

Transcript of Lab 054: Say Ahhh

Titi Every once in a while, I have these dreams where I'm talking, and then all of a sudden my teeth just start falling out of my face.

Zakiya Hmm.

Titi OK. If you're a dream interpreter, slide into my DMs or comment under our post because I want to know what that means. I have them regularly at least once a month, where the teeth are just coming out as if they are made of Play-Doh.

Zakiya Oh, and nobody's hit you in the dream.

Titi No, I'm just talking and they just start coming out.

Zakiya Do you grind your teeth at night?

Titi I do.

Zakiya Do you think maybe you just grind them so hard that the teeth are like, "help," They just, in the dream, they're abandoning ship.

Titi My body's trying to save me. It's like, "wake up, girl, you're grinding your teeth into a fine paste."

Zakiya Yes. You know, how would we had the sleep episode and Dr. Jean-Louis said, "Hey, you snore. That's your body's way of saying, 'wake up.'" Your teeth are falling out in your dreams because it's saying, "take it easy on us, please.".

Titi Take it eassssssssyyyyy on me baby.

Zakiya Yeah, the they're singing Adele. You know, you're not the only one, Titi. In the pandemic, we've seen an uptick in dental problems. People are grinding their teeth because they're stressed out. And with the state of the world today, I'm sure there's even more tooth grinding. So if you're having those dreams, your teeth want an out and that takes us right into today's episode--all about teeth.

Titi I'm Titi.

Zakiya And I'm Zakiya.

Titi And from Spotify, this is Dope Labs.

Zakiya Welcome to Dope Labs, a weekly podcast that mixes hardcore science, pop culture and a healthy dose of friendship.

Titi This week we're talking all about teeth.

Zakiya We're seeing a lot of teeth, new teeth, adorned teeth, bedazzled teeth, teeth have been getting a lot of play. And so we're going to talk about it.

Titi Specifically, we really wanted to know more about the connections between dental, health and our overall health and how advances in modern dentistry are changing the game for certain treatments like braces, veneers and root canals. They're not as bad as they used to be, apparently.

Zakiya Well, that's what I'm hearing, but I'm not so sure.

Titi I still don't want one.

Zakiya Let's get into the recitation.

Titi All right. So, what do we know?

Zakiya Historically, going to the dentist hasn't been thought of as a fun thing to do.

Titi On TV and movies, it's always portraying going to the dentist as the worst thing you could possibly do. And I think another thing is that how healthy our teeth are is really tied to what we eat. I know I talked about not wanting my teeth to rot out of my face drinking Coca-Cola in our habits episode, but I know that other aspects of your diet can really affect your dental health.

Zakiya Yes, I think we also know that dental problems or dental visits have been on the rise. I think there were some articles that talked about people not doing regular dental hygiene and going to the dentist office because it always feels like an extra thing, right?

It's not something that's pressing. If you don't have, you know, a cracked tooth or a toothache, you can kind of put it off. And so I think people have maybe put it off too long, and now the dentist office is booming.

Titi So what do we want to know?

Zakiya I have a lot of questions, Titi. First is just tooth anatomy, we talk about teeth, but like, what's really happening in there?

Titi Yeah, and I feel like there is no person that doesn't think about their teeth, their tooth health. I feel like everybody's thinking about, "Oh, how do I present myself when I'm smiling? I hope people like my smile" and things like that. I think everybody thinks about it. And so I want to know what are some of the most common things going wrong inside of our mouths?

Zakiya Hmm. I have had a dental procedure. The procedure went fine, but I had all my wisdom teeth cut out. Oh my gosh. And I was a terror coming off of that general anesthesia.

Titi When was this? I need to know what Zakiya this was.

Zakiya This was high school Zakiya, so you already know. And I just can remember waking up and my mom tells a story all the time that I thought the nurse had-- she had on white shoes. She was a nurse and I thought she had stolen my K-Swiss list that I had. And I was like, She has my shoes. She stole my shoes. That's me on anesthesia. You don't want to be around. And I'd love to know more about the link between oral health and general physical health. You know, I've got some interest from a microbiological perspective, but I think there's probably more to it than I even realize there.

Titi Biofilms on the teeth?

Zakiya Yes.

Titi Ugh.

Zakiya That's what you're scraping off. You're physically disrupting those biofilms with your toothbrush.

Titi Oh my gosh.

Zakiya Uh huh...

Titi Teeth are wearing a jacket.

Zakiya Eww. That's so crazy. And now I'm like, Can I draw that?

Titi And then I feel like the most common thing that folks are afraid of is a root canal. But I don't even really know what a root canal is like, what is actually happening. So I want to know what is a root canal actually, and what are you doing and how does it work?

Zakiya It feels like a paradox. You know, people are both afraid of root canals and seeing the dentist for that. But we're also seeing an uptick in cosmetic dental procedures. People are getting the diamonds. You remember, Monica did it first. Just one of them days, she had those diamonds on her cuspids. People are really tricking their mouths out now, but it feels strange if you're scared of the dentist.

Titi Yeah, I saw a person get fake braces like its actual braces, like they got them installed, but they serve no purpose. She was like, I think I look cute with braces.

Zakiya Wow. Yeah, there's a lot to unpack here. Let's jump into the dissection.

Titi Our guest for today's lab is Dr. Marcus Johnson.

Dr. Marcus Johnson I'm a dental specialist, more specifically an endodontist and I have a private practice in Midtown Manhattan, and we are trying to save teeth and eliminate pain for any patients who need our services.

Zakiya You know, for a lot of people, going to the dentist isn't a favorite pastime. Well, a lot of people actually dread it. But Dr. Johnson says when it comes to seeing a dentist, there is a lot to be excited about.

Dr. Marcus Johnson Dentistry has made significant strides and improvements, and modern dentistry is very much. I think there's affordability within that. It's accessible, the information is out there. The clinicians are trained well. There's so many different avenues to learn, even beyond just the traditional classroom. We're learning from each other on Instagram, different platforms of communication, so don't be fearful of the dentist, because the dentist is your friend.

Titi Yeah, I've seen some pretty funny TikToks from dentists on everything, from how to properly brush your teeth like when you're supposed to brush your teeth--it's before you eat breakfast, of course--to debunking certain myths about oral health.

Zakiya So first, we asked Dr. Johnson to help us understand the anatomy of a tooth, because if we're being honest, teeth are kind of weird when you really think about. OK, let's clear this up once and for all. Are teeth bones?

Titi That is a very good question, because I feel like I see a lot of really funny memes about this very thing, even though it makes sense that we might think that teeth are

bones, you know, they're white, they're hard. You would think that that's what your bones might feel like.

Zakiya They show up on X-rays.

Titi Exactly. They do have calcium, but teeth are not bones. Dr. Johnson helped us break it down a little further.

Dr. Marcus Johnson Teeth sometimes can be overlooked, but the oral cavity is the entrance into the body. And so when we talk about teeth, we have to understand that the importance is paramount. When you smile, everyone sees the pearly whites as the enamel that's the outer covering.

Titi The enamel is actually harder than bone. Dr. Johnson told us it's one of the hardest substances within our bodies, and it acts as a protective layer for the tooth.

Dr. Marcus Johnson Inside of a tooth. Underneath that is another layer, which is dentin, and that's like a forgiving aspect of the tooth. Essentially, if there's cavities or any sort of trauma to a tooth that's going to be a protective mechanism for the tooth and actually respond in a way where cells can regenerate. Or sometimes they may not.

Zakiya And beneath the dentin is the pulp of the tooth. That's where all the nerves and blood vessels are located and those supply the tooth with nutrients.

Dr. Marcus Johnson The whole idea is to protect the pulp, and the pulp is what you think about when people say, Oh, I have a nerve that's exposed, you have to get a root canal.

Titi So protecting the pulp, those nerves and blood vessels inside the tooth is critical. The root canal is a passageway where nerves and blood vessels are connected to the head and neck.

Dr. Marcus Johnson And that's where sensory is applied to the cerebral cortex and the thalamus, where pain is processed. So, ideally we want to keep our teeth as healthy as possible so that we don't have any insult or threat which is going to cause pain or any sort of noxious stimuli which is going to, you know, elicit discomort.

Zakiya But it's not just about protecting our teeth from discomfort. That enamel, dentin, and even the soft tissue gums surrounding our teeth, those all help protect each tooth from bacteria.

Dr. Marcus Johnson So when you have bacteria that are within the mouth, once they have a way to get into the tooth and affect the nerve, they cause disease.

Zakiya And you know, there's always bacteria in the mouth. The problem is, when we don't keep up with our oral health, the bacteria begin to feed on sugars and starches from our food that stay in the mouth. And this leads to plaque and tartar buildup, and that's just biofilms, biological films of bacteria. And then this makes way for tooth decay and cavities and potential infection

Zakiya And cavities in children, also called childhood caries, is one of the most prevalent dental diseases in the United States.

Dr. Marcus Johnson And we have made significant strides in combating all health disease, specifically childhood caries, through fluoridation, community fluoridation of water. We know that communities where there is fluoridated water, there's about a 25 percent decrease in overall childhood or just carries in general for adults and children and, of course, dental sealants.

Zakiya In 2018, the CDC found that about 73 percent of communities in the United States had access to fluoridated water. And so, like Dr. Johnson said, that access leads to a 25 percent decrease in cavity formation in kids, so 25 percent of the population is missing out on that benefit.

Titi The other solution Dr. Johnson talked about is dental sealants to protect young teeth from disease.

Dr. Marcus Johnson Once a permanent tooth comes in and for most kids around age six or seven, as those teeth erupt, we can use composites to kind of bond onto the tooth to actually create a seal so that, like I've mentioned, bacteria or sugar, food and things of that nature does not actually get into the grooves of the tooth, leading to an inflammatory response that leads to the breakdown of the tooth enamel. It's a very basic procedure. It's relatively inexpensive. One of the beautiful things about the Affordable Care Act, as it made it a strict requirement that for all children under 18 that all health care or at least preventative services are included within that provision of health.

Zakiya So is this different from the fluoride varnish I got as a kid?

Titi So sealants are not the same thing as a fluoride varnish. According to Dr. Johnson, silence are actually bonded to the teeth and are meant to last until they're worn away from regular function. They provide additional protection from food, bacteria and things like that from getting into the grooves or crevices of the teeth. But they're not a substitute for brushing and flossing. Fluoride, on the other hand, strengthens enamel to resist breakdowns that lead to cavities. But that's temporary, and the effects are not long lasting like it is with a sealant.

Zakiya So those are some common issues that can happen with the tooth itself. But another area where disease is very prevalent is the gum tissue or periodontia.

Dr. Marcus Johnson At least for adults, over 30 periodontal disease or diseases of the gums are very prevalent. Maybe even upwards to 50 percent of those over 30 are going to experience some sort of periodontal disease, inflammation, gum irritation, bone loss, just a lack of dental care.

Titi And as Dr. Johnson says, oral health is not just about protecting our teeth. There is also a connection between oral health and general health, especially because people tend to see dentists a bit more frequently than primary care providers. Dentists are really on the front line of a larger community of health care providers.

Dr. Marcus Johnson There's been significant research that shows the strong link between all health and systemic health, and so sometimes a patient may come in, they'll have some sort of periodontal sores or gum sores or something like that, certain just presentations within the mouth that may say, you know what, you may be a candidate for diabetes or some other systemic ailment like hypertension. Why don't you go ahead and take this referral? Go follow up with your primary care provider, at least get screened.

Zakiya That sounds like a good dentist to me. Yes, it's really fascinating when you think about it because I don't think of the dentist visit the same as I think of a doctor's visit. And because dental insurance is always billed, you know, separate from our overall health insurance, we're kind of trained to view dentistry and oral health is separate from our overall health, but is really super connected.

Titi Yeah, Dr. Johnson gave us another example with pregnant people. Health care providers have found a systemic link between pregnant people with untreated gum disease and low birth weight in babies. And it's not just oral health that can be an indicator of things like diabetes or hypertension. Those things can affect your oral health just as much, so it's like a chicken or egg type thing. Your health can affect your teeth, and your teeth can affect your health.

Dr. Marcus Johnson And just to put a little bit more plainly, if someone were maybe to have hypertension uncontrolled diabetes, we understand that diabetes delays healing the increase in the sugar. It's going to prevent proper healing.

Zakiya Well, now that we're talking about healing, let's go ahead and get to the number one invasive thing we always hear about when it comes to teeth on television, and that's root canals.

Titi Oh no, I'm nervous.

Zakiya The only thing that felt as globally hated as root canals growing up was brussel sprouts. I like those are the two things on TV that everybody hated.

Titi Yes, absolutely.

Zakiya But Dr. Johnson is saying, "Hey, the times have changed." He's telling us we shouldn't be afraid of a root canal.

Dr. Marcus Johnson Patients think that by going to get a root canal, they're going to be in pain. Quite the opposite. When you go to see the endodontist or go to get a root canal, our whole focus is to eliminate pain. And with modern advances in local anesthetics, as well as general anesthesia, just a lot of ways that we can manage and properly treat these cases in a seamless fashion.

Titi There's a lot of other reasons why a patient might need a root canal. Dr. Johnson gave us four examples. The first is trauma to the teeth. So from a sports injury or a fall or an accident that might have happened, that might disrupt the nerve complex.

Zakiya Second, cavities can break the teeth down over time.

Titi The third is rapid movement of teeth that disrupt the nerve complex. Now I just need to know where are those teethies going.

Zakiya Well, you remember in middle school back when kids used to put rubber bands on their teeth and stuff like that, making fake braces.

Titi Homemade braces.

Zakiya And you know, like you said, some people on Tik Tok and Instagram, they're making fake braces. So if you are not doing this stuff under the care of a dentist or orthodontist, you are not moving your teeth at a slow pace and you could have this happen. This was what some of the dentists were complaining about for some of those Instagram companies that were sending trays directly to people. They're not linking you up with the dentist and you start getting some rapid movement. Things can go wrong.

Titi Them teeth are sprinting.

Zakiya Yeah, it's supposed to be slow and steady.

Titi It's supposed to be a leisurely walk. Them teeth sprinting to the finish line.

Zakiya And then the final thing is cracked teeth from grinding. I know we saw a lot of stress grinding of teeth during the pandemic. So root canals going up, up, up.

Titi I was actually one of those people, but I was lucky because I have a retainer, so it almost looks like an Invisalign and I had a retainer that I was putting in and I grinded through the retainer. So it wound basically acted as like a shield for my actual teeth. I probably would have grinded down to my gums.

Zakiya Oh wow. So you say you think you could have ground through your enamel, dentin. No, I'm going to stop.

Zakiya Pulp, nerves!

Dr. Marcus Johnson Two thirds of dentists have seen an increase in patients coming into their practice with cracked teeth. And so we know that is a direct result of the high anxiety from the pandemic, patients staying at home more, snacking more frequently, sitting in front of the computer Zoom, things of that nature.

Titi The root canal is all about saving the tooth, which Dr. Johnson says is more preferable than an extraction. So pulling the tooth out? Hmm. Here's how the process works.

Dr. Marcus Johnson One of the analogies I like to use is like a number two pencil. So, earlier I gave us the anatomy of the tooth. Well, if you think of a pencil as the tooth, the lead would represent the nerve. So, by completing a root canal, essentially we are removing the lead from the pencil. But you still have the pencil intact and we're cleaning up that space and then filling it up, sealing it up as to keep any contaminants or bacteria from getting back into that space. So, by doing the root canal, technically we are saving your tooth.

Zakiya I get it. The goal is to get in there and clean out all of that bacteria from the canal space. Then they do need to use a drill. Or sometimes I use lasers to drill a hole into the tooth to get down in there. And that can turn a lot of people off. I feel like keep the lead in my pencil.

Titi Yes, me, I am people. I'm going to keep all those pencils. It'll be fine. In terms of comfort during the procedure, which can take an hour to an hour and a half, the patient is typically placed under general anesthesia so that there's no pain. And now dentists will offer headphones for patients to listen to music or watch TV instead of hearing all those dental sounds. You know the "zzzz"

Zakiya Yes, those are the noises, I don't like.

Titi Blood pressure through the roof as soon as I hear it.

Zakiya Well, let's take a break and when we come back, we'll get into some of these new developments, trends and technologies in dentistry.

Titi We're back we've been talking to Dr. Marcus Johnson all about teeth, oral health and how it's connected to our overall health. But before we get back to that, let's talk about what we're covering in next week's lab.

Zakiya Next week, we're talking all about cyber security. Scamming stories have been on the rise, from inventing Anna to the Tinder Swindler. You know, we've been hearing a lot about ransomware attacks and other cybersecurity threats, too. So we're digging into exactly what that means and how to keep our online information safe. But in the meantime, let's get back to teeth.

Titi I've seen on TikTok that there are some people who are really taking their oral health into their own hands. I saw a TikTok of a woman who was like, "I just got three teeth pulled in that apartment right there, and she points to this high rise apartment." I was like, No, that is not where a dentist is doing business. I'm sorry. It's just not.

Zakiya It's a no for me, dawg.

Titi I've seen people getting like all of the technology they need to put on their own braces. I've seen people making their own retainers with plastic beads, and you put the plastic beads in hot water. Once all the plastic beads like melt, you put it in your mouth and you shape it around your teeth. It's how you make like a mouth guard for when you're playing sports.

Zakiya Mm-Hmm.

Titi But they use it as a retainer.

Zakiya No, no, no, and no.

Titi I've seen everything on these internets. It doesn't seem safe.

Zakiya We're taking Pinterest and DIY too far. Too far.

Titi Not everything is meant to DIY. You shouldn't be DIY on your own like surgeries.

Zakiya Yeah. If you can go to the dentist, you should. Now, we realize everybody doesn't have access, right? But I think if you do have access, take the dentist-approved route first. When I look back, it might have been too much. When you know, I remember tying some string around a tooth and closing the door, trying to pull a loose two that you tell me permanent teeth. People are adjusting in apartments. No, thank you.

Titi No way. I saw a TikTok of a woman who got braces put on by a friend. They don't function, but now her teeth are shifting, her gums are receding and her teeth are shifting. She had perfectly straight teeth. Put the braces on. Now they look very different. I'll say that.

Zakiya Uh huh. I believe it. And like Dr. Johnson told us earlier, oral health can indicate other health issues. And if you're having your teeth worked on by somebody who's not a

dentist, they could easily disregard signs of other health implications, like sores on the gum.

Titi I don't know what's happening. It doesn't seem safe. Is it safe?

Dr. Marcus Johnson This platform of DIY has really taken off, specifically within the dental space. But I think it's important that we really promote safety first. At the end of the day, it's always best to consult with a trained dental specialist, and now Zoom being so prevalent, you can just call up your local orthodontist have that consultation first, and if they recommend a DIY program for you by all means, it's most likely going to work for you.

Titi Dr. Johnson said if they say to go to your next door neighbor and tell them to use the pliers and pull it out, go ahead. But I doubt they will say that.

Zakiya And Dr. Johnson also said that he's seen an increase in patients actually needing treatments like root canals because they try to do their own thing first, so they try to make their own Invisalign and ended up doing damage to their nerve bundles and their tooth. So, if you're not careful, what you tried to prevent in the first place with DIY will actually create more problems for you down the road and boom, you're right back at the dentist office.

Titi Just stop all that and just go to the dentist. So as an endodontist, most of what Dr. Johnson specializes in is under the surface of the tooth. But we really wanted to ask him to talk about veneers. We're seeing a lot of people getting veneers as opposed to a root canal. Veneers are really about improving the esthetic of your teeth.

Zakiya Yeah, I feel like ever since Cardi B was like...

Titi Yes, I was going to say that. Got a bag and fixed my teeth. Hope you know this ish ain't cheap.

Zakiya I think everybody's gone teeth crazy.

Titi Yeah, everybody. I feel like so many people have veneers these days and they're getting them at a rapid rate like it went from, you know, in a few people that have veneers because they had, you know, some dental issue that they were trying to fix to now getting veneers is like getting a pair of glasses.

Zakiya I was going to say, like when people got a second hole, you know, for the earrings, like it was like everybody got them all of a sudden. It feels like that.

Titi That's probably more in line with that than glasses because glasses, you actually need them to see.

Dr. Marcus Johnson So as opposed to getting a crown and a crown is going to cover the entire tooth surface, if you think about it, a crown goes around the entire circumference of a tooth. A veneer is only going to go over the outside facing aspect of it. You know, they drill the tooth down to certain dimensions and they'll bond that custom-made laminate on your teeth to give you that more esthetic look that you desire.

Zakiya And another thing that I've seen is not only are people getting veneers, but they're going out of the country to get the veneers. Are passport veneers better? Like what's going on?

Dr. Marcus Johnson They may just want to vacation as well. And I'll frame this from perspective of I'm a big time supporter of the international dental community as well as domestic. I know of talented clinicians. You know, Europe, Mexico, Asia, you name it. I think that if you go to a reputable source, someone that you feel comfortable with, and that's perfectly fine to do your research. And if the price matches your budget by all means, but understand that if something does develop, you know, six months down the line, your veneer falls off six months down the line, you develop a root canal. Are you going to be able to go back to that individual in a timely fashion to have that emergency situation addressed?

Zakiya That's a really good point, and Dr. Johnson mentioned that getting veneers has the same type of risk as any other dental procedure, so the tooth could be overprepared. So you imagine shaving that tooth down, just shaving it too far. Now you just got a little nub. It's exposed. The nerves and things are very close to that surface, and that could cause you a lot of pain or discomfort. Or you might need a root canal after getting the veneers apply. So, of course, they can break and cracked just like any other tooth. So making sure you talk to a dentist and figure out a plan for follow up care is crucial. All right, so let's pivot to developments in dentistry.

Titi When I went to the dentist recently, I was absolutely blown away by some of the new technology that they were using to treat patients. I was getting fitted for some Invisalign. And it used to be a big deal to get those types of things done because you'd have to put this really nasty mold into your mouth. It would have to sit there for a little while.

Zakiya Yes, it would feel like you were choking.

Titi You feel like you're choking. It's very dramatic. But this time it had been--I'm telling my age-- it had been like since the last time I went to an orthodontist, not the dentist, like 15, 20 years? And they had a device that looked like a toothbrush. And they just stick it in your mouth and it scans each tooth. They just rub it over each tooth, and it creates a 3D mockup on the screen of your mouth. No more molds.

Zakiya What? No more slimy stuff?

Titi No more slimy stuff. You get a digital mold. You get to go home. You don't have to be going, "agh, agh."

Zakiya Get this stuff out from in between--

Titi Trying to get that stuff from in between your teeth, yeah, no more of that. I was like, This is dope.

Dr. Marcus Johnson That's the intraoral scanner. And that's very big within just a general dentist. You go to your dentist now you're going to see that. And that technology eliminates now the necessity for taking that nasty, gooey mold that kind of makes you gag and choke. And so you can recreate someone's smile and then guess what? Chair side being right next to you, they can mill a crown or mill some sort of aspect of your smile right there at the same time so that, like I said, the efficiency is streamline. Hey, man, I just broke my crown at lunch. I come in. Fix me a new one, and I'm already back out hanging out at happy hour at Five o'clock. New smile, I'm ood. That's how dentistry is changing lives in this new millennium, so it's pretty good stuff.

Titi And from a material science perspective, Dr. Johnson was also talking about new materials being used to create an even more protective coat or seal for your tooth.

Dr. Marcus Johnson You know, when I first started out, we always had a biomaterials class and we were kind of talking about the composites and just the particle size and the smaller the particle size, the better the seal, the better the bond you can actually get. So now we see extreme nanoparticles existing within these polymers within these composites that really allow for that protective seal. Because again, like I highlighted, the goal is to prevent anything from getting inside for tooth, going back to the sealants. And that's why it's important that we seal those young patient's teeth.

Zakiya And the same with new and different substances that are being used to bond different parts of the tooth. You need materials that will effectively stick to different parts of the tooth, like with veneers or crowns. So Dr. Johnson was saying there have been a lot of new materials coming out for those purposes as well.

Titi One of my favorite materials that Dr. Johnson didn't talk about is gold. I love grills and seeing people with grills, and another new thing that's been coming out is like putting little jewels on your teeth. That's pretty cool, too.

Zakiya I mean, listen, any additional care paid to the mouth, even if it's just cosmetic, I think will also cause you to think about those things that you need for general upkeep as well. So that's all good because one of the things we didn't discuss but that we know is that root canal that we talked about allows those nerves and vessels of the teeth to connect to those in your head and neck which go straight to your heart. And sometimes if you're not taking care of your teeth and you have those bacteria in the mouth, they can lead to infection and that can lead to bacteria in the heart. Hmm. So what I basically

just described is how a tooth infection or an abscess can lead to sepsis, which is bacteria in your bloodstream. The teeth are very important, yall, right? And so mouth health, like Dr. Johnson, say it is overall health. So anything that's going to put the microscope on the mouth, I'm for it. So, you know, every week we share one thing that we're really excited about. Well, this week is one person, a new member of our team, Briana Garrett. Everybody, please give her a warm Dope Labs welcome. Welcome to the team, Briana! That's it for Lap 54. Did it make you want to run out and call your dentist to schedule an appointment? If you're overdue, please get to it. Call us at 202-567-7028, and tell us what you thought about this episode. Or you can give us an idea for a lab we should do this semester. I can tell you we both love hearing from y'all. That's 202-567-7028.

Titi And don't forget, there's so much more for you to dig into on our website. There will be a cheat sheet there for today's lab and additional links and resources in the show notes. Plus, you can sign up for our newsletter, so check it out at dopelabspodcast.com

Zakiya Special thanks to today's guest expert, Dr. Marcus Johnson. You can find him on Instagram @cityendodontics.

Titi You can find us on Twitter and Instagram @dopelabspodcast.

Zakiya And Titi's on Twitter and Instagram dr_tsho.

Titi And you can find Zakiya on Twitter and Instagram @zsaidso. Dope Labs is a Spotify original production from MEGAOHM Media Group.

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