



ARO 2021 MIDWINTER MEETING VIRTUAL TRAVEL AWARD RECIPIENTS

DON HENDERSON TRAVEL AWARD RECIPIENTS



Dana Bsharat, M.Sc.

I work as an audiologist and speech pathologist. I completed my BA and MA studies in the Department of Communication Sciences and Disorders at the University of Haifa. Currently, I am a Ph.D. student under the supervision of Dr. Hanin Karawani and Dr. Tamar Degani. I am interested in behavioral and neural plasticity in bilingual populations across the lifespan. My master's thesis entitled "Learning and Bilingualism in Challenging Listening Conditions: How Challenging Can It Be?" under the supervision of Dr. Hanin Karawani examined factors that affect bilinguals in challenging listening conditions. Specifically, the study compared native Hebrew monolingual speakers' performance to Arabic-Hebrew bilinguals and bilinguals' performance in first and second languages. Our findings provided insight into the bilingual mechanisms that play a role during speech performance in adverse listening conditions. In my Ph.D. research, I aim to study the complex construct of listening effort and the neural mechanisms that underlie speech processing. Specifically, examine subcortical and cortical physiological aspects of bilingualism using electrophysiological measures and pupillometry to examine listening effort.



Valeria Castagna, B.Sc.

I got a degree on Biological Science from the Universidad de Buenos Aires. Now I am doing my PhD in Buenos Aires, on the Physiology and Genetics of Hearing Lab. My topic of research is hearing system, specifically the consequences of acoustic trauma during the critical period of development of the auditory system.



Ariadna Cobo-Cuan, Ph.D.



The overall goal of my research is to better understand the link between neural circuits and behavior, with a primary focus on the peripheral sensory functions. I believe that the pursuit of this goal will not only provide theoretical insights into the sensory coding but will lead to improvements in the detection, prevention, and treatment of anomalies in sensory-guided behaviors. I completed my BA and MA studies in the Research Group in Bioacoustics and Neuroethology at the University of Havana, Cuba. As a postdoc, I worked under the supervision of Dr. Peter Narins at the University of California Los Angeles investigating the neurophysiological mechanisms underlying high-frequency/ultrasonic communication in the amphibians. Currently, I am a Postdoctoral Research Associate working under the guidance of Dr. John Oghalai at the University of Southern California. The research on the neural basis of visual attention in human and non-human primates during the first stage of my career, and the study of the biophysics of the hearing organs in vertebrates and invertebrates as part of my doctoral and postdoctoral training, have provided me with a strong background in sensory physiology and the inner ear mechanics. As a biophysics lecturer at the University of Havana, I developed an essential understanding of the molecular synaptic machinery as well as the techniques that have paved the way for our understanding of synaptic transmission. I have gained expertise in an extensive variety of neuroethological models using behavioral and neurophysiological measures that include *in vivo* single and multi-unit recordings, event-related potentials, otoacoustic emissions recordings, laser Doppler vibrometry and optical coherence tomography. My expertise puts me in an excellent position to address both basic science and clinically-motivated questions regarding how a sensory system works.

Amandine Jarysta, Ph.D.



Amandine Jarysta is a post-doctoral associate at The Jackson Laboratory. Her work focuses on investigating the molecular mechanisms involved in the development of hair cells in the inner ear, notably on dissecting the G-protein signaling pathway and its role in cytoskeleton architecture.



Daria Lukasz, B.A.

Daria Lukasz is a predoctoral fellow at the National Institutes of Health in a joint graduate partnerships program with Johns Hopkins University. She is studying hair-cell function in zebrafish under the mentorship of Dr. Katie Kindt at the NIDCD. Daria completed her undergraduate work in neuroscience at the University of Pennsylvania.



Gabe Sobczak, B.S.

Gabe Sobczak is currently a medical student at the University of Wisconsin – Madison. He is a member of the Binaural Hearing and Speech Lab, directed by Dr. Ruth Litovsky. His research primarily encompasses cochlear implants, an interest that first began while learning about neural prostheses as part of his undergraduate biomedical engineering training. His current work focuses on understanding how cochlear implants affect cortical-level integration of binaural stimuli, using functional near-infrared spectroscopy (fNIRS).

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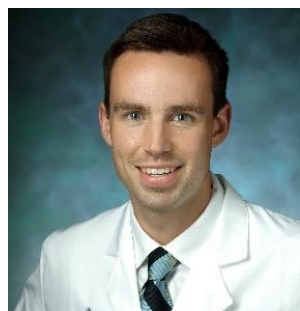
Aykut Aksit, M.S.

Aykut Aksit is a 5th year Mechanical Engineering Ph.D. student at Columbia University in the Small Scale Mechanics and Electrochemical Engineering Labs. His research involves polymeric and metallic microscale devices for inner ear applications. He develops novel manufacturing techniques, which require an understanding of microtechnology, small scale mechanics and chemical engineering. With these techniques, it becomes possible to design and create new tools with unprecedented capabilities that can be used to solve inner ear problems. He is co-advised by Professors Jeffrey W. Kysar, Anil K. Lalwani, and Alan C. West.



Nina Aldag, M.Sc.

Nina Aldag was born in Minden, Germany, in 1996. She received her Bachelor of Science (B.Sc.) degree in physical engineering from the University of Applied Science Muenster, Germany in 2017 and her Master of Science (M.Sc.) degree in biomedical engineering from the Leibniz University Hanover, Germany in 2020. She started her doctoral research in September 2020 at Hannover Medical School, Hanover, Germany. Her research interests include brain-computer interfaces especially for cochlear implant recipients.



Nicholas Andresen, M.D.

Dr. Nicholas Andresen is a third-year resident in the Department of Otolaryngology – Head and Neck Surgery at Johns Hopkins Hospital, currently in the first year of a two-year dedicated research block. He studied Biology and Philosophy at Luther College before completing his Medical Degree from the University of Iowa Carver College of Medicine, where he spent one year as a Howard Hughes Medical Research Fellow. He currently works in the lab of Dr. Amanda Lauer and his research interests include age-related hearing loss and sickle cell disease.



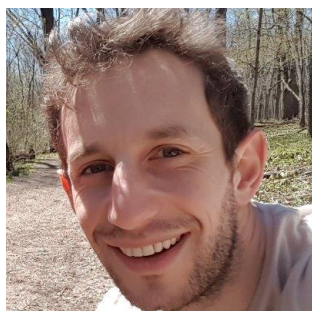
Meisam Arjmandi, Ph.D.

Meisam Arjmandi is currently a postdoctoral research associate in the EAR lab, working with Dr. Julie Arenberg. He received his Ph.D. in Communication Sciences and Disorders with a specialization in Cognitive Science at Michigan State University. He obtained his M.Sc. in Biomedical Engineering and his B.Sc. in Electrical Engineering. In his Ph.D. dissertation, he studied the impact of environmental noise and reverberation on the quality of early language input and language outcomes in children with cochlear implants (CIs). His research interests include the comprehension and production of speech and language in children and adults with CIs, auditory psychophysics, computational models of speech perception, and voice quality assessment. Meisam's overarching career goal is to better understand factors influencing speech and language development in children and adults with CIs and translate the findings into clinical practice.



Selina Baeza-Loya, B.A.

Selina Baeza-Loya is a 5th year PhD Candidate in the Neurobiology graduate program at the University of Chicago. She completed her BA in Cognitive Science at Rice University with an emphasis on studies in Neurosciences and Philosophy of Mind. Simultaneously she worked with Dr. Ramiro Salas in the Department of Psychiatry at Baylor College of Medicine, studying the impact of substance abuse disorders on neural connectivity. Currently she works with Dr. Ruth Anne Eatock to investigate the functional impact of diverse sodium currents on spike timing regularity in vestibular afferent neurons using patch clamp electrophysiology and computational modeling. She is an HHMI Gilliam Fellow, a doting cat mom, and a bacon cheeseburger enthusiast.



Joel Berger, Ph.D.

I have a fascination with understanding how sound is represented within the brain, both in the presence of external stimuli and in the absence of an objective stimulus, as is the case with subjective tinnitus. I utilize the latest tools in intracranial ECoG, behavioral neuroscience, PET and source-space EEG to further our understanding of basic neuroscience and translate this into benefits for patients. I currently work in the Department of Neurosurgery at The University of Iowa, in the Human Brain Research Laboratory of Dr Matt Howard, collaborating closely with Phillip Gander and Tim Griffiths. I obtained my BSc in Psychology from the University of Lincoln, followed by a PhD from the University of Nottingham, under the supervision of Alan Palmer and Mark Wallace, focusing on the behavioural and neural correlates of tinnitus. My first postdoctoral position was at the MRC Institute of Hearing Research, also under the supervision of Alan Palmer.



Vikrant Borse, Ph.D.



I have been working in the field of inner ear research for a decade. My research has always been focused on understanding the inner ear biology and the causes of inner ear dysfunction for therapeutic intervention. During my doctorate, I studied the mechanism of cisplatin-induced inner ear damage and hearing loss. I developed possible treatment option against cisplatin-mediated hearing loss without affecting cisplatin's anti-cancer ability. Currently, I am working as a post-doctoral research associate in Dr. Mark Warchol lab, at Washington University in Saint Louis. In my earlier research project, I studied Hippo-Yap1 signaling pathway in inner ear development, damage, and regeneration. My findings showed that the removal of the mouse utricle from the mechanical constraints of its *in vivo* environment can promote transient YAP1 nuclear translocation in SCs. Further, data from this study indicated that differences in injury-evoked translocation of YAP1 in mouse vs chick utricle accounts for their differing regenerative abilities. This work has been accepted in Scientific Reports journal for publication.

My current research is mainly focused on the role of the immune cells such as macrophages in the cochlear development and hearing function. It seems there is limited work done in the area of immune cells and its influence on the inner ear development and function. My current research is aimed to provide better understanding of macrophage function in the cochlear development, hearing function and disorder. Simultaneously, I am also investigating the role of *Pou4f3* gene in inner ear development, function and hair cell regeneration. In addition, I am actively serving as a reviewer for multiple scientific journals such as Medicinal Research Reviews (IF-9.79), The International Journal of Molecular Sciences, Scientific Reports, Frontiers in Cellular Neuroscience, International Journal of Pediatric Otorhinolaryngology etc., and I have recently accepted the invite to serve as a guest editor for the journal of Frontiers in Neuroscience.



Paige Brooks, B.A.



I am a PhD candidate in the Department of Biology at Georgetown University where I am studying the role otic mesenchyme cells play in supporting cochlear spiral ganglion neurons (SGNs). SGNs are the first-order auditory afferents, and while they are necessary for most therapeutic hearing options, they are also sensitive to even moderate noise damage. My work focuses on the potential for otic mesenchyme cells - a poorly understood but abundant cochlear cell - to support SGN survival through the transcription factor Pou3f4. Prior to beginning my graduate work, I earned a B.A. in Neuroscience from Colgate University where I studied supporting cell development in the zebrafish lateral line under Dr. Jason Meyers. I am dedicated to continuing to develop my expertise in neuroscience and sensory biology, and I hope to use this

Carmen Alicia Carabali Carabali, M.Sc.



Carmen received her Bachelor of Engineering in Electronics and Control in Ecuador and her Masters Degree in Biomedical Engineering at Flinders University in Adelaide. As a student, she was awarded for her performance and collaborated with different research groups focusing her research on advanced computing for EEG interpretation, and brain signal analysis. Alicia worked as a full-time lecturer at an Ecuadorian University and has conducted research in areas such as medical devices, artificial intelligence, multi-agent systems, and signal processing. In February 2018 Alicia commenced her PhD studies at the Bionics Institute where her research is focused on assessing listening effort using fNIRS technology. Her goal is to explore how fNIRS technology can help to improve the quality of life of patients using hearing devices such as Bone-Anchored Hearing Systems and Cochlear Implants.



Luis Cassinotti, Ph.D.

I obtained a PhD in cardiovascular physiology and pathophysiology field in April 2018. I then decided to learn about other research areas and I joined the laboratory of Dr. Gabriel Corfas at the Kresge Hearing Research Institute (University of Michigan Medical School) as a postdoctoral fellow. My current research focuses on the molecular and cellular mechanisms of the hidden hearing loss and on the importance of myelination in the peripheral auditory nerve. Since starting my postdoc in July 2018, I have learned several techniques to assess auditory function including, among others, ABR and DPOAE. Also, learned confocal and electron microscopy to study the inner ear at the cellular levels. Together with the knowledge I acquired during my PhD in the handling of laboratory animals and molecular biology techniques, I am preparing myself for a career as an inner ear neuroscientist. During last two years at Kresge, I contributed to the writing of one paper and two reviews. The paper was on the development of an injectable PEG hydrogel controlling neurotrophin-3 release by affinity peptides, published in Journal of Controlled Release. The reviews were focused on 'hidden hearing loss', published in Cold Spring Harbor (CSH) Perspectives in Medicine series, and on 'axon-glia interactions in the ascending auditory system', recently accepted in Developmental Neurobiology. This is my third participation in the Annual MidWinter Meeting of the Association for Research in Otolaryngology in which I am going to present my fourth poster. In this occasion, I will talk about the consequences of the disruption of Schwann cell ErbB receptor signaling in the auditory nerve and how this results in hypomyelination and hidden hearing loss.



Tais Castagnola, B.Sc.

From a very young age I have been passionate about nature and science. Following my interests, I decided to move out from my home town to study Biological Sciences in the University of Buenos Aires. There, I found what really meant investigating guided by some of the best scientists of Argentina. Inspired by their commitment, I decided to pursue a scientific career, so on April of 2018 I started my PhD in neuroscience. Now I am studying the GABAergic modulation of the efferent auditory pathway in the mammalian cochlea, combining both optogenetics and calcium imaging techniques.

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Melissa Castillo Bustamante, M.D.



Melissa Castillo Bustamante is graduated from Universidad Pontificia Bolivariana Medical School in 2011. In 2014, she started her Otolaryngology training at Hospital Británico of Buenos Aires, Argentina associated to the Pontificia Universidad Católica Argentina. During her residency, she received training in Tinnitus therapies and Neuro-otology. Between 2017-2018, she served as a member of the research committee of Buenos Aires British Hospital.

In 2018, Melissa became a Neuro-otology physician in Hospital de Clínicas Jose de San Martin associated to the Universidad de Buenos Aires. Currently, she is a *post-doctoral fellow* at Massachusetts Eye and Ear- Eaton Peabody Laboratories at Aaron Remenschneider's group. Her work is focused in Otopathology and biomechanics of the middle ear, centered on rheumatologic diseases as Rheumatoid Arthritis, Scleroderma, Lupus and Osteoarthritis. Also, she studies the effects of landmines to the ear in Colombian citizens. To date, Melissa has 30 indexed and non indexed publications.

Melissa received the Medellin Mayor Award for outstanding undergrad researchers in 2010, Autor Bolivariano award in 2011, Universidad Pontificia Bolivariana Honorable Mention for researcher students, the scholarship of the Pan-american Otolaryngology Association and the Pontificia Universidad Católica Argentina Mention for Otolaryngology students due to her thesis on Vestibular Migraine and the Travel Award of the Association for Research in Otolaryngology.

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Neha Chauhan, B.S., M.S.



I am currently a Master of Science candidate at the University of Toronto in Dr. Alain Dabdoub's Lab at Sunnybrook Research Institute, Toronto, Canada. My research focuses on investigating and developing non-invasive therapeutic delivery strategies to the inner ear using focused ultrasound and microbubbles. My work highlights the feasibility of using focused ultrasound as a safe method to deliver various therapeutic substances, including genes, stem cells and large molecules, to treat inner ear disorders.

Sima Chokr, B.S.



I am a Ph. D. candidate in the laboratory of Dr. Karina S. Cramer at the University of California, Irvine. I received my B. S. in Molecular Cell Biology and Physiology at California State University, Long Beach. During my undergraduate research, I studied an estrogen-dependent behavioral circuit. I then became interested in how circuits develop, and specifically how central sensory systems form. The development of the auditory system uniquely interested me due to its peerless accuracy and rapid signaling processes. I currently study the role of microglia in auditory brainstem development. Microglia are the brain's primary immune cells, and regulate synapse sculpting and plasticity during development. Our lab recently showed that microglia are required for synaptic refinement of the calyx of Held, just after hearing onset. Further, we found that microglial depletion early in postnatal development reduced astrocyte maturation. We are currently interested in identifying the microglial signaling mechanisms that regulate circuit maturation and we are investigating the functional implications after deletion of the microglial fractalkine receptor. Our findings currently highlight the system- and region-specific heterogeneity of microglia, and implicate novel roles of microglia in the developing auditory brainstem. My dissertation work aims to characterize microglial roles in functional auditory system development, as measured by the ABR, and to identify the role of microglia during a critical period of circuit plasticity.



Stephen Dennison, B.S, M.S.



Stephen Dennison is a Ph.D. candidate in Electrical Engineering at the University of Wisconsin-Madison. His research interests include audio signal processing and binaural psychoacoustics. His work in Dr. Ruth Litovsky's Binaural Speech and Hearing Lab focuses on restoring binaural hearing to bilateral cochlear implant users using new processing strategies and synchronized research devices. He received the M.S. and B.S. degrees in Electrical Engineering from Tufts University.

Mishaela DiNino, Ph.D.



Mishaela DiNino received her Bachelor's and Master's degrees in Psychology from San Diego State University and her Ph.D. in Neuroscience from the University of Washington. She is currently a postdoctoral fellow in the labs of Barbara Shinn-Cunningham and Lori Holt at Carnegie Mellon University. Her research focuses on identifying neural and perceptual contributors to challenges understanding speech in noise in adults with normal hearing thresholds.



Luong Do Anh Quam, M.S.

I graduated from Ho Chi Minh University of Technology with major in Electronics-Telecommunications Engineering. I am currently M.S student at University of Ulsan under the supervision of Dr. Jihwan Woo. My research is about investigating differences in speech perception mechanism between native and non-native speakers as well as decoding speech from neural signal. Recently, the study compared brain responses to continuous speech stimuli between native Americans and non-native Americans group. The findings indicate how sentence components affect the speech perception of non-native speakers during passive listening task. The results also present the potential of employing cross-correlation method to analyze the continuous speech-evoker potential. Our goal is to search for the neural mechanism than underpin speech perception and speech production. From there, we will be able to reconstruct or decode the speech by using neural signals, especially electroencephalography (EEG).



Fotios Drakopoulos, M.Sc.

I am currently a PhD student in my 3rd year, as part of the Hearing Technology Lab of Ghent University (Belgium) and under the supervision of Prof. Dr. Sarah Verhulst. My research focuses on diverse auditory-related aspects, including audio signal processing, computational modelling and machine-learning. I am working on the design of biophysically-inspired as well as machine-learning based signal-processing algorithms, designed to compensate for various combinations of hearing deficits, including outer hair cell loss and cochlear synaptopathy. I completed my BSc and MSc studies in the Audio and Acoustic Technology Group of the University of Patras (Greece), under the supervision of Prof. John Mourjopoulos. My master thesis focused on the Time-Frequency Analysis and Processing of Audio Signals for Audible Distortion Suppression. After my studies I did an intership at Phonak, Sonova AG (Switzerland), where I worked on Real-time Systems for Auditory Scene Analysis under the supervision of Dr. Eleftheria Georganti.



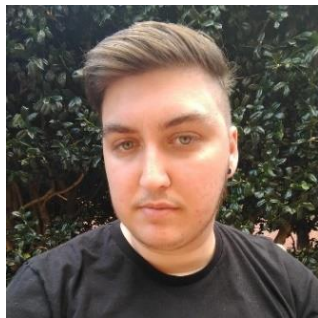
Celia D. Escabi, M.S., Au.D.

Dr. Celia D. Escabi earned her bachelor's and Au.D. from the University of South Florida. She is a certified and licensed audiologist for the state of Texas and recently earned a master's in Applied Cognition and Neuroscience while concurrently pursuing a Ph.D. in Hearing Science at the University of Texas at Dallas. Currently, Celia is working on her dissertation under her research mentors Drs. Colleen Le Prell and Edward Lobariñas. Her current research goals include advancing her basic science skills and bridging that together with her clinical experiences. Her primary research interests include noise- and age-related hearing losses, tinnitus, auditory cognitive neuroscience and future pharmacological interventions for acquired auditory disorders.



Charlotte Garcia, B.S.

Charlotte Garcia is a Ph.D. student at the MRC Cognition & Brain Sciences Unit at the University of Cambridge, funded by the W. D. Armstrong Trust for projects focused on the application of engineering in medicine. She is primarily supervised by Dr. Bob Carlyon and co-supervised by Professor Manohar Bance and Dr. Richard Turner. In her Ph.D. she is primarily focused on improving objective measures for improving speech perception in poor-performing cochlear implant users. Her research interests also include pitch and music perception in hearing impaired listeners using various auditory technology platforms. She holds a B.S. in Biomedical Engineering and a B.A. in Music Theory & Cognition from Northwestern University (Chicago, USA), and prior to joining the MRC-CBU she worked as a Biomedical Engineer in the healthcare industry developing and implementing multivariate process control systems for radio-frequency welding processes.



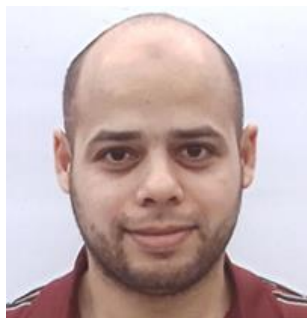
Raymond Haggerty, Ph.D.

Raymond Haggerty is a queer and transgender post-doctoral researcher. He graduated from the University of North Carolina in 2019 with a PhD in Bioinformatics and Computational Biology after being the first one in his family to attend college. His scientific interests involve machine learning and mathematical/biophysical models. He has worked on a variety of biological problems and is now working on detecting cochlear synaptopathy using electrocochleography.



Adam Hockley, Ph.D.

Adam Hockley is a third-year post-doc using in vivo recordings to study the physiology of the cochlear nucleus. His current interests lie in investigating how neural circuits in the auditory brainstem, including olivocochlear projections, contribute to hearing in normal and pathological systems. These circuits within the cochlear nucleus are altered after cochlear synaptopathy. Further understanding of these circuits may explain how signals are extracted from background noise and how this ability is degraded after cochlear synaptopathy or 'hidden hearing loss'.



Baher A. Ibrahim, Ph.D.

Baher A. Ibrahim received his Bachelor's degree in pharmacy from Mansoura University, Egypt in 2003, and Master's degree in Pharmacognosy from Mansoura University, Egypt in 2007. In 2014, he received his Ph.D. in Pharmacology from the University of Louisiana at Monroe, Monroe, USA. He also got his postdoc training from the University of South Carolina, Columbia, USA studying the molecular mechanism of phosphodiesterase A11 in the hippocampus, and from the University of Illinois, Urbana-Champaign, USA studying the rule of the corticofugal system in the gating of acoustic sensory information. He is currently a postdoc fellow in Interdisciplinary Environmental Toxicology Program (IETP). His research interests lie in studying the physiology of the central auditory system and how different toxicants could interfere with its function.



Weitao Jiang, Ph.D.

I received my Ph.D. in the Department of Biomedical Engineering at University of Miami. Currently, I am a postdoc in Southern University of Science and Technology. My research focus on the vestibular system. In my Ph.D. stage, under the supervision of Dr Suhrod M. Rajguru, I developed an Infrared Radiation (IR) system which can selectively stimulate individual vestibular end-organ in rat and evoke compensatory eye movement. As a practical and spatial selective tool, I believe this IR stimulation method would give momentum to the peripheral and central vestibular system research. Currently, I am using IR to investigate the role of MET channel related genes such as TMC1 and TMHS in vestibular system. Meanwhile, as projection from peripheral vestibular system to cortex is comprehensive and diverse, the central vestibular pathway is understudied. I am developing a reliable IR based method to investigate the ascending pathway of individual end-organ, especially the otolith organs, and reveal the role of vestibular input in higher cognitive functions.



Neha Joshi, M.S.

Neha Joshi is currently a graduate student in Electrical and Computer Engineering at the University of Maryland. Her research interests lie in representation of human speech in the auditory cortices, specifically in a multi-talker setting. She is investigating the neural correlates of stream segregation in the ferret primary and higher auditory cortices. She is also interested in differential processing of streams for varying stream types, such as math and language, in humans. In her spare time, she loves reading, exploring food and rock climbing.



Sarineh Keshishzadeh, M.Sc.

Sarineh Keshishzadeh is a final-year PhD student of biomedical engineering at Ghent University in Belgium. She is a member of the Hearing Technology group in Information Technology department, where she does research on developing personalized models of the auditory periphery using human auditory electrophysiological/physiological recordings. Her research interests are in auditory neuroscience, biological signal processing and pattern recognition.



Subong Kim, Ph.D.



I received my Ph.D. degree in Speech and Hearing Science from the University of Iowa in 2020. I am currently working as a post-doctoral research assistant at Purdue University in Dr. Hari M. Bharadwaj's laboratory. I have been studying the neural mechanisms of speech-in-noise perception in human listeners using high-density electroencephalography. My research aims to explore a systematic, biology-guided approach to personalizing hearing intervention, including hearing aids and cochlear implants. One line of my work involves investigating objective neural markers of hearing interventions' benefits and identifying what drives the individual difference in those benefits. Another line of my research is relevant to training listeners to selectively attend to the target speech while suppressing background noise to improve their speech-in-noise perception.

Renata M. Knoll, M.D.



Renata M. Knoll, MD, is a fully trained Otolaryngologist from Brazil, and currently a Research Fellow at Massachusetts Eye and Ear Infirmary (MEEI) /Harvard Medical School. She is currently studying auditory and vestibular dysfunction in patients following traumatic brain injury through a series of histopathological, experimental, and clinical projects.



Elouise Koops, M.Sc.

Elouise Koops is a neuroscientist who graduated with an MSc in Cognitive Neuropsychology and in Cognitive and Behavioral Neuroscience from the University of Groningen, the Netherlands. Her PhD-research at the University Medical Center of Groningen focused on structural and functional correlates of tinnitus and hearing loss. With Magnetic Resonance Imaging, the effects on the human brain of tinnitus, hearing loss, hyperacusis, and age were teased apart. She has also worked on subtypes of tinnitus and somatic tinnitus. In addition to her research projects, she is the program manager of the TIN-ACT consortium. This Horizon2020 EU project aims to unravel tinnitus by combining molecular methods with genetic and behavioral research to ultimately aid the patient. She will continue to work in the field of hearing research and will start her Post-Doc in the Polley lab at Eaton-Peabody Laboratories in Boston, USA, as soon as COVID-19 permits.



Jamie Lee, B. Sc.

I am a final year PhD Student based at the MRC Harwell Institute, under the supervision of Dr. Mike Bowl in the Sensorineural Hearing Loss Group. My doctoral studies involve elucidating the functional requirement of a recently identified, novel candidate deafness-causing gene, *Nedd4l*, to determine its role in mammalian hearing. Using a I am characterizing a *Nedd4l* knockout mouse model using a range of in vivo phenotyping tests, ex vivo and in vitro experiments. I obtained my undergraduate degree in Biochemistry at the University of Manchester, with a specific interest in the role of genetics in developmental biology and the underlying molecular mechanisms. During my undergraduate studies, I took a year-long research placement at the University of California, San Francisco at the Cardiovascular Research Institute.



Onn Wah Lee, M.Sc.



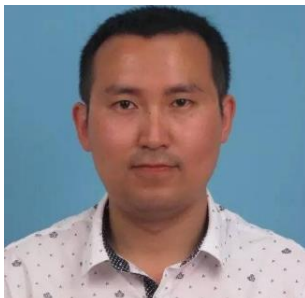
Onn Wah Lee (Steven) received his BSc. (Hon) Audiology from Universiti Kebangsaan Malaysia (UKM) and MSc. Audiological Science with Clinical Practice from University College of London (UCL). He was an audiologist trainee at Royal National Throat Nose and Ear Hospital, London for one year. He also served as a lecturer/audiologist at UKM for three years. Steven enrolled as a PhD student in 2019, under the supervision of Prof Colette McKay and Dr Julia Wunderlich. His study funded by the Graduate Research Scholarship from University of Melbourne. Currently, Steven is exploring the use of fNIRS in measuring the functional cortical change in population with hearing loss.

Shannon Lefler, Au.D.



Shannon Lefler earned an AuD in 2019 from Missouri State University and is currently completing the second year of a postdoctoral research fellowship in the Lichtenhan Lab at Washington University School of Medicine in St. Louis. Her research has focused on (1) understanding the origin of objective measurements from the ear that can be used in the clinic, and (2) making electrocochleography measurements during human cochlear implantation surgeries to ultimately predict the outcomes of post-surgical hearing performance.

Xiaojun Li, Ph.D.



My name is Xiaojun Li, and I am a postdoc in JHU. I am working on hair cell regeneration for three years. Besides research, I also like swimming and listening to music. I can play several instruments. I choose working on hearing as I like music so much. I want to know the mechanism of hearing in cochlea, especially some clinical hearing loss disease.

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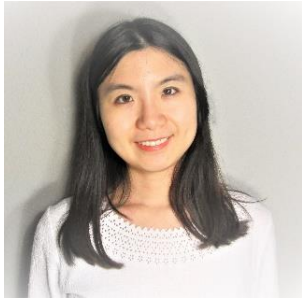


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Nantian Lin, M.D.

Nantian Lin is a second-year medical student at University of Texas Medical Branch at Galveston. She obtained her bachelor's degree in Nutrition from University of Missouri-Columbia and practiced as a Clinical Dietitian several years before switching career paths to medicine. She is passionate about research in otology and plans on pursuing Otolaryngology residency upon graduation.



Steven Losorelli, Ph.D.

Steven Losorelli is a fourth-year medical student at Stanford whose current research interests are to identify more objective measures of auditory discrimination from an individual's brain response. His long-term aim is to contribute to our better understanding of the relationship between signals delivered via neuroprosthetics such as cochlear implants and auditory perception. His interest in auditory neuroscience originates from his own experiences with right-sided microtia and associated unilateral hearing loss. Steven has been an advocate for those who identify as having a disability to pursue careers in medicine, including co-founding an initiative called Medical Students with Disability and Chronic Illness while a student at Stanford Med. He hopes to match into otolaryngology this year.



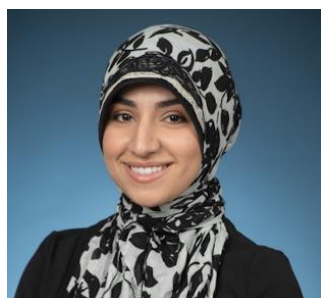
Elias Lunsford, B.S.

Elias Lunsford (he/him/his) is a PhD candidate at the University of Florida, Whitney Laboratory for Marine Bioscience where he works in Jimmy Liao's lab studying the neurophysiological mechanisms of lateral line hair cell sensitivity.



Kelsey Mankel, B.S.

Kelsey Mankel graduated with a Bachelor of Science in music, neuroscience, and psychology from Central Michigan University in 2016. There, she developed a passion for auditory cognitive neuroscience, particularly how the brain changes with experiences such as music training and auditory learning. Kelsey is currently pursuing a PhD in Communication Sciences and Disorders with a Neuroscience concentration at the University of Memphis under the guidance of Dr. Gavin Bidelman. She was recently awarded an F31 NRSA Fellowship from the NIH/NIDCD to fund her work investigating the neural correlates of successful auditory category learning.



Yusra Mansour

Yusra Mansour is a 26-year-old medical and PhD student at the Lake Erie College of Osteopathic Medicine in Erie, PA. She is co-matriculated as a fourth-year medical student in the College of Medicine and a doctoral student in the Anatomy Education program. She has also worked as a research assistant in the Auditory Research Center under Dr. Randy Kulesza for three years. The focus of her research is alterations in auditory and vestibular pathways in human and animal models of Autism Spectrum Disorder.



Kenneth Morse, Au.D., Ph.D.

Kenneth Morse completed his Doctorate of Audiology in 2019. He is currently enrolled in the Ph.D. program at Syracuse University and works as a clinical audiologist. His research interests include studying peripheral and central auditory nervous system function and dysfunction, primarily that related to the presence of tinnitus.



Youngmin Na, M.A.



I received the B.S. degree in 2015, the M.S. degree in 2017 from biomedical engineering from University of Ulsan, Ulsan, Korea. I am currently a Ph.D. student at the Department of Biomedical Engineering, University of Ulsan, Ulsan, Korea. My research interest includes the development of objective interpreting tools by using biosignals such as developing a mobile application to predict the hearing ability in noisy environment, decoding the heard words from electrocorticography, investigating listening effort using electrocardiography and speech intelligibility using electroencephalography. In my Ph.D. research, I aim to predict the speech intelligibility from electroencephalography using a deep neural network model. My awards and honors include the 2019 ARO travel awards (2019 Association for Research in Otolaryngology conference), the Excellence awards (2018 Korean Engineering Safety Health Art Society conference), the Global Ph.D. Fellowship Program (National Research Foundation of Korea).

Karli Nave, M.A.



Karli Nave is a PhD student at the University of Nevada, Las Vegas, pursuing her degree in Psychological and Brain Sciences with an emphasis on Development. Co-mentored by Dr. Erin Hannon and Dr. Joel Snyder, Karli asks interdisciplinary questions within the fields of auditory neuroscience and developmental psychology. Specifically, Karli's current focus is on the underlying neural mechanisms to children's auditory rhythm perception. Karli hopes to graduate in 2021 and is on the market for a post-doctoral position.



Jennifer Pineros, M.S.



Jennifer Pineros is a Ph.D. student in Biomedical Engineering at the University of South Florida (USF). She earned her bachelor's degree in Biomedical Engineering at the University of Miami (UM) in 2017. During her undergraduate career, Jennifer held leadership positions in the UM's chapter of the Society of Hispanic Professional Engineers while working in a Sensory & Electrophysiology lab researching the effects of localized therapeutic hypothermia to preserve neurons against electrode-induced trauma. She decided to continue her education and dive further into research in the auditory field; thus, obtaining a Masters in Biomedical Engineering at the USF and working on her Ph.D. Currently, her research at the Global Center for Hearing & Speech Research involves interdisciplinary investigations of the aging auditory system aimed at drug or therapeutic discovery, to prevent or retard the progression of age-related hearing loss (ARHL).

Emmanuel Ponsot, Ph.D.



Emmanuel Ponsot is a postdoctoral research fellow from the Fondation pour l'Audition working at Ghent University in Belgium since 2019. Emmanuel Ponsot was initially trained in Engineering at Ecole Centrale (Lyon, FR), and received a Master degree in Acoustics in 2012. He then turned to Psychoacoustics and Cognitive Sciences and obtained a Ph.D. from Sorbonne Université in 2015 on loudness processing and coding in humans. During his first postdoc at IRCAM (Paris, FR), he developed new psychophysical methods to explore the computational bases of social and emotional cognition in speech prosody. He then combined, in a second postdoc at ENS (Paris, FR), psychophysical and modeling approaches to characterize the perceptual mechanisms used to extract complex spectro-temporal modulation patterns from noise, in both normal-hearing individuals and individuals with hearing loss. Overall, his research attempts to provide a clear mechanistic account of how the human auditory system and the brain process complex acoustical signals such as speech, at both peripheral and central levels, and why this processing differs among normal as well as pathological individuals.



Ronald Pouyo, M.Sc.

Ronald Pouyo is born in Lomé, Togo. In 2012 He moves to Liège in Belgium at the age of 18 to study biomedical science and graduated in 2017 in Master Biomedical sciences – with a specialization in neuroscience. He started his PhD in the laboratory of Neurodevelopmental biology under the supervision of Professor Brigitte Malgrange. The topic of his thesis is to decipher the role of Nedd4-2 in the mouse inner ear.



Caitlin Price, Ph.D.

Caitlin Price is a clinician-scientist and postdoctoral fellow in the Auditory Cognitive Neuroscience lab at the University of Memphis. She received a Doctor of Audiology and Doctor of Philosophy in Hearing Sciences and Disorders from the University of Memphis. Caitlin's research interests include aging and the neural correlates of speech-in-noise perception.



Prithwiji Roychowdhury, B.S.

Prithwiji Roychowdhury is a medical student at the University of Massachusetts Medical School (Class of 2023), completing a year of scholarly research in the lab of Dr. Aaron Remenschneider at the Massachusetts Eye & Ear Infirmary. His primary research focus is on the otopathology of presbycusis.



Merlin Schaer, MMed

I am an MD-PhD student in the field of hearing biomechanics. I graduated from medical school at the University of Zurich in Switzerland, where I also joined the MD-PhD program and the graduate school of the Neuroscience Center Zurich (ZNZ). I am a member of the group of Otology & Biomechanics of Hearing at the University Hospital of Zurich, where my thesis project is supervised by PD Dr. Jae Hoon Sim and Prof. Alex Huber. On a general level, my research is related to protective and adaptive functions of the human middle ear. In this context, I have studied the interplay between structure and mechanics of the human stapedial annular ligament, which entailed the development of a nondestructive morphometry technique via multiphoton microscopy and experimental studies on the ligament's multidirectional stiffness properties. Furthermore, I have a strong interest in mechanical modeling and computational science.



Tong Shan, Ph.D.

I am Tong Shan from the University of Rochester. I completed my BS degree in Medical Imaging in Sichuan University (China) and then MS degree in Biostatistics in Northwestern University. I am currently a PhD student in the Department of Biomedical Engineering under the supervision of Dr. Ross Maddox. I am interested in studying how the human brain processes natural stimuli such as speech and music in both cortical and subcortical levels. I am also interested in how visual stimuli integrate with the auditory system to enhance people's hearing, and how we can improve people's hearing with our knowledge and new technology. In our recent work with our collaborators, we found the deep-neural-network system that generates talking faces from pure audio signals could significantly benefit speech comprehension especially in noisy environments, which suggests a potential for use as a "visual hearing aid" when true face is not available to listeners.



Lea Sollmann, M.Sc.

Lea Sollmann is a PhD student in the 'Auditory Sciences' program that is integrated in the cluster of excellence 'Hearing4all'. She is a scientific research associate at the Institute of AudioNeuroTechnology (VIANNA) and the Department of Experimental Otology at Hannover Medical School. Her doctoral research investigates the structural micro- and macroscopic neuronal changes as well as functional alterations in primary and secondary auditory brain regions. Especially the impact of auditory deprivation regarding neuromorphology and layering in the cortex are of interest. Through her research, she aims to gain further insight into the complexity of deafness effects within the brain to provide long-term results for rehabilitation. The topic of her doctoral dissertation is entitled 'Functional computational anatomy of the role of experience in the primary and higher-order auditory cortices' and is supervised by Prof. Andrej Kral, MD, PhD. She holds a master's degree in Neural Engineering from the University of Applied Sciences in Saarbrücken, Germany. During her studies she took the chance to work as Visiting Research Scholar at the Department of Speech, Language and Hearing Sciences at Purdue University, West Lafayette, IN, USA. There she participated in the design, conduction, and analysis of a psychophysiological study regarding auditory distraction in the laboratory of Prof. Alexander L. Francis, PhD. Previously, she received her bachelor's degree in medical engineering at the University of Applied Sciences in Jena.



Torin Thielhelm, B.S.

Torin Thielhelm is a rising fourth year medical student at the University of Miami Miller School of Medicine. He is interested in pursuing a career as a physician-scientist in the field of otolaryngology. He graduated from Duke University in 2016 with a B.S. in Biology. His current research interests include the radiobiology of vestibular schwannoma, hearing loss interventions, and 3D printing in otolaryngology.



Anna Vavakou, M.Sc.

I am a biologist by training, with a MSc in Neuroscience. I am currently finishing my PhD under the supervision of Dr. van der Heijden, studying the function of the cochlea. Now I work on the mechanics of the cochlea. The question I am trying to answer is which are the mechanisms underlying sharp tuning and sensitivity control in the mammalian cochlea. Using OCT-vibrometry I record sound induced vibrations in intact cochleae in vivo, working with rodents. My goal is that my work contributes in the understanding of the cochlear function. In the future, I want to apply my skills and knowledge in the development of hearing devices and regenerative therapies for hearing loss.

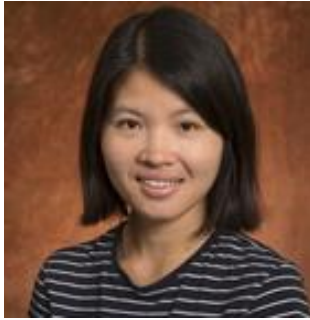


Megan Beers Wood, Ph.D.

Megan Beers Wood is a graduate of the University of Georgia (Cellular Biology, 2010) and Emory University (PhD, Immunology and Molecular Pathogenesis, 2016). Her first postdoctoral fellowship at St. Jude Children's Research Hospital under the supervision of Dr. Jian Zuo combined her background in immunology and epithelial development with noise induced pathology in the inner ear. She is currently a postdoctoral research fellow in the laboratory of Dr. Paul A. Fuchs at Johns Hopkins University School of Medicine where her current work focuses on the function of type II afferents in the cochlea after acoustic trauma.

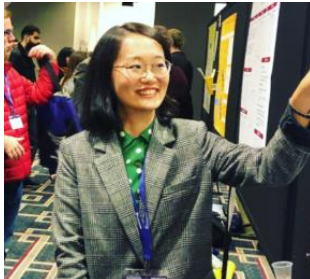


Xiaoyan Yu, M.S.



Xiaoyan Yu is a fourth-year graduate student in Yuan Wang Lab in the Department of Biomedical Sciences at Florida State University College of Medicine. Her research interest is in the neuronal mechanism of brain development and plasticity, and how their deficits are associated with neurological diseases. Her current work focuses on the role of fragile X mental retardation protein (FMRP) in regulating protein synthesis, synaptic development, and plasticity in the auditory system with integrating different approaches in genetics, cell biology, proteomics, and bioinformatics, and aims to explore potential molecular targets for the therapy of fragile X syndrome (FXS), which results from functional deficits of FMRP.

Yi Yuan, M.A.



I am a Ph.D. candidate under the supervision of Dr. Yonghee Oh in the Department of Speech, Language, and Hearing sciences at the University of Florida. I completed my BA and MA studies in the major of Linguistics and Applied Linguistics in China. My main research focus during that time was speech perception in prosody and its relationship with syntactic structures. Currently, I am interested in multisensory integration in speech perception with normal hearing- and hearing-impaired listeners. My doctoral dissertation entitled "Audiovisual integration in speech perception in noise." Specifically, the study is to establish which visual characteristics can facilitate speech perception and to explore the nature of the speech information that is available in the visual input. The audiovisual benefit has a strong application in technological enhancements, for instance, hearing aids and cochlear implants, to speech perception in adverse hearing environment. What's more, the implication will be more effective and compatible with variety of equipment including smart phones and other appliances, offering a giant leap in life quality for hearing impairments population and aging population. In my future research, I aim to describe the neural biomarkers associated with the multisensory (audiovisual) benefits in speech perception and to study the underlying neural mechanisms.



Celia Zhang, Au.D.

Celia Zhang, Au.D., CCC-A is a PhD Candidate at the Center for Hearing and Deafness, University at Buffalo. Her research interests include the role of the cochlear immune response in age-related and noise-induced hearing loss in mouse models of different genetic mutations.



Yuanyuan Zhang, Ph.D.

I received my Medical B.S. from the North Sichuan Medical college in Sichuan, China (2005). Then I completed the M.S. in Otolaryngology from the Chongqing Medical University in Chongqing, China (2009). I worked as a surgeon in otolaryngology department at Wuhan Central Hospital in Wuhan, China (2012). After I received the Ph.D. from the Tongji Medical College, Huazhong University of Science and Technology in Wuhan, China (2015), I started to work at Renmin hospital of Wuhan university as a physician in Otolaryngology-Head and Neck Surgery department until 2017. Then I joined Paul Fuchs lab to continue my postdoctoral fellowships in the Department of Otolaryngology-Head and Neck Surgery at Johns Hopkins University, America. My current research is focused on understanding the physiology and pathology of the Inner ear including: Understand the cholinergic synapse innervation to hair cell from the olivocochlear efferent neurons before and after the hearing maturation. Explore the function of the medial olivocochlear (MOC) system in acoustic trauma effects, the role of $\alpha 9$ nAChR in cochlear synaptopathy. The current training laid the foundation of my ongoing research on auditory physiology and pathology.



Nathaniel Zuk, Ph.D.



Nathaniel Zuk – I am a research fellow at Trinity College Dublin in the Lalor Lab for Computational Cognitive Neurophysiology. I use electroencephalography (EEG) to study how the brain tracks speech and music in time. My focus has been on developing analytical techniques to quantify the neural encoding of features in naturalistic stimuli and to decode those features from EEG. Recently, I have been interested in the following questions: How do we determine where beats are in a piece of music? Are there differences in the timing of neural activity when we listen to speech and music? EEG provides temporal acuity sufficient to address these questions. By using machine learning techniques, we can identify the neural processes involved when people listen to long, continuous sounds, like audiobooks or music. I received a PhD from the Harvard Program in Speech and Hearing Bioscience and Technology through the Harvard-MIT Program in Health Sciences and Technology. I did my doctoral work in the EPL Neural Coding Group with Bertrand Delgutte at the Massachusetts Eye and Ear Infirmary, where I studied how the inferior colliculus in the midbrain encodes time-varying interaural time differences (ITD), one of the cues we use to localize sounds.