

Meet the Researcher



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Wood received her doctorate in immunology and molecular pathogenesis at Emory University in Atlanta. She is now a postdoctoral research fellow at Johns Hopkins in the department of otolaryngology. Wood's 2022 Emerging Research Grant is generously funded by Hyperacusis Research.

I WAS INTRIGUED TO FIND that neurons in the cochlea expressed genes similar to pain-sensing neurons. Since my background is in immunology, I'm interested in whether the alpha-calcitonin gene-related peptide (CGRP α) in those neurons interacts with immune cells after noise exposure, like in other organs. I looked for CGRP α protein in type II peripheral endings after exposure and saw promising results. My current project allows me to learn more about this exciting observation, which may help with hyperacusis—an elevated sensitivity to everyday sounds.

I WAS INTERESTED IN SCIENCE from a very young age and wanted to be a doctor. My first "research" project was in 5th grade when I looked into how Super Glue could be used instead of stitches in some wounds. I was also lucky to come from a family with several scientists. On one side was my grandfather, who was a forester with a Ph.D. in plant biology, and on the other side I have two cousins who are scientists—one a chemist working for the Smithsonian Institution and the other a scientist working in biotech. So, I would say we are all a curious bunch, and that was encouraged at home by nature walks with my parents and science kits to play with.

AS A TODDLER I WAS DIAGNOSED with juvenile idiopathic arthritis. My experiences in teaching hospitals were very inspiring. One of my pediatric rheumatologists even oversaw my independent research study in high school, which was my first real introduction to scientific literature.

MY GOAL AS A RESEARCHER has been to explain rare phenomena. I recently gave a talk for Hyperacusis

Research. It was very rewarding, as I was able to interact with people experiencing the condition. It really helped me understand the mechanisms underlying hyperacusis.

I GREW UP AROUND MUSIC, so the experiential side of hearing has always been important to me. My grandmother wore hearing aids. I saw first and how uncomfortable they are and how isolated she became when the batteries got low.

LAST SUMMER I WORKED in a community garden. We grew 70 pounds of cucumbers and 15 varieties of tomatoes! I like to think I'm following in my grandfather's footsteps as he grew abundant vegetables. I also enjoy embroidery. I find free-handing shapes lets me slow down. It keeps my hands busy while I think over complex problems. —

Megan Beers Wood, Ph.D., is generously funded by Hyperacusis Research. We thank them for their support of studies that will increase our understanding of the mechanisms, causes, diagnosis, and treatments of hyperacusis and severe forms of loudness intolerance.

We need your help funding the exciting work of hearing and balance scientists. Please consider donating today to Hearing Health Foundation to support groundbreaking research. **Visit hhf.org/how-to-help.**