Luiz is a Ph.D. candidate in Mechanical Engineering at Worcester Polytechnic Institute (WPI) and a Research Assistant at the Center for Holographic Studies and Laser Micromechanics (CHSLT) at WPI and Eaton-Peabody Laboratories at Massachusetts Eye and Ear. His current research investigates nonlinearities in the middle ear response when exposed to various sound levels using full-field high-speed optical techniques, aiming to advance understanding of middle ear mechanics and improve hearing protection methods. Jonathan graduated with a Bachelor's degree in Mechanical Engineering from Universidade Federal de Santa Catarina in 2019 and completed a Master's degree in Optical Metrology from the same institution in 2021. His experience spans Optical Metrology, Vibrations, Acoustics, and Mechanical Design.



James O'Sullivan

James O'Sullivan is a postdoctoral research associate in the lab of Dr Zoë Mann at King's College London. His work currently focusses on the role of metabolism in influencing hair cell identity and maturation during inner ear development, with a focus on how mitochondrial activity affects the differentiation, survival and tonotopic morphology of hair cells in the murine organ of Corti. His other interests include how gestational diabetes may predispose the auditory tissues of affected offspring to damage later in life, as well as how interactions between mitochondrial and nuclear gene variants contribute to sensorineural hearing loss. He will continue to investigate this latter question through 2025-2026 as a fellow at King's College London supported by the Royal National Institute for Deaf People.

ARO 2025 TRAVEL AWARDEES



Sujata Pandey

As a PhD candidate in the Pharmacology and Neuroscience program at Southern Illinois University School of Medicine, I work with Dr. Brandon Cox as my mentor. My research focuses on otoprotection from damaging insults such as aminoglycosides and noise, investigating aryl hydrocarbon receptor (AhR) signaling in the cochlea, a potential novel pathway, that could prevent hair cell damage and hearing loss. My journey in science began during my undergraduate studies in Pharmacy in Nepal, where my interest in research was first sparked. After completing my undergrad, I received a full-tuition scholarship to pursue M.S. in Pharmaceutical Sciences at the University of Toledo. As part of my Master's degree, I balanced my research with responsibilities as a Teaching Assistant, gaining valuable experience in both mentoring and scientific communication. I am eager to continue exploring and advancing scientific knowledge with passionate researchers.



Alena Pauley

Alena Pauley is a second-year medical student at the University of California, San Diego, with a background in anthropology and global health. Originally from Omaha, Nebraska, Alena completed her undergraduate studies at Washington University in St. Louis and later served as an English Education Peace Corps volunteer in Nepal. She went on to earn a master's in global health from the Duke Global Health Institute and worked as a clinical research coordinator before starting medical school. Alena's research interests include surgical innovation in otolaryngology, global surgery, and addressing health disparities in underserved populations, with plans to pursue a career in otolaryngology. Outside of medicine, she enjoys long runs, hiking, camping, and exploring beautiful San Diego.

ARO 2025 TRAVEL AWARDEES



Shelby Payne

Shelby A. Payne is a fourth-year MD/PhD candidate in the NIH-funded Medical Scientist Training Program (MSTP) at the Medical University of South Carolina (MUSC) under the mentorship of Dr. Hainan Lang. Her research focuses on proinflammatory macrophage/microglia dysfunction in age-related hearing loss, with studies in both mice and humans. Shelby holds a BA in Classical Studies with a minor in Speech and Hearing Sciences from Washington University in St. Louis. From 2016 to 2021, Shelby studied auditory neuroscience and cochlear inflammation at Washington University School of Medicine in the Department of Otolaryngology-Head and Neck Surgery. In 2019, she was invited to the Biology of the Inner Ear Course at the Marine Biological Laboratory in Woods Hole, MA, as a research instructor, where she taught patch-clamp electrophysiology. Additionally, Shelby volunteers with the South Carolina Ovarian Cancer Foundation to educate healthcare providers about ovarian cancer risks. Her clinical activities include volunteering at community clinics in Charleston, SC, enhancing her patient care skills alongside her research endeavors. Shelby has presented her work at multiple national conferences and her work has led to several peer-reviewed publications in respected journals. Her academic excellence has been recognized with numerous awards, including the Emerging Scholars Award from MUSC. Shelby's long-term career goal is to become an otolaryngologist and independent investigator, leading a laboratory focused on neuroimmune interactions within the auditory system to identify novel therapeutic targets to treat hearing loss.

ARO 2025 TRAVEL AWARDEES



Prithwijiit Roychowdhury

Prith is an R25 resident physician in otolaryngology-head & neck surgery at Washington University in St. Louis School of Medicine. He is spending his R25 postdoctoral research time with Dr. Lavinia Sheets at the Central Institute for the Deaf. His research is focused on using live imaging to characterize the interactions between macrophages and the afferent synapses following excitotoxic injury in the zebrafish lateral line. Before residency, he attended medical school at the University of Massachusetts Medical School in his hometown of Worcester, MA. During this time he completed a year of scholarly research in the lab of Dr. Aaron Remenschneider evaluating the ossicular chain in cases of age-related hearing loss using otopathologic techniques. Outside of research, Prith enjoys exploring the local St. Louis restaurant & brewery scene, walking aimlessly around the Central West End neighborhood, curating Spotify playlists and reading non-fiction related to futurism & design thinking.



Carina Sabourin

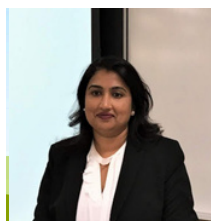
Carina Sabourin is a doctoral candidate at McGill University supervised by Dr Stephen Lomber in the Department of Biological and Biomedical Engineering. After graduating with a BSc from Queen's University, she joined the Cerebral Systems Lab at McGill University where she used system identification methods to model temporal modulation in the auditory cortex. For her doctoral studies, she is collaborating with Archie's Cochlear Implant Lab to investigate how stimulation of the auditory nerve by cochlear implants varies over time and between ears in a large cohort of children with bilateral cochlear implants.



Tsubasa Saeki

Tsubasa Saeki is a postdoctoral research fellow at Indiana University School of Medicine in Dr. Eri Hashino's lab. In 2022, he completed his PhD in Medicine at Keio University School of Medicine, Japan. As a PhD student, he studied to establish a novel protocol to generate otic lineage cells from human pluripotent stem cells under the mentorship of Dr. Hideyuki Okano. His current research focuses on maturation of outer hair cells in cochlear organoids derived from human embryonic stem cells.

ARO 2025 TRAVEL AWARDEES



Mrudhula Sajeevadathan

Mrudhula Sajeevadathan, Ph.D. has been a postdoctoral fellow at the Miyoshi lab in the Department of Molecular and Integrative Physiology at Southern Illinois University, School of Medicine since 2024. Dr. Sajeevadathan graduated from the Karnataka Veterinary, Animal and Fisheries Sciences University in India with a DVM (Doctor of Veterinary Medicine) and obtained a Ph.D. in reproductive physiology from the University of Saskatchewan, Canada, under the mentorship of Dr. Mary Buhr. Dr. Sajeevadathan is interested in the mechanism of mechanosensing, specifically for hearing and balance, because it achieves an extremely high sensitivity to convert the little energy of sound and acceleration into the electrochemical activities of neurons. To analyze how the motor activities of unconventional myosins are utilized in developing stereocilia, Dr. Sajeevadathan is applying the single-molecule microscopy workflow developed by her mentor, Dr. Takushi Miyoshi, to various myosin and cargo molecules with her own novel experimental frameworks. At the 2025 ARO MidWinter meeting, she will present a poster entitled “Technical details on single-molecule microscopy of MYO7A trafficking in live hair cell stereocilia” to introduce how the biochemistry of single protein molecules can be analyzed in the context of live hair cells. Dr. Sajeevadathan is looking forward to attending this meeting to interact with researchers of various backgrounds and cultivate collaborations to elucidate how inner ear hair cells develop functional stereocilia and to regenerate or restore this beautiful organelle in patients suffering from sensorineural hearing loss.

ARO 2025 TRAVEL AWARDEES



Harriet Smith

Dr Harriet J. Smith is a postdoctoral research fellow in the Department of Speech, Hearing and Phonetic Sciences (SHaPS) at University College London (UCL). Her research focuses on speech perception in noisy environments, particularly when multiple talkers are speaking simultaneously. In her postdoctoral work, she is examining the cognitive factors that contribute to understanding speech in these situations, as well as the neural systems underlying these processes. Specifically, her current projects explore the impact of voice familiarity, spatial attention, and semantic knowledge on speech-in-speech perception, in individuals both with and without sensorineural hearing loss. She also co-supervises BSc and MSc student projects, assessing the impact of voice training on speaker recognition and speech intelligibility. She utilises behavioural methods, pupillometry and functional neuroimaging (fMRI) to explore these questions. Dr Smith completed her PhD in Medical Sciences at the MRC Cognition and Brain Sciences Unit (University of Cambridge), funded by a UK Research and Innovation (UKRI) studentship, and supervised by Dr Matt Davis. Her PhD research focused on individual differences in auditory perception and language skills, in both children and adults. Prior to pursuing her PhD, Dr Smith gained an undergraduate degree in Experimental Psychology at the University of Oxford, and worked in the Brain, Speech, and Language Lab (led by Dr Kate Watkins) on projects assessing the neural correlates of Developmental Language Disorder. In October 2023 she joined the Cognitive Hearing Lab at SHaPS, led by Dr Emma Holmes.



Akane Tamura

Akane Tamura was born in Osaka, Japan, in 1999. She is in the second year of a master's program in biomedical engineering at Chiba University in Japan. She belongs to Nakagawa-Otsuka Lab and is studying mechanisms of bone- and cartilage-conduction perception using psychophysical and bioacoustical measurements in humans, under the guidance of Prof. Seiji Nakagawa. Her work focused on effects of unordinary auricles, such as those with hematoma and those of children, on cartilage conduction. Her findings provide useful insights into the development of new types of earphones for auricular hematoma patients and children, who often have difficulties using conventional earphones.

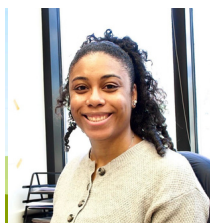
ARO 2025 TRAVEL AWARDEES



Chisako Tanaka

I am an otolaryngologist and visiting postdoctoral fellow in Dr. Taha Jan's laboratory at Vanderbilt University Medical Center. After earning my MD from Kyushu University in Japan and completing a Ph.D. at Osaka University Graduate School of Medicine under Dr. Arata Horii, I investigated vestibular compensation mechanisms using molecular biology techniques in a rat model. I furthered my research training as a postdoctoral fellow at Otago University in New Zealand with Dr. Paul Smith and Dr. Cynthia Darlington, studying central nervous system alterations after inner ear damage. Following this, I devoted several years to clinical and surgical practice as an ENT surgeon in Japan. In 2023, my husband, a head and neck surgeon, began a postdoctoral fellowship at Vanderbilt, prompting our family to relocate to Nashville. This transition provided me the opportunity to return to research, focusing on hair cell regeneration in the human inner ear with the goal of restoring hearing. My current translational research involves characterizing human utricles from surgical samples using histology and RNA sequencing, complemented by advanced in vitro experiments. Establishing these methods has reignited my passion for science and translational research. I am excited to present my work at the 2025 ARO Annual MidWinter meeting after 18 years, eager to connect with leading scientists, explore the latest advancements in auditory neuroscience, and strengthen collaborations for ongoing and future projects. This experience promises to deepen my understanding of the field and significantly benefit my research and career development.

ARO 2025 TRAVEL AWARDEES



Jocelyn Taylor

Jocelyn Taylor is a second-year PhD student in the Cellular, Molecular, Developmental, and Biophysics (CMDDB) Program at Johns Hopkins University. Originally from Georgia, Jocelyn earned her B.S. from the University of Mary Washington and serves in the Air Force Reserves as a C17 communication and navigation technician. After graduating, she joined the NIH as a post-baccalaureate fellow, researching the function of a key protein domain in dentoalveolar development under Dr. Martha Somerman. Following Dr. Somerman's retirement, Jocelyn transitioned to Dr. Alison Boyce's lab, Metabolic Bone Disorders Unit (MDBU), where she investigated the expansile nature of fibrous dysplasia in gnathic bones and identified risk factors associated with lesion growth during development. During her time in the MDBU at the NIH, Jocelyn contributed to several publications on translational and clinical approaches for therapeutic interventions in fibrous dysplasia. Her NIH experience sparked a passion for bench-to-bedside studies, ultimately leading her to pursue a PhD in Biology. Now a member of Dr. Erin Jimenez's lab at JHU, Jocelyn investigates gene regulatory networks essential for transforming supporting cells into new hair cells, aiming to identify the missing factors that hinder mammalian regeneration in the adult inner ear. She hopes her thesis work will one day contribute to restoring hearing in patients with sensorineural hearing loss, enhancing their quality of life. Jocelyn looks forward to connecting with colleagues at the ARO Mid-Winter Meeting to advance her research. In her free time, she enjoys puzzle games, anime, and spending time with her cat, Nami.

ARO 2025 TRAVEL AWARDEES



Akil Turner

I am a graduate research assistant in the Department of Biomedical Engineering at the University of South Florida, specializing in auditory research with a focus on the effects of aging. My work bridges biotechnology and engineering, with a particular emphasis on non-invasive imaging modalities to assess cochlear health. Currently, I am investigating imaging techniques, including PET/SPECT, MRI, and NIR fluorescence, to overcome challenges associated with the temporal bone and facilitate the delivery of therapeutic agents to the cochlea. This research aims to refine imaging approaches for better diagnostic and therapeutic outcomes in hearing-related disorders. Beyond imaging, I am deeply interested in the molecular and genetic aspects of auditory health and aging. This has been emboldened with my current work with mitochondrial genomic data, exploring how aging impacts the cochlear mitochondrial genome and its role in hearing decline. Although I am early in my research career, I have benefited greatly from mentorship under Dr. Robert Frisina at the Global Center for Hearing and Speech Research and support from the NIH. These experiences have shaped my commitment to interdisciplinary research and my aspiration to address the challenges of aging and hearing loss. I am dedicated to advancing our understanding of cochlear health and developing strategies to mitigate age-related impairments for societal benefit.

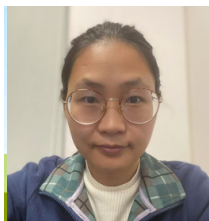
ARO 2025 TRAVEL AWARDEES



Jiali Wang

Jiali Wang is a resident at the ENT Institute and Department of Otorhinolaryngology at Eye & ENT Hospital, Fudan University in Shanghai. She holds an MD in otolaryngology from Fudan University, Shanghai, China (2023), a master's degree in the same field (2019), and a bachelor's degree in clinical medicine from Shanghai Jiao Tong University, China (2016). She joined Professor Yilai Shu's research Lab in 2017, where she received immense support and guidance. Her research focuses on hearing loss and advanced delivery system in otology, including oto-protective effect of biomaterials in microscale and nanoscale on hair cell injury, the protective effect of microfluidics-based drug delivery system on hearing loss, nanomaterial mediated CRISPR-Cas9 RNP delivery in inner ear. She has published multiple articles in journals such as ACS Applied Materials & Interfaces, Research. Dr. Wang has presented her research and won the Second Prize in the Youth Excellent Paper Competition at the Shanghai Medical Association's annual meeting in 2023. She has also received the Research and Innovation Award from the China Hospital Association and participated in innovative projects honored as the Shanghai Innovative Activity Plan. Outside of her professional endeavors, Dr. Wang enjoys climbing, marathon racing, and playing Ping-Pong.

ARO 2025 TRAVEL AWARDEES



Fang Wang

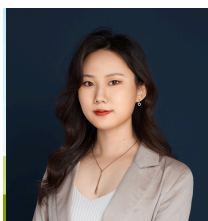
Fang Wang is currently a PhD student in Professor Geng-Lin Li's lab in the Eye & ENT Hospital, Fudan University, Shanghai, China. Through years of training, she is proficient in conducting patch-clamp recording in both the cochlea and the brainstem slices of mice, and she seeks to understand fundamental mechanisms of hearing and pathological changes of these mechanisms in deafness. She first joined the Li lab in 2020 as a Research Assistant, and she worked on several projects in gene therapy, a line of collaborative research between the Li lab and Dr. Yilai Shu, where she examined functional recovery of hair cell ribbon synapses after gene therapy. In 2022, she was successfully enrolled to become a PhD student, and she started to work on the endbulb of Held synapses in the cochlear nucleus. She took advantage of a mouse line where prestin was genetically knocked out (Prestin^{-/-}), therefore removing cochlear amplification completely but with outer hair cells largely intact. She performed patch-clamp recording in bushy cells in the cochlear nucleus and examined changes in neuronal excitability and synaptic functions, aiming to reveal how the central nervous system works with cochlear amplification to expand dynamic range of hearing. She is expected to graduate in May, 2025, and she plans to continue to study hearing, focusing on synaptic transmission and plasticity in the auditory pathways in different deafness models.



Yingxuan Wang

Yingxuan is a Ph.D. candidate in Biomedical Engineering at the University of Rochester, conducting research under the supervision of Dr. Kenneth S. Henry. After completing her undergraduate degree in Chemistry at Nankai University, she transitioned to auditory physiology research during her Master's studies at the University of Rochester. Her dissertation research investigates neural processing in the inferior colliculus of budgerigars, a small avian species, while also examining the effects of cochlear synaptopathy on neural coding.

ARO 2025 TRAVEL AWARDEES



Ningjin Wu

I am Ningjin Wu, a Ph.D. candidate in Epidemiology and Human Genetics at the University of Maryland School of Medicine and a Pre-doctoral Visiting Fellow at the National Institute on Deafness and Other Communication Disorders (NIDCD) at NIH. With a background from medicine school, I bring a strong clinical perspective to my research and am deeply interested in translational studies that bridge basic genetic insights with therapeutic applications. My research focuses on the role of RFX transcription factors in auditory development and maintenance, aiming to uncover the genetic mechanisms that sustain hair cell function and hearing preservation. I am so glad that my work has been recognized with a Travel Award for the 2025 Association for Research in Otolaryngology MidWinter Meeting. With expertise in molecular biology, next-generation sequencing, and auditory system analysis, I have developed practical skills in gene editing, confocal microscopy, and multi-omics data interpretation. I plan to continue investigating the role of key transcription factors in inner ear development to identify potential therapeutic targets for sensorineural hearing loss. I am passionate about advancing auditory genetics and aspire to contribute meaningful insights toward understanding of inner ear development and improving treatments for hearing loss.

ARO 2025 TRAVEL AWARDEES



Fan Wu

I am a postdoc in the Sha Laboratory at the Medical University of South Carolina (MUSC), studying the cellular and molecular mechanisms of acquired hearing loss with the aim of finding novel targets for prevention and treatment. As an Otolaryngology resident at Sun Yat-sen Memorial Hospital, I witnessed patients suffering from hearing loss without clinically available drugs for treatment. From 2018 to 2020, I was an exchange visiting Ph.D. student at the MUSC, supervised by Dr. Sha. During this period, I became fascinated by the study of the mechanisms underlying cochlear pathologies. I returned to the Sha Laboratory in 2023. I continue my research using adeno-associated virus (AAV) vectors as a tool to prevent acquired hearing loss based on the identification of new targets. Since outer hair cells (OHCs) are particularly vulnerable to inner ear insults, such as noise-induced and age-related hearing loss, targeting OHCs with AAV vectors is particularly important. However, the lower transduction efficiency in OHCs in adult mice remains a challenge. We hypothesize that the lack of AAV transduction efficiency in OHCs in adult mice is associated with a reduction in AAV receptor, AAVR (KIAA0319L). In this study, we demonstrated a decreased AAVR expression in OHCs of adult mice compared to neonatal mice. Furthermore, AAVR is essential for AAV to transfect in sensory hair cells. Importantly, conditional knock-in AAVR successfully restored the sensitivity of several AAV serotypes to transgene in OHCs of adult mice. I am very excited to share our findings at this ARO meeting!

ARO 2025 TRAVEL AWARDEES



Jacqueline Yao

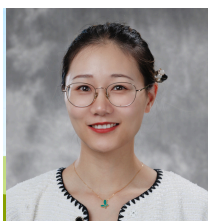
Jacqueline Yao is a medical student at Stanford University's Physician Scientist Training Program. With an academic foundation in microbiology and immunology from McGill University, Jacqueline's interests center on the intersection of clinical care and innovative research in otolaryngology. She is currently investigating drug-induced ototoxicity under the mentorship of Dr. Alan Cheng. Her research seeks to mitigate hearing loss from aminoglycoside antibiotics through novel chemical modifications, balancing efficacy with reduced ototoxicity. This work involves innovative imaging techniques and interdisciplinary collaboration with infectious disease specialists. Beyond research, Jacqueline fosters interest in otolaryngology among peers as a co-lead of Stanford's ENT Interest Group. She organizes educational events, including procedure simulations and faculty seminars, to provide career exploration opportunities for fellow students. Additionally, her commitment to community service is reflected by her clinical involvement at the Cardinal Free Clinic, where she manages follow-up care for underinsured patients. In her free time, Jacqueline enjoys long-distance running, cycling, and playing classical piano pieces. Humbled by the opportunity to learn from peers and experts, Jacqueline looks forward to contributing to and growing within the collaborative environment of the ARO MidWinter Meeting.



Omer Zeliger

My name is Omer Zeliger. After receiving my B.S. in Behavioral Neuroscience from Northeastern University in 2019, I began my doctoral studies at the University of Pennsylvania under the mentorship of Dr. Maria Geffen. My research explores the role of cortical inhibitory interneurons in auditory adaptation, using behavioral, electrophysiological, and computational methods. In short, I study how the brain functions in varying acoustical environments, from a busy city street to a forest with rustling leaves. Outside of lab I write for the science communication blog PennNeuroKnow to make neuroscience more accessible for everyone.

ARO 2025 TRAVEL AWARDEES



Lingjun Zhang

I am a fully trained Otolaryngologist from China who is pursuing a postdoctoral fellowship at Stanford. From 2015 to 2018, I received Otolaryngology residency training and clinical research on otosclerosis at the Capital Medical University in China. From 2018 to 2021, I studied the role of sirtuins and mitochondrial dysfunction in hearing loss using a combination of molecular biological, pharmacological, and imaging techniques. Our work has found that ROS and oxidative stress induced hair cell damage by causing mitochondrial dysfunction in the mouse cochlea, and that SIRT3 application preserved mitochondrial function and protected the cochlea from oxidative damage. During my postdoctoral fellowship at Stanford, my research now focuses on inducing hair cell regeneration in the adult murine cochlea and promoting maturation, which will hopefully lead to functional recovery of regenerated hair cells.



Chaoqun Zhou

Chaoqun Zhou is a PhD student major in mechanical engineering at Columbia University co-advised by Professor Jeffrey W. Kysar and Dr. Anil K. Lalwani. Her research focuses on advancing the diagnosis and treatment of inner ear diseases through microneedle-mediated intracochlear delivery and cutting-edge imaging technologies. Her work includes investigating safe intracochlear injection of minimal dosage of gadodiamide with microneedle through the round window membrane to facilitate Ménière's disease diagnosis, developing quantitative dynamic contrast-enhanced MRI method to study the spatiotemporal distribution of delivered therapeutics and assess inner ear perfusion dynamics, and optimizing microneedle design and therapeutics delivery strategy for intracochlear injection using cochlear pharmacokinetics simulations.

ARO 2025 TRAVEL AWARDEES



Meredith Ziliak

Meredith Ziliak is a PhD candidate in the Interdisciplinary Life Sciences (PULSe) program, specializing in auditory neuroscience and computation under Dr. Edward Bartlett. Her research investigates the impact of auditory stressors, including aging, small arms fire noise, and continuous noise, on central auditory processing using electrophysiological and neuroanatomical techniques. She plans to continue this work after graduation with metabolic auditory stressors such as polycystic ovary syndrome. Meredith was awarded a T32 Training Program in Auditory Neuroscience fellowship, is serving as a Travel Grant Vice Chair for Purdue Graduate Student Government, and was selected as a Sloan Center for Systemic Change Graduate Ambassador. With commitment to impactful research and mentorship, Meredith aspires to increase understanding of neural contributions to auditory systems for the development of patient diagnostics.