

The sleep/wake cycle and autism with Ashura Buckley

The NIH neurologist talks about her research, her family and how mental health labels can be limiting.

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This transcript has been lightly edited for clarity; it may contain errors due to the transcription process.

[opening theme music]

Brady Huggett

Here we are again, with "<u>Synaptic</u>," our podcast that explores the people, the science, and the challenges of autism research and, to some extent, the greater neuroscience space. My name is Brady Huggett, and I'm the host of this show. Today, we're going to start in 1852, when a post office was established in Maryland, not far from the Potomac River. Nearby was a Presbyterian church called the Bethesda Meeting House, and because of this, the new post office was designated to serve an area called Bethesda.

But the post office failed within six months, and it would take another 10 years for the government to decide to try again. The location for the new post office was in William Darcy's General Store in the downtown area, and for a while, people simply called the post office and the surrounding area Darcy's Store. But when Darcy himself no longer served as the postmaster, the Bethesda church pastor and some other people petitioned to change the name back to Bethesda.

And indeed, on January 23, 1871, the name for the area the post office would serve was legally changed, and Bethesda was officially born. Today, Bethesda is a suburb northwest of Washington, D.C. It has a population of about 68,000 people. About 70 percent of those are white, 11 percent are Asian, about 9 percent are Hispanic or Latino, and about 5 percent are Black. And I'm telling you this information because Bethesda is where Ashura Buckley lives. She lives in a little neighborhood almost literally in the shadow of the NIH, where she works.

In fact, she and her family chose this location specifically for its proximity to the NIH. As she says in this interview, she can leave her house on foot and make it to her job in about 11 minutes. But in choosing this place for her home, she had to balance her career and what would be best for her children. And we talked about that in this episode, the kind of balancing act that families do, weighing jobs against schools and the needs of children.

It's the sort of thing that families do all the time, actually, and certainly, Ashura's family did this when she was growing up, and we talked about that, too. But we also talked about race, which is why I gave you the 2020 demographic data for Bethesda. Bethesda is mostly white, and Ashura is Black, but living in an area with that makeup is nothing new to her, and we talked about that on this episode. And of course, we talked about the NIH and the study of sleep and its relationship to the brain, and mental health, and autism.

All of that in the next hour. I recorded this interview in Ashura's home, two mics over a table in a corner of her kitchen. She relegated her dogs to some other part of the house to keep them quiet. Her husband was not there when we started, but he came home shortly, and you'll hear some light kitchen noises as he made his entrance to the room and then slipped back out. Listen, I loved talking to her. When it was over, I was sure I understood her better and her work better, and that's not uncommon after interviewing someone.

In fact, that's the point of interviewing someone. But in this case, I also thought I understood humanity a little bit better, and that does not always happen, and that felt valuable to me. So let's start here, where Ashura Buckley and I are talking about her commute time. This is your episode of "Synaptic" with Ashura Buckley, starting right now.

[transition music]

Because — as I said, I drove down last night, but you — can you walk to work?

Mm-hmm.

Brady Huggett Is that why you live here?

Ashura Buckley

[laughs] Partly. Yes, I can walk to work, and it has been wonderful. It's about 11 minutes, door to door. I'm a fast walker, I have to say, but it's about 11 minutes door to door to my office, and when I moved into this place, my kids were still in school, middle school, and so it was either be close to school or be close to work, but anywhere that wasn't either one of those things, it was going to be impossible to do.

Brady Huggett

So you couldn't get them both, you're saying?

Ashura Buckley

No, I just — I wanted to be one or the other. Like, if I needed to be splitting my time, I needed to be either close to work or close to the schools.

Brady Huggett Right, so you have to, like, do the pick-ups and drop-offs at school, but you can walk to work in 11 minutes. [crosstalk]

Ashura Buckley Exactly. Exactly. Yes.

Brady Huggett Perfect.

Ashura Buckley Yes.

Brady Huggett

Yeah, that's not a bad way to do it. I mean — so, I live in New York, and I honestly think people's quality of life depends on their commute, whether it's an hour and a half from Queens, or 15 minutes on one train. It really matters.

Ashura Buckley

It does, and as the kids got older, and they learned to drive, and they were more independent, the Red Line's right here, and so they can actually walk to the Metro if they didn't want to drive, but because I'm a doc, your hours are not set. You're not like 8 to 5, and then you're done. And so if I needed to be anywhere quickly or pop in and see a patient, or, you know, talk to a research assistant, or clarify something, I need to do, um, whatever clock it was, this turned out to be the best solution.

Brady Huggett

Right. So if someone said — I don't know, for some reason, somebody showed up, "I can be there in 10 minutes."

Ashura Buckley

Yes. [crosstalk]

Brady Huggett

You can actually be there in 10 minutes. [crosstalk]

Ashura Buckley

That's right. I can be there in 10 minutes, walking. [crosstalk]

Brady Huggett That's kind of amazing. So, you've — How long have you been in this house?

Ashura Buckley So, um — 2011.

Brady Huggett Oh, OK. So coming up on 12 years.

Ashura Buckley Yeah, a dozen years, yeah. Yeah.

Brady Huggett But you were not — You're not Bethesda by birth, I don't think.

Ashura Buckley No, I am not Bethesda-born, which I think sounds funnier. I grew up in New York.

Brady Huggett You did?

Ashura Buckley I did, but not Manhattan, and so, that's always the first question. People are like, "New York, New York?" So, not New York, New York —

Brady Huggett New York State?

Ashura Buckley New York State. About an hour north, yeah.

Brady Huggett Oh, where? What part?

Ashura Buckley I grew up in a town called Somers, New York, which is on the Westchester-Putnam border.

Brady Huggett I can see it on the map, but I've never — I don't think I've ever been there.

Ashura Buckley Um — So, Mount Kisco, Katonah, do you know that line?

Brady Huggett Yes.

Ashura Buckley Yes.

Brady Huggett

Yeah. So, OK, how is it that your family was there? Was it a long lineage there, or did you move there?

Ashura Buckley

You know, not there, but in New York, yes. So, both my mom and my dad are, like, generational New Yorkers. My dad

grew up in Queens until 10, and then upstate New York for the rest of his life. But his family had been in New York City and Queens for generations and generations. And my mom grew up in Washingtonville, New York, also sort of up there in Orange County, and they had been there forever.

Brady Huggett

Forever.

Ashura Buckley

So, I think in the '70s, you know, my mom stayed at home, she's a homemaker, and my dad had a business in the city, and he didn't, like a lot of folks, want to raise his kids in the city.

Brady Huggett

Yeah.

Ashura Buckley

He wanted to raise his kids in the suburbs with, you know, the idyllic, better schools, and property, and that kind of thing.

Brady Huggett

As was — Well, I mean, especially the '70s, right? I mean, New York had come out of a bankruptcy, and it was a worse city, I think, than it is today.

Ashura Buckley

Yeah. So I was born in '72, and I think we moved - I was born in Staten Island.

Brady Huggett

Oh, you were?

Ashura Buckley

Yeah. Yeah.

Brady Huggett Oh, so your family lived there for a while.

Ashura Buckley

Well, we moved because — They kind of did, like, the move away from Queens gradually. And so, then I was born in Staten Island, and then, in my sort of early babyhood, childhood, they moved a couple of times, and then settled in Westchester, when I was 5. So I started kindergarten in Westchester and then went through age 15, when I left for boarding school.

Brady Huggett

So both your families, your mom and your father's side of the family, the lines originated in the city and sort of migrated out.

Ashura Buckley

Well, I think my mom's originated in upstate.

Brady Huggett

Oh, OK.

Ashura Buckley

Like, they're like old, I mean — You know, it's funny, I don't know if you have a relative like this, but my mom, in the last, like, 15 years, has gotten very, very into genealogy, and it's so much easier now, right? Because you could get online, and she's met all these different cousins, you know, reconnected with folks that she knew when she was 10 and 15. And so she is putting together everybody's, you know, both my maternal and paternal side, for the grandkids.

And yes, their lineage goes back generations and generations and generations in upstate New York, like farm folks and mountain folks. She's got all sorts of names for the different lines. But my dad's family was in New York City until they came up, or he moved up.

Brady Huggett

Was your dad's family like the typical — some immigrant moved into the city, and then they —?

Ashura Buckley

No, I don't think so. I think both my parents are long-term Americans, as in — came to this country in bondage, married whomever was around, you know, generation after generation, early sort of Black freed folks on my mom's side and professional people who had migrated up north on my dad's side. And so, yeah, it's funny, I didn't really realize that until you sort of get older and out in the world, and you meet people from a lot of different places, that there's sort of a lot of different lines of the sort of African diaspora.

Brady Huggett

Yeah.

Ashura Buckley

We are very sort of ensconced Americans.

Brady Huggett

Yeah, this, um - I — because I don't — you know, so I live in New York, and I lived in New York for many years now, but do you have any thoughts of Staten Island? Because it is, you know — especially among Manhattanites, I think it has like a reputation as being this sort of outward borough that nobody wants to go to, they vote conservative out there, that sort of thing. And I'm wondering if you have any thoughts on that.

Ashura Buckley

I don't have any particular thoughts on it, because I was a baby, but I — but — not any personal sort of memories. But it's funny that you say that because that is the reaction, right? People don't expect a Black progressive woman doctor to be like, "I hail from Staten Island." They have a very different idea of who lives and votes there, and how it goes. But I think, like all things, I don't think any place is really that simple.

And certainly, when you were in my mom and dad's shoes, they were pushing boundaries, I think, a lot, right? Because my dad was looking for something that wasn't what he was allowed to do or be. And so, I think maybe they found themselves in some places that weren't the places that people thought that they would be in.

Brady Huggett

Right, and Staten Island would be one of those.

Ashura Buckley

I think, maybe, from — from what — you know, the reaction that I get when I tell folks I was born there. I know my mom has gone back, and I don't wanna speak for her, that she has gone back and visited sort of their early neighborhood and their neighbors. And some of their neighbors are still there. That's like 50 years ago. Some of these folks are still there. And she always speaks very, very warmly of them, and the people that remember her. They remember — I'm one of eight, right?

Brady Huggett

Oh, you are?

Ashura Buckley

Yeah, so there were three above me who were there, and they always speak really fondly of — they remember my older brother, my older sister. So I think, you know, things are not as simple, maybe, as they seem.

Well, they never are. Because I remember, the first time I ever came to New York, well, as an adult, someone was like — we were — I don't know where we were. I couldn't tell you now, because I didn't understand New York's, the geography of it, as well as I do now. But we were someplace where you could sort of see out over the bay, I think. And they were like, "That stankin' island over there." And I was like, "What do you mean?" And they're like, "It's just like a garbage dump."

Ashura Buckley

Oh, that's terrible.

Brady Huggett

Yeah, it was really — And I was like, "Oh." And in my mind, I was like, "I guess nobody goes to Staten Island." But then I moved here. I was like — I've been out for the Staten Island Yankees. I've gone out to eat pizza. It's actually not an island of garbage.

Ashura Buckley

Right, thank you for that.

Brady Huggett Yeah, no, completely.

Ashura Buckley My birthplace is not an island of garbage.

Brady Huggett

No, no, not at all.

Ashura Buckley

Yeah, so I think — I think those are kind of the things. And what's good about that is, you know, you hold those perspectives, then, going forward, in any — in every stage of your life. Things are just not as simple as you'd like them to be.

Brady Huggett

I mean — I think that has to be a great base to do science.

Ashura Buckley

Yeah.

Brady Huggett

This understanding that things are really not, you know, black and white as we think it is. And you have to really get down in to figure out what stuff is.

Ashura Buckley

Yeah, that's absolutely what drives me.

Brady Huggett

Really?

Ashura Buckley

Yeah, absolutely. I mean, I went to college to go to med school and thought — You know, I knew that I was gonna do that. I loved biology. I knew I was gonna do that. I was one of these people who was, like, enamored with helping. I was one of those little helpers. And this is what I was gonna do. But I went to be an OB-GYN. Like, that was how I saw myself. Like, I was gonna, you know, bring new life into the world. And this supportive — sort of had a very strong feminist bent.

I really thought that was the thing. And my life didn't turn out that way at all. But I think the things that I study now are sort of much more in keeping with, um, the things that go through my head on a daily, which is — it's beautiful to deliver a baby and know what the gestational progression should be, and to be helping. But there was always sort of the "why" questions about other things, things that were a part of medicine, but really much more part of society, and, more broadly, kind of much more part of life.

Like — and I came to work, eventually, for a long time now, in the Institute of Mental Health. But that, to me, is really — it's not — I don't think that I'm looking for diagnoses. I think I'm looking to decrease suffering. In order to do that, you have to sort of have an understanding about humanity. So it's not super unsimple, I guess, is what I would say.

Brady Huggett

This — we're gonna have to go backwards in a second, but for, like, this idea that if you had been an OB-GYN, then you might have delivered 1,000 babies in your life, which would have been kind of an amazing, beautiful thing.

Ashura Buckley

Would be beautiful. [crosstalk]

Brady Huggett

But there might not have been that sense of exploration that you get doing research. Is that right?

Ashura Buckley

That is right. But I will say, going back a little bit, the decision tree, where I deviated from being an OB-GYN into being a neurologist, was also not something that I was conscious of doing for that reason. So, I actually had my daughter as a third-year medical student, and my son as a pediatric intern. And it was becoming a mom during my training where I thought — you know what? I love OB-GYN. I cried when I told my mentor I was not gonna do it.

It was like — It was — it was very traumatic to let it go, but the work-life balance of being a surgeon and an obstetrician, and having a newborn, and later, a newborn and a toddler, was just not — I just didn't think that was practical. And so I went to all of these wonderful folks who are my mentors. Um. There was a wonderful neurologist named Nicholas Len, when I was — when I was a med student and a resident, and I said —

You know, I'm in this state where I'm grieving the loss of what I thought I was gonna do, and I'm thinking, "Where is my direction?" And I, and I had sort of become close to him because I was interested in what he was doing, and he was like, "Oh, you're gonna be a child neurologist." [laughs]

Brady Huggett

Seriously?

Ashura Buckley

Yeah, he was wonderful. And so I did a little sort of hanging out with him, and thinking, and he was like, "You know, you love this stuff. Yeah, I can hear you talking about it. You know, you have an aptitude for it, and it's fun, and you're investigating, and you're gonna keep being able to ask questions." And so, when I let go of being a surgeon mom, OB-GYN, that mentor was sort of what pushed me into — I do like this. In fact, I love this. And so that's kind of how it happened.

Brady Huggett OK. Born in Staten Island.

Ashura Buckley [laughs] Yes.

Brady Huggett You're the fourth of eight. **Ashura Buckley** I am the fourth of eight.

Brady Huggett And then, whatever reason, your parents are like, "We're actually gonna move —"

Ashura Buckley Yeah, they wanna go further out.

Brady Huggett Further out. Right, so they —

Ashura Buckley They wanna have property, they wanna have a pool, they wanna give their kids —

Brady Huggett [crosstalk] And they have eight kids. Yeah, the pool, the whole thing.

Ashura Buckley They wanna give them the whole thing, yeah.

Brady Huggett So you probably have, based on what you just said, some sort of, maybe, like, idyllic childhood, where you've got —

Ashura Buckley No.

Brady Huggett You got neighborhoods, and you can go — I don't know.

Ashura Buckley Nothing's ever simple, right?

Brady Huggett Yeah.

Ashura Buckley

Like, back to our first theme. Yes, so it was — this is interesting, because this is sort of, I think, what I've come to think of as a suburb, right?

Brady Huggett

Bethesda?

Ashura Buckley

You walk to the city, it's much more, you know — it's close in. But we moved into what was more like the rural suburbs. Not really an exburb, because exburb, by now— think of as sort of just, like — you know, more dense, but further out.

Brady Huggett

Yeah.

Ashura Buckley

But definitely, like, homes on acreage, and, you know, you're driving everywhere.

Yeah, yeah.

Ashura Buckley

Which has its good and bads, right? Because my mom's a homemaker, and so, you know, she's there with however many children. Yes, but I think, for my parents, that was a gift that they thought that they were giving us, right? That we weren't gonna be in the city, like you said, it was the 1970s, and my dad had his business there. And so he got to see, you know, some of the less, less kind sides of people being in the city, and he didn't want that for us, and he thought that Westchester was something he could give us.

And I think that was the reason that we moved up there. But then, you know, the flip side of that is, there were no Black people there.

Brady Huggett

Oh, really?

Ashura Buckley

You know? I mean, there were some, I probably know all of the ones in the town, two or three families, and like, you know, and it was the '70s, and those thoughts about sort of what Staten Island is like, those kinds of provincial viewpoints were everywhere, particularly in places where other people, not Black families, were moving to Westchester for the same reasons, right? So you have people thinking — having their own ideas about what this Westchester experience was supposed to be for them.

And I think it was difficult, harder on some of my siblings than others, to grow up in that environment.

Brady Huggett

One thing, what was your dad — was your dad still going into the city for work?

Ashura Buckley

He was, yes.

Brady Huggett

Every day?

Ashura Buckley

Yeah, so he had a business on the Avenue of the Americas now, like, what that is now, and it was — it started as a bike shop, and then it became a bikes and things shop, where it was like clothing and two- and three-wheeled vehicles, and things like that. But yeah, he spent a lot of —

Brady Huggett

Was he a cyclist?

Ashura Buckley

Yeah, so he — yeah. And the business was wonderful, for as long as it lasted, and, um — but he just didn't want us in the city. Wasn't a cool thing for him.

Brady Huggett

Yeah, yeah, and so, somehow, this bike shop is enough to provide for the whole family, including the eight kids.

Ashura Buckley

Yeah, well, until my parents separated and sort of — things sort of explode. But yes, and I think it was a different time period, and if you were very successful in a shop, you know — you could be very successful in a shop, and you could raise children outside of the city. Yeah, a long time ago.

So, when you — your — most of your memory is this town up in Westchester, right?

Ashura Buckley

Yeah.

Brady Huggett

And based on the things you just said, was it a happy experience? I mean, where — go ahead.

Ashura Buckley

Yeah, so, and again, I, being one of eight, like — everyone's got their own individual — like, where their tolerance levels are. But I generally am a happy person, so I generally was happy, but I think, also — I give more memory weight, if I may, to the things that were happy. I know, intellectually, that there were things that were not happy.

Brady Huggett

Yeah.

Ashura Buckley

Um, and that there were struggles, and that those things, um, probably impacted my parents more, sort of, than, than me, and maybe some of the children more, um, than me, so I — again, we moved there when I was 5, and I left when I was 15. So, most of my formative years were spent there. And that solid chunk of development being consistent, I think I really lucked out as the middle child, in that way. I don't have previous experiences.

I left and went to boarding school in Connecticut at 15, so I don't have post-experiences, trying to live there as a young adult. So, I think by dint of sort of fate, I ended up with this chunk of really consistent —

Brady Huggett

This decade of —

Ashura Buckley

Yeah, beautiful life. Yeah.

Brady Huggett

And — I mean, you were happy, you had friends. It was a decent childhood, in that way.

Ashura Buckley

Yeah.

Brady Huggett

Yeah. But I guess I see what you're saying. If you had moved there when you were 10, as maybe some of the older siblings did, it's more upheaval, and you were thrust in. Because those middle school years are rougher, and if you're put in there as an outsider coming in, and if you're one of the only Black people in town, for sure, that had to be hard, I think.

Ashura Buckley

But there was that. And there were lovely, wonderful people, who were like, "That doesn't matter." My mom was involved in everything. She was a den leader for my brothers. She was my scout leader for many years. She was involved in the, you know, American Field Service community and everything. So she was, you know, homemaker supreme. She threw herself in there. And she made wonderful friends,

And there were people in those neighborhoods for whom race was not an issue, and, and to that extent that you could make those friendships, she did. But then, of course, it was the '70s and '80s in an area where many people had moved to that area because they thought they were also leaving people of color behind.

Oh, really?

Ashura Buckley

Well, sure. I mean, it was a white flight type of time, right? So, the moving out of the city into the Westchester suburbs, we were accompanied by other folks who had other ideas.

Brady Huggett

Let's talk about this, because this is actually, I think, a really interesting point. So, my family, we lived in Detroit when I was young, right? And we — my dad worked for GM, so he was in the city every day, but our home was in a suburb. And the riots had already happened in Detroit, and there was this white flight happening. But my thought, and maybe this is wrong, based on what you just said, but people were really fleeing —

Detroit had been on fire, and there was all this violence, and like - we don't want to be around this violence.

Ashura Buckley

Right. Nobody wants to be around violence.

Brady Huggett

But you're suggesting that maybe the white flight is also just like — if you move to an area like Westchester and you see a Black person, they're assuming that violence is coming there? Or they just — It's literally the skin color? [crosstalk]

Ashura Buckley

No. I think it's more complicated than that. I don't think — and that's really interesting that you said that, because, of course — of course, no one wants to raise their children in violence, it doesn't matter how you identify. That's not something you want for your children. I think it wasn't that they necessarily equated people of color with violence. I think it's more primal than that. You feel like you've made a decision, and all the factors that go into what you want for your life are a part of that decision.

And because of the incredible racial divisions that have existed forever in this country, you know, and that continue to be flamed, and, and certainly were, um, present in the '70s and '80s when I was growing up. The association with making it, coming out of the city, and arriving, did not include arriving with people of color. Does that make sense?

Brady Huggett

I think.

Ashura Buckley

So it's not like you look around and you see my older brother and you say, "Hey, that kid is going to make sure that our school burns down," but you do look around and say, "That family means my neighborhood is not worth what I thought it was worth, and maybe won't be worth what I think —" I mean, we're talking about, you know, redlining, and, and — right? And intentional development of pockets of people who look like same. Does that make sense?

Brady Huggett

I think. So, a-a-also, maybe they see your brother, your family, and go, "This is just the start."

Ashura Buckley

I don't know what they thought. I do know that there was a lot — I-I'm trying to conjecture about, maybe, why we received some of the bad feeling, the less kind things, and I'm trying to say, maybe that was why. But those entrenched prejudices that sometimes end up in burning people's neighborhoods down or burning crosses, which thank goodness, we never experienced. But those type of prejudices, I think, have roots in lots of strong tribal feelings.

And so, we definitely did experience that. My older brothers definitely experienced that, you know, to the extent when I was younger, when I rode the bus, you definitely experienced that, right? Everyone has the N-word in their mouth.

Everybody uses that. There are wonderful people, but it's not like you don't hear it every day. And so, in the '70s and '80s, we heard it every day. And so, why people hold on to those things, I don't know. I'm not sure.

Brady Huggett

Well, yeah. I mean, God, if we knew that, we'd really be making some progress. But I think that's another thing that, and we were already way off topic, but, um —

Ashura Buckley

[laughs] We'll do a separate interview.

Brady Huggett

This idea that, you know, like — boy, the South is terrible for race relations. True enough, right? But, you know, those things don't happen in the North. Not true.

Ashura Buckley

Not true at all.

Brady Huggett

Not true at all. The Midwest is quite infamous for it.

Ashura Buckley

Sure.

Brady Huggett Dig back in history, and upstate New York is infamous for it too, right?

Ashura Buckley

Yes.

Brady Huggett

Yeah. So, in the end, maybe you don't know this, but do your parents think that — they still thought that was the right thing to do?

Ashura Buckley

Um, I don't know, and I wouldn't think that it could be distilled into a yes or no, that was right. I think, you know, as a professional Black family, in a country steeped in hatred and racism in certain quarters, you are choosing between two non-idyllic, right? Even though you want to get to that place. You know, I think they were kind of like, "We know that our children are going to be exposed to this, right? We know that there's support if we stay, you know, closer to the city, but then they're going to be exposed to that."

So I think you choose, you pick your poison, if you're my parents, and then you try to make the best of it. And they did. And I think lots and lots of families do that, right? In lots of different non-racial or, you know, different, you know, decision trees.

Brady Huggett Social economic. Yeah, of course.

Ashura Buckley

Sure. It's always a trade.

Brady Huggett

Yeah. What can we do? Can we do this or can we do that? Do we have the money for this or that? Can we go? Or is family here or there, or —?

Yeah. Or what's going to be the most important for their development? Is it access to these wonderful schools with, maybe, the racism that comes with it? Or is it, you know, stay in an area where, maybe, those schools are not receiving the support that they should support, but they have cousins and they'll see more people who look like them there. And I think that's probably a decision that parents make, to this day.

Brady Huggett

Right. And I think, quite often, they make the decision for the best education.

Ashura Buckley Yeah. You fall down on that side.

Brady Huggett Yeah. So then at 15 —

Ashura Buckley Yeah.

Brady Huggett You go off to private school. Was that your idea?

Ashura Buckley I did.

Brady Huggett Was it their idea?

Ashura Buckley

It was my mom's idea. So, I think, sort of, the stresses of life started to really pull them apart, my parents. And it became clear to my mom that, "Hmm, I'm not sure that this is going to end up with you finishing high school here. I want you to take this test." So she was like, "You have proven that class is boring to you. They're already pulling you out and putting you in library separate classes.

Take this test, and we're going to get you somewhere else, because if and when dad and I separate," — which did happen, within that 12-month period — "you have an avenue up and out." And that's what happened. So I took the test.

Brady Huggett What was the test?

Ashura Buckley Oh, it was like — Oh, God, what was it? [crosstalk]

Brady Huggett For that specific school?

Ashura Buckley

No, no, no. It was, um — It was, um, it was ABC. It was like, A Better Chance Foundation has this funnel where they will place children of color into elite boarding schools around the country, mostly in New England. And so, my mom, being the researcher that she was, had stacks and stacks and stacks of opportunities and schools. She had all these kids that she wanted to make sure that we understood exactly how the world was, and as much information as we could get, and knowledge.

And she was like, "There is this program, and you can do this, and we'll send in your scores, and if we leave, you'll have these options." And that's what happened. And so, I took the test and I got a letter that said, "Taft" — which is an elite boarding school in Connecticut — "would like you to come."

Brady Huggett

So your mother, and the schools, had already identified you as - whatever word you want to use.

Ashura Buckley

Whatever word I want to use. [crosstalk]

Brady Huggett

Overachiever. Yes.

Ashura Buckley

Yes. Obnoxious overachiever. I prefer that one. I think that happens to a lot of people who end up in medicine. You like to learn, you like to do, and so, you're always asking for more, and you end up getting attention, and then —

Brady Huggett

Oh, you were? You were asking for more? Or were you just sort of like, this — every test was an A, and you were done before every other child.

Ashura Buckley

Yeah. I think both of those things. And then like, "Well, what can I — what else can I do?" Kind of thing. And so, I was already in the pullouts, where they're taking me to the library where I would do other stuff, which I think is why my mom was like, "OK, I have an answer for you." I think it was hard, because she had a lot of other children. You don't necessarily have an answer for everybody when your life is imploding. So yeah, that's what happened.

Brady Huggett

So did you — were you like, "OK, I'm totally fine with leaving the house at 15 and going to a private school," where you were probably — again, mostly white, I would assume.

Ashura Buckley

Who, the school?

Brady Huggett

Yeah, Taft.

Ashura Buckley

Yes, except for the students who came on these programs, which is an interesting phenomenon, which, again, is the same kind of rock and a hard place, right? So, there's pluses and minuses to having that situation. So, yeah.

Brady Huggett

Well, the pluses being — I mean, looking back, everything that they did, worked.

Ashura Buckley

For me.

Brady Huggett For you.

Ashura Buckley And I'm eternally grateful to them.

They were negatives there, I'm sure. You had to go through being — let's say you probably bonded with the other kids who were on, um, these — the ABC program, or whatever —

Ashura Buckley

Well —

Brady Huggett

— or no?

Ashura Buckley

It didn't quite work out that way for me. So, um, listen, I had a great experience at Taft, um, and I have nothing negative to say about it. Uh, I was in everything that I could be in, played every sport that would take me, um, did every committee that, that I could and, um, I was generally a happy girl but, um, the provincialness that you talked about in Staten Island exists in sort of a different form in an elite school, right?

Anywhere, where many people only interact with the folks that they interact with. So again, the tribalism, so it was — you know, you could say that you're sophisticated, and a metropolitan, and whatever, but you still have your tribe. And I think, um, what happened to me, having spent 10 years in Westchester, without sort of being a part of a community of color, was that I ended up in an elite school that had tribalism for folks who, um, considered themselves to be very sophisticated and privileged, and elite folks.

And then there were people, um, who were coming without any exposure to that at all, um, who hadn't spent the first 10 years of their lives in the Westchester school system, so I ended up having more in common with people across lines, unexpected, you know, friendships, that I have to this day.

Brady Huggett

Yeah.

Ashura Buckley

Um, but it didn't, it didn't fall out evenly that way.

Brady Huggett

Yeah, but you had, you had had experiences that they had not?

Ashura Buckley

I think that, that either group really had not.

Brady Huggett

Yeah.

Ashura Buckley

Right. And I think — and I don't know what it's like now there, but then, it was very stark, and so you still had a table of Black scholarship children in each dining area.

Brady Huggett

Yeah.

Ashura Buckley When dining wasn't assigned.

Brady Huggett Yeah.

And so, I think what that ended up doing, ultimately, was just kind of continue to hone this, um, perspective, that there's always another perspective. There's always another person. There's always another way to approach this problem, which served me well for what I ended up eventually doing.

Brady Huggett

Yeah. OK. So you finished the school?

Ashura Buckley

I do.

Brady Huggett And you, uh, I don't know if you applied widely, or, or what?

Ashura Buckley I applied to eight schools, um, yes.

Brady Huggett And you were thinking that you were gonna be in the medical profession, one way or another?

Ashura Buckley And I was gonna go to med school.

Brady Huggett For sure.

Ashura Buckley For sure.

Brady Huggett But did — you didn't know in what area, you just —

Ashura Buckley No.

Brady Huggett OK.

Ashura Buckley Well, no, I didn't. I mean, I think probably through college, I decided on obstetrics, yeah.

Brady Huggett OK. So, applied widely.

Ashura Buckley I applied to eight schools, yes.

Brady Huggett

Did you — I'm assuming that when you got accepted to Harvard, that was going to be your— you know, you weren't like, "Well, let me see what else comes through, right?" I don't, I don't know. I would just assume that's —

Ashura Buckley

Yeah, no, that's funny. Um, yeah. So I applied to eight schools, like, all of the Ivies but Yale, for funny reasons, and

Georgetown, and got into all the schools, and talked to my mom and said, "OK, what, what am I doing?" And she said, "Well, you're going to Harvard." And I said, "OK, I'm going to, to Harvard." That, that's kind of how it worked.

Brady Huggett

I just think — like, your mom must have been over the moon.

Ashura Buckley

Well, again, I think, I think she's a very practical person, and, and this is sort of the other part of, of my life, which is— I had three siblings, uh, who ended up developing severe mental illness, mental illness, and when you are raising children, and you have this, in perspective of, sort of, eight different developmental trajectories, I think you realize, or at least she did, very soon, that I'm going to have children who are going to go this way, and I'm going to have children who are gonna go this way.

And these children are gonna need some more support. So I think that, while she was, of course, and remains, like, my biggest fan and supporter, um, you know, she was never saccharin, or ridiculous, because I think she was always grounded, like —

Brady Huggett

It's almost like, um, so you've got these eight kids ----

Ashura Buckley

Yeah.

Brady Huggett — and Shu is now accepted to eight colleges.

Ashura Buckley Right.

Brady Huggett

And they're amazing schools. She's almost like, "I need to worry less about that one."

Ashura Buckley

I think so. I hope so.

Brady Huggett

Yeah.

Ashura Buckley

Because there's — the energy is — not that she wasn't always there, which astounds me now. Like, she would get on the bus and come from Albany to Boston if I had, you know, made-up health scares, she would come and I remember those times that she came, and now I look back and I'm like, "How did you do that?" But yeah, so I think, yes, I think that she was able to say, "This is where the support needs to be. You have the tools that you need, and as long as we need to talk and be supportive, you know that I'm here."

And that was really enough. Knowing that she was there was really enough.

Brady Huggett

Yeah. When your parents split, your mom went to Albany.

Ashura Buckley

Yes.

Did your dad stay in Westchester?

Ashura Buckley

Um, no, my dad ended up first in Maine and then in California, and, and honestly, we didn't really have any — I didn't have any, um, further contact with him. I remember he called me at school and was like, "Your mom and I are separating, um, you can stay with mom or you can come live with me," and I was like, "Well, mom has four other children that she's raising, so that sounds like fun, but that's not gonna happen that way."

And so, um, I didn't actually have any more contact with my dad. When I was a resident at Mass General, I got a phone call that he had died suddenly, at 56.

Brady Huggett Oh.

Ashura Buckley Yes. Had a, had a ruptured aneurysm in an airport in California, and that was the next time that I — Yeah.

Brady Huggett I did not know that.

Ashura Buckley Yes. Well, not many people do.

Brady Huggett Um, do you —

Ashura Buckley That's OK, yeah.

Brady Huggett Do you wanna talk about, like — The, the main que — the main question I have about that is, um, that's young to, for —

Ashura Buckley Very young.

Brady Huggett

— parent to suddenly go like that, and especially if it's unexpected. You know, the, the thing that I think about, um, is you, you have now seen the whole scope of that man's life?

Ashura Buckley

Yeah.

Brady Huggett

Well, you weren't there in the beginning, but you know it ends at 56, and there is no more to add to it, and I — that, I — That's, that is sort of like, um - I find that troubling, in a way, like, like to see the whole of someone's life?

Ashura Buckley

Well, don't we do that all the time, with relatives and people?

Brady Huggett

Well, yes, relatives. That's what I mean. Uh, when it happens in the outside world, you're like, "Well, that person died," but when it happens in your family, it's a different thing.

Yeah.

Brady Huggett

And you were pretty young when that happened.

Ashura Buckley

Um, yeah. My parents were 24 and 25 when I was born, so when my dad died, I was 31.

Brady Huggett Oh, OK. So not that young.

Ashura Buckley 31, I was a mom.

Brady Huggett Yeah.

Ashura Buckley I was in residency.

Brady Huggett Yeah.

Ashura Buckley

Right, and, and the interesting thing about the path that I ended up choosing, which is child neurology, is that a big part of your, um, neuro training is — child neurology, um, um, has — Unfortunately, we take care of a lot of the devastating early childhood diseases, right? Whether it's a metabolic disorder, or it's a genetic, um, problem but, um, people dying early was not a new thing to me, at that point. Not my mom or dad, not maybe, you know —

Brady Huggett

Yeah.

Ashura Buckley

But, um, there's a different perspective.

Brady Huggett

Right. That's — he's the cap. He's a cap of your family, your mom and your father, and that cap is removed, and now there's no one above you, right?

Ashura Buckley

Yeah.

Brady Huggett Because every, everybody dies, we know that.

Ashura Buckley

Yeah.

Brady Huggett It's the one given of life, but now it's sort of, like — you're next up.

Ashura Buckley Yeah. I never felt that.

Huh.

Ashura Buckley

That's so — it's so interesting because I think my older brother, um, who's the eldest, I think he did, and Phil, I don't wanna speak for you, but I think it probably makes more sense that, um, maybe you see yourself in the same-gender parent. I don't know, I didn't feel that way. I felt, "Oh, it's too bad that I never got to reconcile with you —"

Brady Huggett

Well, that's the other thing.

Ashura Buckley

"— and have that conversation with you about why, why you were unable to follow through with, with, you know, the parenting part," right?

Brady Huggett Yeah.

Ashura Buckley Like, what, what happened to you?

Brady Huggett

Mm-hmm.

Ashura Buckley

And as I get older and I study mental health and I study stress, um, I, I continue to revisit, like, what his last 10 years might have been like.

Brady Huggett

Yeah. And that's hard because you can't — you know there's nothing to be done about that. All right. Moving on from there.

Ashura Buckley

Yeah.

Brady Huggett

Um, so I, I had this thought too, because, obviously, I know that you went to Harvard. Did you have any idea?

Ashura Buckley

Yeah.

Brady Huggett Because going to college is amazing.

Ashura Buckley

Yeah.

Brady Huggett Education is always gonna better your life, it, it feels like.

Ashura Buckley

Yeah.

But I didn't really know until I got older, sort of, like, what just the name Harvard would do, how many doors that sort of opens, to have gone to Harvard, um —

Ashura Buckley

I don't know. I think that, um, it's hard to know. I mean, I get asked that a lot, right? And like a lot of people who went to Harvard, I don't lead with it. It's not like a party thing.

Brady Huggett

Yeah.

Ashura Buckley

It's something that I — that in the correct context, um, makes sense, and when it makes sense, it makes sense, but for the most parts of my life, that are not career-related, it's not a thing that I think about, or that I, um, think necessarily changes much of how I — you know, you — There are people who would just never even have heard of any college, who are brilliant and have different exposures, um, and so I, I, I try not to put too much of an extra career emphasis on that.

So, where it's helpful, I think, are honestly things that I think, maybe, um, need to change a little bit, structurally, which is that there are entrenched pipelines that exist, particularly in academia —

Brady Huggett

Yeah.

Ashura Buckley

- Um, where we take for granted that meritocracy is a thing, and I'm not sure that it is a thing. And I think as - I mean, yes, it's - it - yes, it is, but then, there are also all these other constructs that decide who gets what job.

Brady Huggett

Right. It's, it's sort of like, um - so, you went to Harvard, and absolutely based on your academic record -

Ashura Buckley

Yeah.

Brady Huggett

- you deserve to be at Harvard, right? That's - well, listen, you did the work and you graduated, so in their eyes -

Ashura Buckley

I did the work and I graduated.

Brady Huggett

That's it.

Ashura Buckley Yeah.

Yeah.

Brady Huggett

But there's lots of people who could have done that and did not get that chance. That's the ---

Ashura Buckley

Yes. Absolutely.

Brady Huggett

Yeah. It's not that, like, everybody who deserves to go to Harvard can go to Harvard.

Yeah.

Brady Huggett

And that way, it isn't meritocracy.

Ashura Buckley

Yeah. And so you may put — yeah. So I put less emphasis on that. I'm proud that I did that. I'm happy that it worked out well. Um, yes.

Brady Huggett

Yeah. OK. So when you leave Harvard.

Ashura Buckley

Yeah.

Brady Huggett

Now you're like, "OK, I know what I'm gonna do with my career."

Ashura Buckley

[laughs] Well, [laughs], yeah. No, not necessarily. Um, so you, you know, the, the school that I went to, um, was in a lot of ways —

Brady Huggett You're talking about Ston- Stony Brook.

Ashura Buckley Taft.

Brady Huggett Oh, Taft. Oh, sorry.

Ashura Buckley

Taft was a l — was a l — in a lot of ways, like a small college in terms of the rigor. I don't think I've ever worked as hard as I did junior year in high school.

Brady Huggett

Mm.

Ashura Buckley

I never worked that hard again. It was, um, just the intensity, uh, the hours that you spent like learning and taxing and pushing yourself both, you know, on the field, in the classroom, um, and so when you get to school—

Brady Huggett

And what, what sports?

Ashura Buckley

Oh, I played, um, field hockey, and I ran track, and I played basketball JV for a couple of years. Yeah. Yeah. Um, anyway, so when you get — when I got to Harvard, it was kind of like, "I read these books, I'd done the canon, I'd done this," and I kind of, I think, slacked off a lot. Um, yes. Not kind of, I slacked off a lot, and I was just kind of, um, existing, I think, in this world where my mom was still raising kids, the children who were sick were getting sicker, and I kind of felt that this was — it was a not — for the first couple of years, even though I was thinking about pre-med stuff, it was less academic than I had ever been in my life.

Um, I met my future husband there, spent a lot of time being social, growing up in a way I felt that maybe I hadn't been able to until then.

Brady Huggett

Yeah. Yeah.

Ashura Buckley

Um, and then we ended up getting married the year after graduation. He was in the Navy.

Brady Huggett

Mm.

Ashura Buckley

And so those first five years married I spent by myself in Virginia, which is where he had been, um, assigned. Um, and so there was a lot of growing up I did, I think after college where then I said, "All right, I have to figure this out and get my myself back on track," and then ended up entering med school two years after graduation at Stony Brook.

Brady Huggett

Well, wait, but you spent three years in Virginia?

Ashura Buckley

I spent a year. I spent a year in Virginia. Oh, first — all right. So I spent the first six to eight months in Rhode Island because, um, my then-boyfriend, who became my husband, was stationed at, uh, Surface Warfare Officer, SWOS school, so the nuclear training or whatever there in Newport, um, and then from there, uh, to Virginia. So we get married after a year, and then he gets, um, stationed in, um, Norfolk. So I moved down there, we get an apartment, and then he gets sent into the Mediterranean. And then I'm like, "Oh, I had to apply to school." [laughs]

Brady Huggett

Oh, that's what happened.

Ashura Buckley

Yeah. Yeah. So I did a break. I took a break. I left my research job, I went to work at a bakery in Newport, and then, then, um, went with him when he went to Virginia and then he got deployed.

Brady Huggett

And you thought now's the time.

Ashura Buckley And I was like, "Well, yeah."

Brady Huggett Yeah.

Ashura Buckley OK.

Brady Huggett So you —

Ashura Buckley That was a good break. I — I got to — I got to figure this out.

Yeah, it was time to get back to your career, right. You weren't — you never thought — Well, I guess the question is marriage didn't derail your [crosstalk].

Ashura Buckley

Oh, no, no. But my mom thought it might. [laughs]

Brady Huggett

Oh, yeah. Then what happened to your mom, actually?

Ashura Buckley

She wasn't happy about that. Yeah. She was like, "What? You're getting married?" and now of course I'm 50 and I'm like, "God, getting engaged at 22, that was madness," right? I got married at 23, that was madness, but at the time, you know, I felt I've done all this growing up and I was ready.

Brady Huggett

Yeah. OK. So you applied to SUNY Stony Brook for medical school.

Ashura Buckley

So, so I got into Stony- to Stony Brook.

Brady Huggett

Yeah.

Ashura Buckley

Um, and that ended up being wonderful, like a wonderful place back in New York. I love New York —

Brady Huggett

Yeah.

Ashura Buckley

— all, all parts of it, including Staten Island. [laughs] Um, yeah. So then I was on Long Island and, um, was in Port Jefferson. Um, and spent a couple of years there, which is like — I don't know if you know Long Island at all.

Brady Huggett A little. A little, yeah.

Ashura Buckley

Yeah. So, uh, we lived like right across the sound from Connecticut, so that's that part.

Brady Huggett OK. I do know that. Yeah.

Ashura Buckley OK.

Brady Huggett Yeah. Um, cause then you did the residency in child neurology.

Ashura Buckley Right. So go to medical school —

Brady Huggett Yeah.

- thinking I'm gonna do one thing, have my daughter -

Brady Huggett

Oh.

Ashura Buckley

- three years in, so third-year med school I had Paigey.

Brady Huggett

Yeah.

Ashura Buckley

And then my mentor at that time was this wonderful guy named Frank Bonura — hi, Dr. Bonura — who actually raised both my child — raised, um — delivered both my kids, and that was the conversation I had where I was like, "Mm-mm, I don't think I'm gonna do this." Um, and so then —

Brady Huggett

With him?

Ashura Buckley

Yes, with him.

Brady Huggett Because he delivered your kids and was in [crosstalk]? And he had —

Ashura Buckley

And he was my mentor. Like I would go and like do like didactics at his private practice in Smithtown.

Brady Huggett

Got it.

Ashura Buckley You know, it was apprenticing.

Brady Huggett Getting ready here.

Ashura Buckley I had a path.

Brady Huggett Yeah.

Ashura Buckley

Yeah. I had a path. Um, yes. So then I, I during med school decided that that couldn't happen, and when I was pregnant with Paigey, um, I switched my rotation so that I wouldn't have to do surgery while I was pregnant in case I got stuck by a needle or something crazy.

Brady Huggett

Yeah.

Ashura Buckley

And so I did neurology that year, which was earlier in the rotation than you normally would do it.

Mm.

Ashura Buckley And that's when I met all my neuro friends.

Brady Huggett OK.

Ashura Buckley And I think that's kind of how it started.

Brady Huggett And that clicked in your brain to do something.

Ashura Buckley

Yeah. And then those conversations with folks like, "Well do neuro, do"— you know. And so then I still wasn't quite decided. I did, uh, my first year in pediatrics also at SUNY, SUNY Stony Brook and then converted that peds, um, residency into a five-year child neurology tract. So you do two years of pedi neuro —

Brady Huggett Mm-hmm.

Ashura Buckley — one year of adult neurology —

Brady Huggett Mm-hmm.

Ashura Buckley

— and then two years of child neuro. And after my adult neuro year, my then-husband got a job at Boston College and so now he's coming — he's out of the Navy, he's got a job at Boston College as a professor, we have to move. So, um, that broke my heart a little bit. Um, but I called around and said, "Hey, I have these three years, I need a child-neuro program," ended up interviewing at Mass General [crosstalk] —

Brady Huggett Got it. Yeah.

Ashura Buckley — that's how it happened.

Brady Huggett

OK. I- it broke your heart a little bit because you didn't wanna leave New York again?

Ashura Buckley Yeah. 'Cause I kind of thought that, that this is what I was gonna do now.

Brady Huggett

Yeah.

Ashura Buckley

I was gonna, you know — where you do your residency if you wanna do private practice, which I think is what I thought I was gonna do or stay academics private or do something the way that everyone that I knew was, was doing it. You build up those contacts during that time period.

But this is also the second or third or — time that you had moved for your husband's career.

Ashura Buckley Oh, it ends up being six times.

Brady Huggett Six times, right, so does that —

Ashura Buckley It ended up being six times.

Brady Huggett I mean —

Ashura Buckley Yeah, it all comes out in the wash, right? It all, you know — you make the decisions.

Brady Huggett You make them together.

Ashura Buckley I try not to look back.

Brady Huggett

Yeah.

Ashura Buckley

You make the decisions and then you're like, "OK, well then I'm doing this and then I'm doing that." And one of the things that my grandmother and my mom always taught me is, "Great, make a decision and then leave the door open." [laughs] So I always kind of did that, like, "OK, you know, there's, there's — take this opportunity, but then don't close the door on that opportunity."

Brady Huggett Yeah. OK. So then you get out of this program at Mass Gen?

Ashura Buckley I do.

Brady Huggett

And then I — a- actually, now I don't really know 'cause it's somehow you come to NIH, but I don't know how you did it.

Ashura Buckley So you could guess.

Brady Huggett Uh, you followed your husband?

Ashura Buckley I did.

Brady Huggett Oh, what happened?

Yes. [laughs] So at this point I have my first job, job offering and it's at Newton-Wellesley Hospital to work a- an instructor, uh, at Harvard for a stand-alone autism clinic, one of the first of sort of its times, a woman named Margaret Bauman, and she had psychiatrists and psychologists and all sorts of people, and she was gonna add a junior child neurologist to it, and that was my first job. And then the professorship ended up not being exciting and my then-husband decided he wanted work for the CIA. So he takes a job at the CIA and I give up that instructorship and we come down to the DMV and that's how that happened.

Brady Huggett

OK.

Ashura Buckley

Yeah. So my kids are really little at this point. And so in a way it was kind of like, "OK, I'm gonna concentrate. I have a year as just a mom. I'm gonna regroup, figure out what we're gonna do from here."

Brady Huggett

OK. And then you, you turned to the NIH and said, "Hey, I want to study sleep."

Ashura Buckley [laughs]

Brady Huggett Is that right?

Ashura Buckley That would be funny, right?

Brady Huggett Yeah.

Ashura Buckley Um —

Brady Huggett Just knocked on their door.

Ashura Buckley

Yeah. It was one of those things. So I came down and, and the kids were great and happy, and I was bored, and I think my son was bored with going to workout classes with me, and I decided to sort of send — well, what's down here, right? FDA and NIH and all these things that I have all this training, which was the other thing. I have all this training and all this education. I felt like I needed to do something with that.

Brady Huggett

Yeah.

Ashura Buckley

And I had this wonderful letter from Margaret Bauman, who was the ASD researcher, and at the time, again, here's the just serendipity, a woman named Susan Swedo was starting a sort of head-to-toe, um, evaluation of autism. So autism now, um, is something that it wasn't then.

Brady Huggett

Yeah.

Right?

Brady Huggett

What year are we talking about?

Ashura Buckley This is 2005? 2005-6?

Brady Huggett

Yeah.

Ashura Buckley

Right? And as a child neurologist to see sort of that change and sort of even, even guild transformation, right? So it was, it, it was in the realm of something else and then it became firmly in, in another realm, and so I was sort of on that line between, right, interested in the different brain in all its differences, people who suffered because their brain didn't form correctly —

Brady Huggett

Yeah.

Ashura Buckley

— whatever the diagnosis. Really interested in that, which is why I took the job with Dr. Bauman in the first place. But back to my story, Dr. Swedo had just sort of been commissioned to start this. I think the head of NIMH at the time, Tom Insel, called it something like the, the SWAT team of autism. We were gonna do MRIs, and, um, they were gonna do skin biopsies and they were gonna solve these problems and we're gonna get all this information on each child. And so when I sent my application to NIH, um, with this — you know, I had this job with Dr. Bauman, they were looking for an ASD, or autism at that time, right, person, and so I joined that group as their junior neurologist fellow. And I did a clinical fellowship learning all about how do you formally research things that you're interested in —

Brady Huggett

Mm.

Ashura Buckley

— um, under the offices of the pediatric and developmental neuroscience branch under Dr. Swedo. And that was my introduction to NIMH.

Brady Huggett

And then I think you helped set up this sleep service at NIH.

Ashura Buckley So that comes many years later.

Brady Huggett I thought that —

Ashura Buckley Yeah.

Brady Huggett — was like 206 that happened.

Ashura Buckley Um —

Or 2006, sorry.

Ashura Buckley

— I started doing sleep research under her as a fellow, but she was wonderful and kind of allowed me to sort of pursue my interest. She wasn't necessarily interested in sleep electrophysiology, but I was.

Brady Huggett

Yeah.

Ashura Buckley

Um, as a fellow. And then years later, um, in 2016, the sort of first official sleep and neurodevelopment core that stood up at the NIMH and I become the director of that 'cause I —

Brady Huggett

Got it.

Ashura Buckley — built that, yeah.

Brady Huggett OK, right. But so you're — I wanted — There's two papers — I read —

Ashura Buckley Yeah.

Brady Huggett — so many papers. There's two that I really wanna talk about. And the first one is the REM deficit paper, which —

Ashura Buckley Yeah, so that was the early, early, right?

Brady Huggett That's like 2010, I think.

Ashura Buckley Yeah, yeah.

Brady Huggett Well, I, I wanted — so talk— tell me what you were thinking about that made you do that research.

Ashura Buckley Yeah.

Brady Huggett And then how that became that paper? It's fa — it's, I mean it's —

Ashura Buckley Yeah.

Brady Huggett — obviously fascinating work.

Mm. So one of the great things about that time period was joining that lab where all the questions were on the table. What — pick an area and dive into it. And I had, had a wonderful mentor at Mass General. His name is Kenny Sassower, and he's a child neurologist, epileptologist and a sleep person. And I remember sitting with him when I was in residency and the way that you read these things — I don't know if you've seen them. I feel like afterwards I should show it to you. It's just like a bunch of tons of — you've seen EEG?

Brady Huggett

Yeah.

Ashura Buckley

Right. So zEEG and then cEEG of sleep, and it has like your eyes and, you know, tons of leads from your brain and respiratory leads and muscle leads, and it's just this massive mess, but then you learn to decode it. And I remember sitting with him and looking — and he was looking in particular for, um, different morphologies that would show you whether or not you had an epileptiform activity or something that might, might lend itself to developing seizures or whether or not you actually had seizures. And I remember asking him, but there's all these other things in there, what about all this stuff?

Like, what is any of these things? Well, that's not like a signal necessarily that, that we know what any of that means and we don't look for that. And it just seemed to me like, "Oh my God, like, I'm watching the brain change from being awake to being asleep and then all these weird patterns and now I know you're in the dream state." And it just — it had this really incredible beauty to it that I was watching you go through these states.

Brady Huggett Yeah.

Ashura Buckley And they didn't really know what any of it meant and that no one was harnessing that information.

Brady Huggett

Right, so —

Ashura Buckley That's how it started in Mass General.

Brady Huggett So the — it's like, uh — oh, that started at Mass General.

Ashura Buckley That was working with Ken Sassower.

Brady Huggett Oh. OK.

Ashura Buckley Asking the question. He's actually on that first paper, I believe —

Brady Huggett Yeah.

Ashura Buckley — because of that.

Brady Huggett OK, OK.

We were asking like, "Well, what does, what does it mean?" And it looks like, "Well, I'm not sure what that means."

Brady Huggett

Right, that's not my area. I'm not looking at it. We don't really know.

Ashura Buckley

Or nobody knows —

Brady Huggett No one knows, so we don't know —

Ashura Buckley

— which was much more seductive.

Brady Huggett

Right. So then — and this happens a lot in science, and, and, and this isn't a criticism, but it's like, we don't really know, so I'm gonna disregard that right now because I'm looking at this, right?

Ashura Buckley Well, well, you, you have to start somewhere.

Brady Huggett You have to, right?

Ashura Buckley Yeah, yeah.

Brady Huggett

Then you're looking at that being like, "Well, if no one's looking at that, then I wanna look at that."

Ashura Buckley

Or like, well, more, more, um, more salient was maybe, because he was a child neurologist, we saw children who had lots of difficulties, right? And remember, this is pre-diagnosing —

Brady Huggett

Yeah.

Ashura Buckley

— everybody, putting everybody in a label, and it, and it turned out that there were a lot of kids that didn't have a label, but they had different-looking patterns.

Brady Huggett

Mm.

Ashura Buckley

And so I would say, "This kid's X doesn't really look clean. It's really hard for me to stage this kid." You know, I know you've taught me how to do, you know, now I'm in deep sleep, now I'm in REM sleep, but I don't see any transition here. Those things became really important because that inability to read those, to decode easily, meant that you were seeing something salient about the way that brain was organized. And so that came down to my thought process when I started with Dr. Swedo, and then I, I had another wonderful mentor named Susumu Sato —

Brady Huggett

Mm.

— who at the time was the head of the NINDS, um, epilepsy lab, lab. He was the chief of, of epilepsy, I think. And he had a separate kind of boutique interest in sleep. And so I would sit with him and he said, "You know, two decades ago, Shu, I thought about this. Like, if we could quantify, if we had the ability to extract some of those questions and reconstruct," He's like, but you know, it never went anywhere because of the engineering necessary and the computational nece — you know, modeling necessary.

But I think fast forward now, now we're at that frontier where we do have the tools to dig in there and reconstruct those patterns that were indecipherable, but that are — and I firmly believe this — incredibly relevant to developmental trajectory —

Brady Huggett

Mm.

Ashura Buckley — that, that are sleep-unique.

Brady Huggett

Right. So then the paper, well, tell me, tell me —

Ashura Buckley

Yeah.

Brady Huggett — the conclusion of the first paper.

Ashura Buckley

So the first paper was in exploration. And, and this is where I've always liked to live, and I think people like to sort of push further — and you have to push further, 'cause you have to develop hypotheses, but I've always liked to say, "I don't know what this means, but this is what we found," right? "To the best of my ability, I'm going to describe to you what we found." And, um, that first pass on those papers — and it was 100 kids with, with ASD and some with developmental disorders, um, that did not have ASD and then —

Brady Huggett

Some — yeah.

Ashura Buckley — kids who didn't have any of that.

Brady Huggett

Right.

Ashura Buckley

And it just looked like their brain was organized in a very different way in, in a very superficial glance, which was: How much time do you spend in X state? And that was really just, this is what we found. We looked, we graded and we found that it looked like maybe they weren't spending as much time in REM sleep as we think they should, and these are all the reasons why we think people should be in a lot of REM sleep when they're developing and they're not doing that, and what does that mean? And that, again, was very basic reporting out.

Brady Huggett

I don't really know, like, where the rest of the field was at that time, but for when I read the paper, I mean I was like, "God, the — i- it's very clear," number one, right? But two, it just opens up all these questions that I can't really get my head around, right? Like, what — like, how do we — you know, the importance of REM sleep, if, if children are getting less REM sleep at a young age, you know, this is about whether there's any causative effect for autism here. So —

Sure.

Brady Huggett

— the paper shows like, "Look, these autistic children are getting less REM sleep than these other two groups that are in that" — right? So what, what does that really mean? And then, then you think, well, though, like, we know — all know lots of children who slept very poorly when they were young and did not develop autism, right?

Ashura Buckley

[laughs]

Brady Huggett

So there's obviously other things at play there —

Ashura Buckley

Oh, yes.

Brady Huggett

— but there's something here that needs further looking at.

Ashura Buckley

And that, that's the only take-home. And I think what happens in science a lot, and has to happen 'cause then you have to go back and regroup and, and look again, is there are gonna be people like me who are conservative in their interpretation, and there are gonna be people who say, "And does this cause X?" And I just think in terms of neurodevelopment with the exception of sort of single-gene disorders —

Brady Huggett

Right.

Ashura Buckley

— we really don't have that information.

Brady Huggett

Yeah.

Ashura Buckley

What we do have, um, is a way to try to answer it more precisely, and that's really what I've spent the last decade doing, which is building consortia that consist of people who have lots of different perspectives, bringing the computational engineers in, bringing the psychiatrist in, the people who both see the patients and maybe work with models, the animal models, all of those people to say, "Look, this is a field that is ready for exploration. We have the technology to do it, and it has the promise of therapeutic intervention. We need to be focused here."

And so I think that was the whole point, build the library of sort of, what are these sleep unique, um, paradigms look like in a child who's not going to develop suffering, right? And that's broad, right?

Brady Huggett

Yeah.

Ashura Buckley

So you need to build that library because those differences are — there are probably things that are just differences, just personality differences like eye color or freckles.

Brady Huggett

Yeah, yeah.

And then there are things that are probably super salient, and I'm not gonna pretend to know what those things are, and I think that's been my mantra for a long time. I don't have the answers about what that might mean. I know we need, um, to bring people together because we can get those answers. We do it, right?

Brady Huggett

That's kinda the exciting part, is like —

Ashura Buckley

Yeah.

Brady Huggett — you know, we might get those answers —

Ashura Buckley Yeah, I think that we—

Brady Huggett

— in another 10 or — I don't know, you tell me.

Ashura Buckley

Yeah, I think we will. I think that the importance of sleep and the re-imagining sleep electrophysiology as a way to image neurodevelopmental trajectory is very exciting.

Brady Huggett

This — so your second paper that I wanna talk about is the spindle paper.

Ashura Buckley

Sure.

Brady Huggett

Right? Which is also — you know, it just — it's — what it shows is very clear again, right? It shows that these, uh, children with autism have less spindle activity than these other two control groups. One is, um, disabilities without autism, and then a neurotypical child, right?

Ashura Buckley

Right, the same cohort [crosstalk].

Brady Huggett Same cohort.

Ashura Buckley Yeah.

Brady Huggett Right. And, you know, I, I think if like if someone had come to it blind

Ashura Buckley Yeah.

Brady Huggett

— without any background, they would've — they would've looked at the data and gone like, "Well, these two brains — these two sets of brains are having way more spindle activity" —

Right.

Brady Huggett

Ashura Buckley

Yeah.

Brady Huggett — "harming the brain in some way."

Ashura Buckley

Yeah.

Brady Huggett

"And this group is probably some getting some sort of protective effect, but it's actually s- swapped," right? I mean, as far, as far as we can tell.

Ashura Buckley Well, I don't know. It's interesting to see how you, to see how you came to it.

Brady Huggett Well, if you, if you —

Ashura Buckley Yeah.

Brady Huggett — were blind to the field —

Ashura Buckley Yeah, yeah.

Brady Huggett — and you're looking at these, like, what are these little electrical storms happening?

Ashura Buckley [laughs]

Brady Huggett That's probably bad for the brain.

Ashura Buckley

Oh, that's funny. Well, let me, let me throw this out there. Um, everyone is gonna be looking at those signatures in the brain in a different way. And they're also — The important thing about, uh, neurodevelopmental research, but in particular, behavior- behavioral research and especially in autism research, is that people are gonna be looking at different cohorts of children, but the labels may not change, and so the approach is gonna be different. And I think that's why, um — Again, I, I usually don't like to — we're not ready as a field to say, "X equals Y."

Um, so that paper was done with another wonderful mentor, a guy named Greg Holmes, who is a legend in, in — literally a legend in, in epilepsy, um, who — we looked at a very particular part of sleep, the same part of sleep, for each one of those children, and literally by eye counted the amount of times that we saw that signal in the brain. And that is what we, that is what we ended up —

Yeah.

Ashura Buckley

— publishing on. There had been previous papers looking at this deficit, um, in spindling, which is that signature, um, that connotes a lot of different things, including like sleep depth and like disconnection from the environment and you're, you're thoroughly sleeping. Um, a couple handful in people with autism, almost all of them also had intellectual disability like our crew.

Brady Huggett

Yeah.

Ashura Buckley

Um, but the bulk of the work in psychiatry, looking at that signal had been done in schizophrenia. And so I think one of the things that was very interesting that our group did was broaden that, um, conversation and bring people together and to say, "While it's sexy to think that this biomarker is unique to a diagnosis, it's probably more likely that it's representative of a particular set of behaviors that this malfunction than" — that's where I firmly still am.

Brady Huggett

Yeah.

Ashura Buckley

And I think one of the things that's been very exciting about having the support of my institute to bring people together and to talk through these things — and we've done four of these workshops now at, at NIMH starting in 2014 and ending in 2021 — is to say, what, what has your lens told you about this signal, and what is your experience with this signal? Can you look with your lens at this group or in this, um, perspective and at this particular behavior?

And now I think we've actually garnered some folks from child epilepsy and from schizophrenia to say, "Oh yeah, we should, we should look there for autism or for neurodevelopment outside of our lens or what our lens had been." And I think right now that's, um, that's the thing that I get the most satisfaction from because there are brilliant people everywhere, and if you can get your brilliant colleagues to focus on a problem that you think is promising, that is an incredible feeling.

Brady Huggett

Well, you mean the sort of, um, almost like a super team, you get all these different ways of viewing things and get them in one room and then it opens up the conversation.

Ashura Buckley

Yes. And even if you don't end up — even if they may go spin off into their own thing, but with that nugget of, shine a light on this.

Brady Huggett

Yeah.

Ashura Buckley

And so we have sort of seen a steady uptick in interest in this field where I think there's so much promise. So there's sleep electrophysiology —

Brady Huggett

Yeah.

Ashura Buckley

— and then there's clinical sleep, and they meet somewhere, right, but they are separate. And trying to figure out how they meet and how you marry them is also exciting.

Yeah. I just — um, I, I did wanna ask this too. It's like the field of sleep is also sort of blooming right now.

Ashura Buckley

Yes.

Brady Huggett

There's just a lot more interest in it. It isn't just that we need sleep because I'm tired, but it's actually really, really important to mental health.

Ashura Buckley

Yeah.

Brady Huggett

And, uh, you know, are you excited about that? Are you, I mean, [laughter] you must - your face tells me yes.

Ashura Buckley

Yeah. I'm super excited about it. And I think — I think also, and I have to just give a shout — out to, um, uh, you know, Dr. Pao and Dr. Amara. These are my, um, the leadership team at NIMH. Like the patience to let, um, somebody build, right, build their ideas —

Brady Huggett

Yeah.

Ashura Buckley

---- when it's not sexy or hot and just continue to sort of leave that door open. And I- and I- I'm very grateful to them for allowing me to sort of do that and continue to sort of ask these questions. Um, yeah, I think it's incredibly exciting, um, mental health in particular and pediatric mental health in particular.

Brady Huggett

Right. The development stages, right?

Ashura Buckley

That you're building, when are you building your brain, right?

Brady Huggett

Yeah.

Ashura Buckley

So sleep really should be, it's food, right? It's exercise. It's super, super important. Um, but not just that it's important in that way, but the clues in the electrophysiology are also salient because what you're always looking for are robust, reproducible, objective biomarkers, right? That's what you're looking for in order to, um, to do any kind of science, right? And so, uh, yeah.

Brady Huggett

You know, you said that, uh, this was talking about sleep and autism, you know, you, you never wanna say, "X equals Y."

Ashura Buckley

Right.

Brady Huggett

Right? And — 'cause the truth is probably more like X plus W and S and P might equal Y and by the way, Y is really heterogeneous on its own, so you're really not gonna get like, this equals that. Um, but also that's just kind of the joy of research in a way, is you continue to look — you continue to seek answers, right?

Yeah.

Brady Huggett

You stay curious. Well, this, this might be a part of it, but let's keep looking. Even when you think you have it, you need to, need to kind of keep looking.

Ashura Buckley

I would be very happy to get to the "have it." I just think, um, science takes a, a long time. I think, um, scientists know that.

Brady Huggett

Yeah.

Ashura Buckley

Right? Um, I would be very happy to get to a point where not X equals Y in terms of development and, and developing a diagnosis, but X equals Y in terms of, if I do X why is the result of a better outcome for that person.

Brady Huggett

Mm.

Ashura Buckley That I would be very happy to get to, and that is where we're working toward.

Brady Huggett Mm. Yeah. Um, one final thing.

Ashura Buckley

Oh, sure.

Brady Huggett Is it safe to say, given some of your family history —

Ashura Buckley Yeah.

Brady Huggett — whether it's your siblings or maybe your father —

Ashura Buckley Yeah.

Brady Huggett — that that is why you study mental health.

Ashura Buckley Yeah. You know like, "One final thing." [laughter]

Brady Huggett Just to bring this back to the beginning.

Ashura Buckley

Yeah. I think it's very safe to say that. And I think the, the super interesting thing for me about it is, again, I, I went through a little bit of how I ended up coming to that point, and it wasn't a straight line.

Yeah.

Ashura Buckley

And so the realization that you look back and you say, "Oh, wow, for the last 20 years I've been working to decrease mental health suffering. Why might that be?" Yes. I think yes, you — I did definitely end up always leaving that door open that this is where I might contribute. Um, I had an older brother who died at 40 who spent most of his life suffering with schizophrenia.

Um, and I have a younger brother who in his day was diagnosed with PDD, right? Pervasive developmental disorder was sort of like a precursor to, um, you know, um, autism, uh, in a way it was one of those, uh, diagnoses where if you made the diagnosi- diagnosis, but you didn't have evidence for whether or not it happened before some certain age — I can't even remember the exact definition, but it was, um, a not-quite, right? It was a not-quite diagnosis, but then that diagnosis isn't given anymore, really, and I think it was difficult for my mom, um, to figure out why can't people tell us what, what, what is, what is the problem.

I remember telling her years later, Mom, that actually now he would be diagnosed with autism, and, um, that being really difficult for her because it didn't make sense in the context of what was real at that time period, 1975, right, 1977? I think that's happened to a lot of people. And so this is all to say that the inability to be functional in a way that allows you to support yourself independently happens to lots and lots of families.

Brady Huggett

Mm-hmm.

Ashura Buckley

And I think when we get stuck with putting people in diagnoses that are rigid, then we stop asking questions, 'cause then, oh, then that's what they have and then we have to look here for that and they have this. But my experience has, has not been that. It's been that the diagnoses are as fluid as the cultural context that is looking at them, but the suffering is the same.

Brady Huggett

Yeah.

Ashura Buckley

And so I do this research because I think there are ways to get to therapeutic intervention that haven't been tried yet, um, and that are probably salient to people with a diagnosis of ASD who have trouble functioning, whatever that might be, people who have schizophrenia, who have trouble functioning, whatever that might be. So, yes, that's why I do this research. [laughter]

Brady Huggett

Thank you for doing this interview. I'm gonna ----

Ashura Buckley

You're welcome.

Brady Huggett I'm gonna turn this off. Hold on.

Ashura Buckley OK.

[transition music]

All right. There it is. I could have talked to her for the rest of the day, I think. I really enjoyed it. Uh, I should clarify that New York City was in dire financial straits in the 1970s and on the verge of possibly declaring bankruptcy, but it never actually did, as I suggested to Shu in our, in our talk, so I'd like to set the record straight there.

Thank you, Ashura, for having me into your home. Just before I got back into my car, she and her husband gave me some breakfast pastries for the drive — that has never happened to me before after an interview, ever, so thank you. Thank you for that. It was very kind.

This podcast will be archived on spectrumnews.org. You can subscribe to this podcast wherever you get podcasts. You can also rate and review it if you're inclined to do that sort of thing, as that does help other people find the show. *Spectrum* can be found on Twitter, where our handle is @Spectrum. Some of the history on Bethesda for the opening of this episode was taken from the Bethesda Historical Society, including from an article by Mark Walston. Our theme song was written and performed by Chris Collingwood. And that's it. I'll talk to you on the next one and I'll let the music play us out.

[end theme music]

Ashura Buckley Um, I mean, we can — we can talk about that later. I'm not recording, right?

Brady Huggett You are, but —

Ashura Buckley OK.

Brady Huggett — but, uh, I, we, we don't have to start.

Ashura Buckley [laughs]

Brady Huggett You, you go like this when you wanna start. [crosstalk]

Ashura Buckley Oh, OK. I gotcha.

Brady Huggett Yeah.

Ashura Buckley Um, no, I'm good. [laughter]

Brady Huggett Let me — let me pause this.

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