Interview Transcript (Dr. Banakis Hartl & May)

May

In this episode we are joined by Dr. Renee Michelle Banakis Hartl, who is an otologist as well as an associate professor in otology and neurotology at the University of Michigan Medical School.

Dr. Banakis Hartl, thank you so much for joining us today. My introduction was quite brief, can you tell us a bit more about yourself, and perhaps share with us what your job description is?

Banakis Hartl

Absolutely so you maybe unintentionally promoted me, I wish I was an associate professor, but I'm still an assistant professor. I just finished my long journey of training in July of 2020, and so I'm currently working at the University of Michigan as a clinical otologist-neurotologist, and I run a research lab out of the Kresge Hearing Research Institute. I spend my time, I split my time, about 75% of the time I'm taking care of clinical responsibilities and about 25% of my time is dedicated to research at this point.

May

Thank you so much for the correction there. Can you describe what maybe a typical day would be like for you? And is it a rather fixed schedule, or is every day just a new set of tasks.

Banakis Hartl

That's a good question. There's a relative structure. In order to split my time, I do have sort of some consistency. Usually on Mondays, I'm operating, which typically means a 7:30 OR start and I do both outpatient surgery and inpatient surgery. So the outpatient surgeries, of course, are done often at the outpatient surgery center. Patients go home the same day. Sometimes I'm there into the early evening, but rarely late. And then, of course, sometimes I'm working on inpatients. We work closely with neurosurgery, and we do a lot of skull-based surgery, tumor resection and things like that. And those days can be quite long, can drag

out late into the evening, and three hours if the morning on rare occasion. And then 2 days a week. I have a clinic. On Tuesdays and Fridays, I see patients from about 8 o'clock in the morning until about 5 o'clock in the evening. And I see primarily otologic problems and neurotologic problems. So patients with the whole scope of presenting things that an otologist sees patients for. So, ranging from hearing loss to cholesteatoma to skull-based tumors. All of the common complaints, ear pain, tinnitus, that sort of thing. The other 2 days a week, I have some dedicated research time on Wednesdays. I tend to be most present in the lab on that day. We have, right now, our lab meetings on Wednesdays. They're sort of scheduled in the middle of the day to try and accommodate all of our trainees from, you know, different backgrounds. Some are residents and medical students. So we try to involve everyone in that. And then on Thursdays. And there's a lot of academic responsibilities. I have some teaching obligations for the otology residents. But oftentimes that's my more flexible time.

May

That sounds like a lot of responsibility. But a very rewarding career. What is the most rewarding part of your job as an otologist, and do you think this is an aspect of your job that you'll never get tired of?

Banakis Hartl

I think, I think there are 2 things that I find very rewarding in sort of complementary ways.

One is clinical care. One of the reasons I went to medical school rather than pursue a Phd after my initial training was because I didn't wanna give up that connection to patients. I really love taking care of people with hearing loss, particularly like old people with hearing loss. I think helping patients navigate through that stage of their life, and the challenges that come along with aging and loss of hearing and communication challenges with people that they love, I think, is the most meaningful work that we can do. In particular, I really enjoy my cochlear implant patients who, we see kind of, you know, a drastic change in sometimes their life quality after. What I always said when I was going through medical school, what sort of drew me to this field is that, I think that there's all sorts of, you know, things that can happen to the body as

we get older. There's all sorts of ways that we can be devastated with cancer and trauma and horrible things can happen to us. But I think that if we don't have the ability to communicate about it with the people that we love, it almost doesn't matter if we have the problem to begin with, because, you know, being a human is about sharing our experience. And so I think that the work that we do in hearing and communication science is the most important work, because without communication, then we can't really experience life and share it with the people that we love. So, that's the clinical side of where I find meaning and work.

And then I also am, like I said, in a complimentary way, sort of motivated by the research that we do. I find trying to sort of challenge the status quo and ask difficult questions is really invigorating and when I have seen my 10th ear fullness or dizzy patient in clinic that I just have limited ability to help, I'm often drawn to the work that I do in the lab for inspiration, because I know that we can affect larger change than just on an individual level with the work that we do.

May

Do you find that it's also sometimes hard to balance between the two?

Banakis Hartl

Oh, girl, yes.

[Chuckle]

That is this picture that we have of all of the, the best, you know, all of our mentors and models. We think that they've got it all figured out. You know, in addition to the clinic stuff and running the lab, I have a family and children and a husband and I feel like I can't be good at all of the things every day. So if I'm a really good researcher that means probably that day was, I was totally neglectful of my patients, and I didn't spend enough time with my children. And if I was a really good mom one day, that means that my patients got neglected, or you know, all those paper reviews that I'm behind on didn't get done so, yes, every day is a struggle and very rewarding when you have the good days, but the mantra that I sort of started to embrace is just that I need to wade in the chaos and kind of live with some degree of uncertainty. Not every loose

end is gonna be tied up at the end of the day. And it's a challenge to live that way. But I think that's, you know, the only way that all of it is sustainable.

May

This is the kind of mindset that I'm trying to also adapt, which also actually provides a really good segway to the next part of our discussion, which is how you got to where you are now. To provide some context and Dr. Banakis Hartl, please correct me if I'm wrong, you completed a bachelor's of science and audiology and speech language pathology at Miami University, and then went on to pursue a doctor of audiology at Northwestern University before getting your Doctor of Medicine at Northwestern University. You mentioned in a previous article that you are the first in your family to become a medical doctor and researcher, and you described volunteering at a summer camp for 10 years, where you worked with children who are deaf to assist with their speech and language therapy, do you remember how you came across this opportunity? And what about this experience inspired you to consider pursuing a hearing related profession in the first place?

Banakis Hartl

That's all correct. Very vividly I remember all of this. I was 12 years old, and I was, I think, in gym class with a friend of mine who mentioned that she was applying to work at this summer camp. It was called Camp Happy Talk, and she said I should do it, or I should do it with her. And when you're 12 you do what your friends want to do.

[Chuckle]

So I applied. And I got invited to interview for the summer camp. And it was a particularly meaningful experience for a lot of reasons. We were some of the younger kid counselors that were there. There were older counselors who, you know, you looked up to and then the work that we did was just really really cool. The kids at the camp there were usually 28 kids from around the county who had IEPs for some speech language or

hearing problem. About a quarter of the kids had hearing loss. And back when I started they all wore hearing aids, because cochlear implants were very new and we didn't get a a child with a cochlear implant until probably the mid to late nineties. So all of the the deaf and hard of hearing children, most of them primarily communicated with sign language. And I thought that was really interesting. I thought the work that we did, even with the normal hearing children, was really cool. We would work on their speech therapy goals. We were paired sort of one on one with them. The feedback that we would get is that there were particularly like a kid with articulation problems would come, spend the summer at this camp and then return to their speech therapist, you know, in the fall, and be discharged from therapy because they had made so much progress.

And so that was really neat. And I really, of course, was drawn to sign language because it was beautiful. I had never experienced anything like that, so I started learning sign language, and I wanted to be an interpreter of the deaf or a speech pathologist, and ultimately, decided to go pursue speech pathology, initially. And I went to college to do that and very quickly realized, I am not built to be a speech therapist. Working with kids with articulation problems and language problems is a skill set that is not my is not really one in my wheelhouse but audiology was really interesting. And I was sort of unique to the audiology field in that I was fluent in sign language, and I thought I could, you know, provide sort of this, you know, unique perspective on care.

And so then I went to graduate school for audiology, and while I was there I took a cochlear implant class, and I had never visited a hospital for any reason. I'd had a like fortunate that none of myself or my family members had many medical problems, and we were offered the opportunity to observe cochlear implant surgery. And the first time I went I nearly passed out, but after I didn't pass out I thought it was a really neat experience, and I asked if I could go back and observe more cochlear implant surgery or other kinds of surgery.

And so in the operating room, there's often a lot of trainees lined up, and the surgeon, Dr. Alan Micco, would go down the line and sort of you know he would do what we call “medicine pimp” like he would ask all you know, everyone questions about anatomy or physiology, and he went down the

line and I was standing there, and I knew the answers to his questions, and he kinda turned to me, and he's like, “Who are you and what are you doing in my operating room?”, and I was like, “Oh, well, I'm one of the audiologists or audiology students, and I'm observing.” and he kinda said, “You should go to medical school. If you think this is interesting, you belong in medical school.”

I thought, there's no way. I'm not smart enough to be a physician. It's not, don't you have to take tests? But he kind of inspired me to look into it. And right around that time I was questioning where which direction my career was gonna go, and ultimately I decided to go with medicine. So here we are.

May

So early on, you knew that you wanted to do something related to hearing which led you to pursue a doctorate of audiology, and you mentioned that you really liked the experience and interaction with your patients.

Were there any other pivoting factors that made you decide that, yes, you're gonna transition from audiology to otolaryngology and medicine.

Or were there any factors that made you a little hesitant because I assume that when you pursue a doctor of any sort, it's already a pretty high point in your career, and to then decide to continue with medical school for another 4 years, were there any other reasons that contributed to your decision?

Banakis Hartl

I made the decision to go to medical school during my final year of audiology training. It was a challenge for a lot of reasons. Like you said, you know, I was, like, supposed to be reaching that finishing line and like going out into the world and being a grown up.

The people in my life, you know, my family, of course, supported me, following what I wanted to do. But there was a lot of questioning like, you're gonna go to school again, how much debt are you gonna take on, how are you gonna manage all this? And truthfully, like I spent my whole life thinking I was gonna be a speech therapist or an audiologist. So I hadn't taken chemistry or biochemistry. I was in no way prepared for medical school.

I was starting to see the field of audiology, and how people practice in audiology, and I really wanted to be someone who practiced sort of at the the top of my capacity. You know, I felt like I had this experience and this expertise that wasn't fully appreciated always in the clinic. This is certainly variable, and there are many, many great physicians who work really well and very collaborative relationships with audiologists, but I also had my fair share of experience where I was sort of trumped because I didn't have the right degree.

I knew that I wanted something else. And the the kind of the pathway that was typical that you see many audiologists take is that they go get a Phd, and then they're able to do a bit more research-wise, run labs in some cases, you know, run divisions, be you know, more leaders in the field, and I saw that as the primary opportunity, but I also saw the limitations of maybe that would come with less less ability to affect patient care. That was sort of what I was struggling with at the time. But ultimately, you know, my desire to sort of connect with people led me to to stick with the clinical-medical route.

Looking back on that decision, I don't know that that was the most informed decision at the time because it was a long, long time ago. Back in, I mean, it was 15 or 20 years ago when I made that decision. Certainly medicine and clinical care and the field of audiology also have changed drastically. The factors that weighed in really were that that desire to be able to to really take the lead in patient care and bring this perspective, this audiologic perspective about communication and the psychosocial aspects of hearing loss, and all of these things that medical doctors know a lot, but they don't know audiology, and they don't understand the things that we study and the perspective that we have, and I felt like maybe I would be able to help bring a voice to the profession and sort of, not necessarily represent audiology, but help to to

lift that voice of the audiologist and of our profession, and point out where in medicine sometimes it was lacking.

May

I think you bring up a very valuable point in that bringing a unique perspective into patient care can be very helpful, and I think a lot of students these days who may be thinking of pursuing medical school are too focused on, you know, what's the best major to get into medical school, including myself. But sometimes I think we need to remind ourselves that, offering unique perspectives and perhaps personal experience in this field can be a valuable asset to have when you're giving care to patients who need that connection.

And speaking of medical school, I think for many of us outsiders or individuals aspiring to pursue a career in medicine, medical school has a somewhat intimidating reputation of having a rigorous curriculum, and it can be really hard to maintain work-life balance.

Having survived medical school yourself, and clearly are doing really well since then, do you think your experience in medical school attests to this perception, and for everyone listening to this podcast who is either a medical student, or hoping to get into med school, what were some strategies that you use to help alleviate some of the stress or maintain your overall wellbeing during that time?

Banakis Hartl

Firstly, the more life experience that you accumulate, how stressful your life can be is often how stressful you make it.

Before I went to medical school, I had to do this thing where I had to take all these prerequisites for medicine, because I had never taken a chemistry class, and so I was finishing up my AuD, and I was doing my externship. So during my externship, I was working basically, like, you know, a clinical audiologist somewhere around 40 hours a week. And then at night, I was taking biology and chemistry classes, like whatever like bio 101, or chemistry 101, so I was doing that in the evenings. Two evenings a week I would, at like 6 o'clock I'd leave work, and I'd go up to

Evanston, take the train, and I'd go to these classes that were 3 hour lectures, and then on Saturdays we had the labs for those classes which were each 4 hour labs so I did 8 hours of lab on Saturday, and then on Sunday I was taking MCAT prep classes.

I would say, for about 3 or 4 months, this was my schedule every day, which was really rigorous, very hard to live up to, but I told myself, if I couldn't do that, then there was no way that I would hack it in medical school.

And then I got to medical school, and it was in some ways, this schedule was way easier. It's interesting that I sort of set myself up that medical school was gonna be this horrible hard thing, and in many ways I had a lot more flexibility in my schedule than I anticipated.

But certainly it was very stressful, because I knew I I went in day one, and I was like, I'm gonna be a neurotologist. The other doctors, like the mentors and and the advisors, they'd be like, "you mean, you wanna be a neurologist" and I was like, "No, no, I wanna be a neurotologist". I have to do ENT residency, and then I have to do this fellowship and it's all very competitive, so I did feel that stress and that pressure, you know, had to get good scores on my MCATs, and, you know, get honors on every rotation. And all of that sort of thing. Get good letters of recommendation. And I think that the things that helped me the most were the personal relationships that I had, the people who like my family and friends who were there for me, and would listen to me, gripe and complain. Taking time to be with them, taking time to do the things that I love to do. I played like intramural soccer and went running. It was before I had a family.

It's so hard, but trying to remember that perspective. There's always a little bit of chaos and if I could offer advice to former Renee, I would say, letting go of some of that desire for perfectionism, because when you're a student you can get straight A's, when you're in medical school you can get all honors. You can be, you know, top your class, but when you get to be a resident, when you get to actually taking care of patients, there's no A's anymore. There's no black and white. There's so much gray, and you can do everything right, and you will still have these tragic moments. You will still lose patients, and you will still make the wrong choices, even

though you did the best you could with the information that you had at the time.

It wasn't until, like finally coming through that I realized, so much of what we do in medicine and clinical care is not as clear cut as we want it to be.

We spend so much time striving for perfectionism, when when in reality, working on the things that matter, like how to talk to people and how to how to help people through difficult times when we, when we really are out of tools, to help them, maybe with the the disease or the treatment that they they have, or they can't have that would be the advice that I would give you would be to to to realize that that the perfection that you're striving for, that perfect application, it feels really important in the moment, but when you look back on it, you'll, you'll say, gosh, this mattered so little compared to the the work that we really do.

May

After obtaining your MD, you completed your residency in otolaryngology, head and neck surgery at the University of Colorado School of Medicine.Can you tell us a little bit about what that experience was like? And how is it different from medical school?

Banakis Hartl

Residency is in some ways the hardest thing that you do in medical training, because you're working all the time. Even if you're not at the hospital, you feel the need to be following up with clinical things or building your resume or doing research. And this is kinda like what I mentioned, the first time that you run up against like, there's not always a right answer. We all struggled with it. I saw a few people who were really great students really struggle with this that they couldn't be perfect anymore. That's a hard realization, but it's also the the coolest, most rewarding time. You're with this cohort of people. It's almost like trauma bonding, where, you know, you have this experience with your co-residents. They're sort of like your family. They're the only people that

really understand how hard you work and the losses that you suffer and the joys that you experience

It almost is like summer camp in that way that, like a lot of intense emotions and and when it's all over, you kind of think, oh, thank God, it's over! But then, you kind of now practicing faculty. I'm not alone, but you know everyone's sort of in their silo, and that that camaraderie is missing. So I definitely miss that part of of residency.

May

Beside your professional experience in audiology, medicine, and teaching, I understand you're also actively involved with research and various topics regarding hearing loss, including single sided deafness, cochlear implantation, you also shed light on different types of surgery conducted in this field of medicine.

I'm curious to know, what is one distinct topic in hearing loss research that you think needs to be better understood or and has a lot of potential in terms of improving the current clinical practices of hearing loss treatment.

Banakis Hartl

It's a really good question.

I remember when I was like, on my first day, or you know, the very beginning of audiology training, maybe not the 1st day, but I was in my like introduction to audiology class and it was taught by Sumit Dhar at Northwestern, who's an amazing audiologist and a and a great mentor and friend, we were talking about outcomes for hearing loss like hearing aid outcomes probably, is what we were referring to at the time, but he pointed out that, we don't have any good metrics for outcomes, for hearing loss, you know, hearing aids. How do we evaluate which hearing aid is best? And we don't have a lot of data that shows any intervention that we do, other than directional microphones and hearing aids, can really influence all the programming strategies, all of the things that all

the companies are trying to do. We don't know that any of it has any meaningful benefit, because we don't have a good way of measuring it.

And it's interesting, because I think that as a field, we rely very heavily on some of these clinical tests and we don't have a lot of great suprathreshold test of hearing. And I think that that ranges from, you know, not being able to really, very accurately characterize, you know, what some people call “hidden hearing loss”, or subclinical hearing loss, all the way to people with cochlear implants, single sided deafness, not really being able to fully capture their experience, the benefit and the lack of benefit in some cases that they get with the metrics that we have.

Single sided deafness is is an interesting topic. And the reason, I think, that it's interesting, is it really brings to the forefront binaural hearing, and how our ears work together. And gosh, of all the things that we don't have a good test for, binaural hearing is is really one of them, and I think I think that is an area of our, in our field that's really right for some collaborative effort to come up with, what are the best metrics that we should be using to quantify what people are experiencing in terms of the loss? What are the best metrics to qualify patients for the interventions that we have to offer? And then, are those metrics hopefully also good at demonstrating an improvement?

You know, I think about cochlear implants for single sided deafness. And the way that we qualify someone is that we put an earplug and a big muff over their normal hearing ear, and then we play sound to their deafened ear, and we're like, see, they can't hear. And you're like, but in what, what version of the world is somebody with single sided deafness walking around like that? That's not the deficit that they're experiencing.

What I hope to do, and I, this feels like a really big task, but one of the things that I I work towards is this idea of, can we find a better way of characterizing the deficit? Because maybe all these interventions aren't necessarily appropriate for every person, but can we identify who would benefit the most if we're actually testing the problem that they have.

May

I can really relate to what you're saying, because cochlear implantation doesn't really work for me and sometimes I feel like there's a lot of, like you said, gray areas in this field where the most common kinds of treatment isn't accessible or available for everybody, depending on what kind of deafness you're experiencing, and it can be really hard to evaluate that clinically, so thank you for your insights on that.

Looking back, what was the most challenging stage of your career or path to being where you are now and who you are today?

Banakis Hartl

Oh, the most challenging…

Well, it's funny, because I think that we all suffer from this thing where we think that the stage we're in now is the hardest stage, [chuckle] which is probably not true, but I am sort of faced with like being an an early researcher and trying to build you know, a lab and a career, and and it feels like this period of time really matters like, I have to get this plane off the ground, or it's never going to fly.

So, that feels really stressful, but I sleep enough now, because my kids are old enough that they sleep through the night and you know, I'm not constantly on call as a resident.

I think that in a lot of ways, probably, residency was the most challenging part of my my training because it is just so all encompassing. And I think that the other thing was I had this end goal where I wanted to be this person that hopefully I am now, or I'm working towards being, but like I had to do general medicine training, and I had to do like all the general ENT stuff, like, I'm famous for complaining in residency about having to treat nosebleeds. Because, I would, I would, like, you know, get called in the middle of the night, there's a nosebleed that they can't stop, and I'm like “All anyone needs to do is just hold pressure on the nose”, and I'm like, “how many years of graduate training does it take to just pinch someone's nose for 20 minutes”. I would get so worked up about it.

And so I think in a lot of ways like, those things are certainly helpful to have, like a general knowledge base, but waiting through that time, and like, kind of having to go through what felt like, not related to what I was

most interested in was maybe one of the the most challenging aspects of the long journey that I've been on.

May

For younger individuals aspiring to pursue a career in otolaryngology or audiology, or any hearing related field, I know you already mentioned that maybe taking it easy about trying to be perfect all the time, was a great suggestion. Do you have any other advice to give them? Or do you have any suggestions on how they can start their careers and get into this field early on without having that extensive career experience?

Banakis Hartl

I think people who have not gone the traditional path are often like easy to spot and easy to want to advocate for, because they bring something different to the table. And so, sometimes it's hard to go back in time and like, take a gap year in medical school or travel when you're in undergrad if you're already finished, but I think that those experiences tend to be the ones that will set you apart and make you more well informed as a person, but also more distinct as an applicant.

I think there are some interesting opportunities that are available to people who are specifically, they know they have this interest in hearing science, for whatever reason. There's, research fellowships that people can do during medical school. You can take time off. You can work at the NIH. The NIDCD has funding like for intramural researchers to come for a year and work at NIDCD, which would be super cool opportunity.

There are other places around the country. I I actually have a medical student working in my lab right now. He's at a a medical school that doesn't have a have like a home otolaryngology program. We call them like orphan medical students. And he's rotating through the lab, and I think that for him, his year here has been super formative and has certainly strengthened his application. I hope that he'll have an excellent match when he goes to match for residency. So those kind of experiences and opportunities exist for people who know.

And then I guess the other thing would be, find out what is it that motivates you as an individual and really tapping into to to that, because

there will be there will come a time when it's 2 o'clock in the morning, and you're pinching a nosebleed, and you're like, what am I doing with my life and having that internal sense of purpose and interest, is sometimes the only thing that feels like it will keep you going. So, making sure that that's really what you want, and knowing why, and clarifying that can also be really helpful.

May

So understanding what's motivating you, building those unique experiences, and don't worry too much about pursuing the premed route.

Banakis Hartl

You were able to summarize what I said so beautifully. It takes me 10 minutes to say it, and you got it all in one sentence.

May

I thought we could conclude our conversation with a light and fun question. Despite your successful career journey, if you didn't pursue a hearing related profession, what other career paths would you have considered or is there a career or job that you're particularly curious about?

Banakis Hartl

I always said that, I really thought that the Supreme Court was super interesting. And I told people that I would love to be a Supreme Court judge, because I'm really judgy. I watched a lot of, like, Judge Judy back in the day, and I do love a good, I do love a good courtroom drama. I don't know that I would have really been able to hack it as a lawyer, but, I think I would have really enjoyed being a judge.

May

Well, thank you for this wonderful discussion.

That concludes our conversation in this episode A Day In the Life of an Otologist. Dr. Banakis Hartl, thank you so much once again, for your time and for all your great insights that will hopefully help all the aspiring

otologists and listeners of our podcast have a greater understanding of otolaryngology as a profession. We wish you all the best in your future endeavors and career.

Banakis Hartl

It's an honor. Thanks for thinking of me.

[End of dialogue]