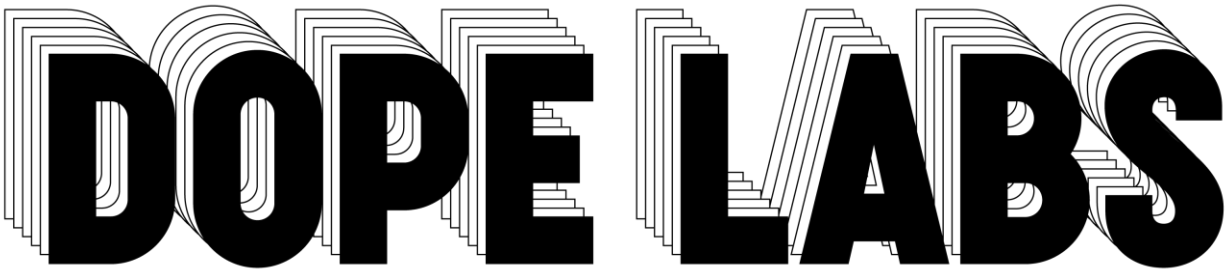

Transcript of Lab 024

Zakiya: Can you believe it? It has been a year.

Titi: I can't. It makes me emotional. I can't believe we've been doing this for a year.

Zakiya: Don't try to make me cry.

Titi: Our baby is 1 year old.

Zakiya: Dope Labs is 1 year old, and it feels just right, you know, on this anniversary in Black History Month. It feels right for us to really highlight some of our favorites, y'all.

Titi: Yes.

Zakiya: Some of our favorites in STEM.

Titi: Yes. All the black folks in STEM that are all over the world, we wanted to hear all about the work that you do.

Zakiya: So if you listened to the end of the last episode...

Titi: Or if you follow us on Instagram, Twitter or Facebook.

Zakiya: You would've heard a call where we said, hey, if you're black and you're in STEM, we want to hear from you. We said to record yourself kind of explaining what you do, what your field is, where you are affiliated. Way you like to do in your spare time. We wanted to hear all about it.

Titi: And y'all responded a lot.

Zakiya: Yes. Now, before we even get started, I want to tell ya, we'll have 30 minutes so we had to cut some clips.

Titi: I'm sorry, we could not put everybody. If we did, we would need hours and hours and hours of space.

Zakiya: But we have a couple of your fellow dope labs listeners who are black in STEM that we really want to highlight. And I can't wait.

Titi: I'm Titi

Zakiya: And I'm Zakiya.

Titi: And from Spotify Studios, this is Dope Labs.

Zakiya: So first we are going to give you a few little tidbits about black history.

Titi: Yeah. So Black History Month is celebrated here in the U.S., in the U.K., Canada and Ireland.

Zakiya: Oh, Ireland?

Titi: Right. I was thinking the same thing. And it started with Black History Week back in 1926. Carter G. Woodson wanted to celebrate black history. And so he designated the second week in February as Negro History Week.

Zakiya: OK. And so he chose the second week because it was the birthdays of Abraham Lincoln and Frederick Douglass. And so then Black History Month. So expanding out from Negro History Week to Black History Month that was in 1969. And it was first celebrated at Kent State in Ohio in 1970.

Titi: Yes. And then when you fast forward six years. Black History Month is being celebrated all over the country in all different types of communities.

Zakiya: Yeah. And then President Gerald Ford formally recognized Black History Month, and we've been rocking with it ever since.

Titi: Black Power Fist Sign.

Zakiya: So like we said this episode, we reached out to you and you guys gave us some great clips about what you're doing. And I can't wait to share those with everybody. You know, I have to say, I don't like to give engineer and his props, but y'all show it out.

Titi: Yes, y'all did. And I'm very proud as a fellow black and engineering person. I was very proud of that 'e' in STEM came in strong.

Zakiya: It was in bold

Titi: It was a capitol E, bold, in the boldest font you can think of. So that's where we're gonna start today.

Zakiya: Yes.

Titi: And so I think before we jump into our clips that we received, I think given a general overview of what engineering is and why it's important is important. So engineering is the how you apply science and math into the real world, into the things that we touch and feel. So engineering is important because when you look around you at pretty much everything within sight, somebody had to engineer that. So they had to understand its characteristics, its chemical properties, its its structure in order to make something work well, for it to work efficiently and for it to be useful for you. So engineers are very, very important. I don't mean to toot our own horn, but toot toot!.

Zakiya: I think that's called laying on the horn, I don't think that's tooting.

Titi: Well, that's fine. That's fine. That's fine. Engineering is important. Engineers are important. And I am very proud to be an engineer and to be a black engineer.

Zakiya: Let's get into the clips.

Chandler Funderburg: My name is Chandler and I'm a structural engineer in training. In my work, I take an architectural concept of a building and turn it into something that can withstand loads from people, equipment, winds, snow, earthquakes and many other forces. And I build structural models to analyze the forces on all of the structural members and produce drawings so that it can be built. Structural engineering is important because it allows us to enjoy the beauty of the built environment while also staying safe and protected from the elements and forces around us.

Titi: Yes, the work that Chandler is doing is super important. If we think about any building, any structure that we've stepped into in our lives, a structural engineer has been a part of that. They have used their mind to make sure that that building stays up while we're in it. And the thing that we also have to consider is that what is taken into account when a structural engineer is working is not just, oh, how does concrete stand up? How does rebar stand up? How do all these things in a brick, whatever.

Zakiya: What is rebar?

Titi: So rebar, is a reinforcing steel that they usually put in concrete, just help it hold together. So if you were to go to any building that was recently knocked down, you could see rebar all through the concrete, things like that.

Zakiya: OK.

Titi: They also have to consider where that building is being or that structure is being built. So let's say that they're in the northeast. We get a lot of hurricanes here. So you have to build this structure with that in mind. So you have to think what our hurricane winds, how how many miles per hour is that? And then they start to test those things out. So they might build like a mini a sample structure and then they put it in a wind tunnel and let that wind just whip it, just like how

a hurricane would and see if it stands up. If it stands up, they know they're doing the right thing and then they can use that material and build these buildings that protect us during those times. That's the reason why when we have all of these really, really harsh weather events, we feel so lucky that our houses don't fall down, you know? And then you also have to consider time and other events that we in our everyday don't think about. So you have to consider how many people are going to be in this building. What is is building going to be used for.

Zakiya: How long should it last?

Titi: Right. So you have take all those things into account when you are when you are building these structures. And let's not just focus on buildings. Let's talk about tunnels, bridges.

Zakiya: You know, I am questions about that!

Titi: And things like that. So if you're thinking about a bridge that connects two pieces of land, that's what a bridge is. They have to consider how many cars are going to be going over, whats the average amount of cars that is going to be going over this in a year. What does it need to withstand? So then you have to go through wear and tear testing for these different materials. Tunnels, Is this tunnel gonna be underwater. How many pounds per square inch of pressure does it need to withstand? These are all the things the structural engineers do. And this is why I love that field. I'm not a structural engineer, but I have so much respect for them.

Zakiya: I can't tell you're not a structural engineer . I don't know if this feels obvious or not, but it just occurred to me, based on the things that you're saying, right? Why you can look at something on TV that has multiple houses and you can kind of pinpoint, This is where this is in America, where this is where this is in the world. Right. Because these structural engineers have optimized what a home should look or feel like based on what's happening in that area.

Titi: Yeah and, you know, the first structural engineers were. The indigenous people of America.

Zakiya: Yes. Yes.

Titi: If you go out to two places in like the desert or Arizona and how they build their houses. The indigenous people were doing that way before modern day structural engineers came along.

Zakiya: I was reading something about homes in Japan and how they have these narrow these narrow entry points and something about where you spray the water on the ground so that evaporates. So it feels cool. And all of this stuff people were doing. I'm like these those are structural engineers

Titi: Those are structural engineers.

Zakiya: And I think one of the things you hit, a structural engineer has to really understand the material that they're working with, too. And it feels like structural engineering is a natural partner with material science.

Titi: My other love, that's my main joint. That's my bae, material science.

Cicely Shillingford: This is Cicely speaking. I am a fifth year PhD student studying chemistry and material science. Right now I'm using a confocal microscope, which is a tool that I use a lot because I study colloidal particle materials. So colloids are present in many cosmetic formulations, all the lotions, creams, things like this that you use. These are made up of colloidal emulsions as well as the droplets of water that make up clouds in the sky. The milk in your fridge, the paint on your walls. All of these things were developed using colloid chemistry. So specifically, I make solid colloidal particles which can be thought of as really, really small marbles. And this is important because as I've mentioned, colloids are present in a lot of materials that interact with debris and being able to manipulate the structure of the building block of these materials can give materials really interesting properties. So, for example, colloidal particles can be used to create photonic crystals, which can emulate the kinds of iridescent color and diffraction patterns that you see in things like Opal's and clamshells and blue morpho butterflies. So I create new colloidal building blocks so that we can have some day, you know, screens that only require the input of light rather than input of electricity. So that's one of the applications of what I do. So that's a bit about me, material scientist.

Titi: I love this because just like Cicely, I am a material scientist as well. I didn't work with materials on the micrometer scale that I worked with materials that were on the nanometer scale, so a little bit smaller. But I totally understand the colloidal chemistry that she's doing and why this is so important. OK. So colloidal particles are spherical and they're dispersed. It can be dispersed in a gas, a liquid or solid. The ones that we most commonly understand are the ones that are dispersed in a liquid. Then the reason why they're so cool and so important is because when they're stable, everything looks nice and smooth. But if they're unstable, then things start to clump up and not look so great. And that that balance between the two is really, really hard to find. So when people like Cicely are doing really novel work to create different structures inside of a colloidal suspension, whether it be solid, liquid or gas, it is very, very difficult to do, especially if those particles are not spherical. So when she talks about the butterfly and clamshells and how you could see those rainbow colors, when you look at them, it's the diffraction of light. And so when light hits those things because of the particle structure within the clamshell or in the butterfly wing, we see that rainbow because of how the light is reflecting back.

Zakiya: OK.

Titi: So what she's doing is really, really innovative and really, really cool and it's going to change everything.

Zakiya: So what you're saying is that we're getting this refraction of light and she's creating something that will probably that could do the same thing that feels like. I mean, I'm going to give you give you your engineering and materials science props. But that also feels like biomimicry. Right. That feels like.

Titi: Okay,.

Zakiya: Taking things that exist in biology, in living organisms and recreating them. Right to advance technology.

Titi: OK.

Zakiya: I think we're in the bio wheelhouse. I'm just going to go ahead and say, this is my spoke.

Titi: I see where you're going. OK. So that we've had enough of the engineering talk. I am very excited to jump in to the bio sciences.

Zakiya: Biology is the study of living organisms. And people always say, like all biology does that mean, you have plants and animals, but there's so much more to it. Just like we learned about engineering at this macro scale when we talked about structural engineering and building things up, the same parallels exist in biology. So you have people that study ecosystems and organisms and how they interact. And then you end in how to build up systems and how to make them, how to make different types of organisms work together, which is what I used to be interested in, you know. So microbial symbiosis. But then also there are people that study how to break these systems down. And how to look at these things that are really tiny, nano or micro level. You know, before we were even recording this episode, I was telling you about these African cichlids, these fish. You know, I go down the rabbit hole,.

Titi: My friend, she watches one video on Twitter and she just spirals out of control.

Zakiya: I saw someone give a presentation on this earlier this week. And so it has really just rocked my world. I'm like, there's so much we don't know about fish and behavior and things we can learn. And we have someone who's called, who called in, who's a marine biologist.

Titi: Perfect.

Zakiya: Perfect. Let's hear it.

Dr. Cinda Scott: My name is Cinda Scott and I'm a marine biologist. I'm the director of the Center for Tropical Island Biodiversity Studies at the School for Field Studies in bocas del Toro, Panama. I'm female. I'm black. I'm originally from Boston, Massachusetts. And I live and work abroad in Panama. I chose a career in marine biology because I've always been fascinated by the fact that humans and fish have many genes in common. Fish are our oldest vertebrate ancestors. And through them, we can understand more about ourselves. In addition to the fascinating world of fish, I mean, they can change colors in the blink of an eye. They can switch sexes. And they have an incredible array of adaptations that we mere humans barely understand. Fish can tell us so much about how we evolved, for example, major systems such as metabolism. And when you study fish and really see how varied their genome sizes are, you can really begin to understand how it's actually possible that so much diversity exists between species.

Titi: Cinda's work is really cool. I never even thought of any of that.

Zakiya: It feels very similar to this conversation we had with Dr. Kizzmekia Corbitt when we were preparing for the coronavirus episode. Do you remember?

Titi: Yes.

Zakiya: You know, people often say, Oh, why are they studying this grasshopper or why they studying bats and when and why are they studying fish when they're so much human disease? But like she said, we share genetic information with these organisms, right?

Titi: Yeah. So potentially studying those organisms in animals, it could lead to us discovering potential cures for maybe diseases that we have as humans.

Zakiya: I mean, I think it just leads to broader understanding of life in general. Right. It changes over time, advantageous changes things that we can see different branch points where things have evolved in different ways.

Titi: Exactly.

Zakiya: There is so much to learn there.

Titi: To quote Jay-Z,.

Zakiya: Here we go.

Titi: "Hov did that, so hopefully you wouldn't have to go through that." These animals, these animals are experiencing these things that almost directly mirror what we go through. If they have found a way to adapt or learn a way to heal themselves or anything like that, if they have the secret, why should we have to go through that? They're here to help us. We're all living in this animal kingdom together.

Zakiya: And so that brings us to one of our next topics, which is human disease. One of my first it was actually my second research experience was working with this professor, Dr. Emanuela Taioli. It was an epidemiology lab and I studied mammographic density. And so we would look at. They would look at mammograms and based on like there was some program they had. And based on how the mammogram looked, you could kind of get an idea of breast density. So they were trying to see if there was a correlation. They were saying then it seemed like African-American women, their breast density was higher and they were trying to see if there's a correlation between breast density and predictions about breast cancer from the mammograms. It was it was like this mams dataset.

Titi: What did they find?

Zakiya: I don't know. It was my sophomore year girl.

Titi: That's Very interesting, though.

Zakiya: I was still trying to learn. It was a summer research experience.

Titi: That's really interesting work, though.

Zakiya: I don't know what they found on the study, but, you know, you never finished a study in never. Right. And this next topic is special to me, the caller. Right. This is one of my really good friends. And we've been friends for a really long time. And he is the reason I did it leave Hampton the first year, in the first week, OK, it was the right after Labor Day.

Titi: I want to go home.

Zakiya: And it's exactly what I said. And if you've been happy, you know you can have a car on campus. And I was like, will you drive me back to North Carolina, I have got to get home. I don't think this is for me. I should've gone to A&T! And it just really helped me stay on the path. So he was a chemistry major, I was a biology major. We knew each other from high school, went to the same college, and then he went to med school. So I'll let you hear about what he does.

Dr. Randy Miles: Hi, my name is Randy Miles and I'm a doctor at Massachusetts General Hospital affiliated with Harvard Medical School. I am a radiologist who specializes in breast imaging, which means I interpret x rays of the breast called mammograms looking for any signs of breast cancer. So in the U.S., about 1 out of 8 women will develop breast cancer over their lifetime. So it is important, I repeat, very important that women at average risk receive a mammogram every year starting at age 40. Our goal is to find cancers if they do develop when they are small. So they are easily treated. So if you're listening to this, you are a woman and you are over the age of 40 and are not up to date with your mammogram. Don't be scared. Go get screened, friend. Science is such a big part of my job from X-ray generation to performing procedures. Yes, I do biopsies too. My job is dope just not as dope as Zakiya and Titi. For more information on breast cancer in breast imaging, please follow me on Twitter @RMilesMD.

Both: Randy, Randy, Randy.

Titi: We love Randy.

Zakiya: We do. And the work he's doing is so important. You know, I think one of the things that I've been really interested in is the awareness around health. Like just health awareness. And prioritizing one's health, especially in the black community. Right. And I think the people that are doing STEM outreach, you're doing they're spreading that message, too. Right. They're saying like this is important. This is what you should be doing. This is why this matters. This is how one thing is linked to another. I was talking to someone the other day and we were talking about dental health, which a lot of people think of based on how our current insurance system is as a luxury. But gum disease and bacteria in your gums can lead to heart disease because it's all linked to the same blood system. And on. Who knew? I mean, I knew it. But you do you do you think about that when you think about brushing your teeth and flossing? Do you think about heart health?

Titi: That's why I brush my teeth before I eat.

Zakiya: Okay, that's good. Breath don't stink.

Zakiya: OK. So we've heard from some of you, but we have some more people coming up. We're gonna take a quick break. And when we come back, we're gonna tell you all about STEM education and outreach.

Titi: And we're back. And so now we are going to jump into something that is very important and that is STEM education and outreach. A lot of folks think that STEM is just in the classroom.

Zakiya: They couldn't be more wrong.

Titi: Bunsen burners, beakers and all these things like that. There is so much more to stem than meets the eye.

Zakiya: Yeah. I think, you know, it's education. Yes. In the classroom. Yes, it's important. But it's also tying those principles to day to day things that you see. Right. You understand importance. You understand. Yes. The topic or the content. But then you see how it's related to all these other systems that we use every day, like you just said about structural engineering. I don't think about that when I go in a house and walk upstairs and hope the floor doesn't, I dont hope the floor doesn't fall in is just not going to fall.

Titi: Yeah.

Zakiya: You know, I think about that kind of stuff with civil engineers who who make sure that our water gets to us and is not contaminated. I'm looking at you, Flint, but there I mean, there's just so many things that are happening that are related to STEM and we don't immediately consider them STEM. And I think we can kind of raise our awareness with that and the people that are doing that, our folks that are in STEM education and in outreach.

Titi: Yes.

Zakiya: So when we think about 21st century learning, that's not just in the classroom, that's on the apps. This podcasts like this one.

Titi: Exactly.

Zakiya: Everywhere.

Titi: Yes. And with all this new technology and ways to educate ourselves, the amount of points where STEM can touch you are increasing exponentially. And so we loved hearing from people who had STEM backgrounds in our STEM outreach and then some that don't have STEM backgrounds and in STEM outreach. And so let's listen to that now.

Mercadi Crawford: Hi, my name is Mercadi Crawford from Houston, Texas. But currently living in Washington, D.C., my STEM career is not like everyone else's. I do not have a STEM background, but my goal and my passion in life is to introduce students from K-through-12 into STEM careers. I've spent the last 10 years introducing our amazing students to what STEM can do for them, their families and their communities. And I will continue to do that as long as I can. So keep up the good work, girls. I use your podcast all the time. I love it. And I hope to meet you one day. Thanks.

Zakiya: I think the K-through-12 you know how I feel about that. K-through-12 is where my heart is. A lot of my my first exposure to STEM education was in the K-through-12 arena.

Titi: Me too.

Zakiya: I used to participate in this program called Boost back when were at Duke. Mm hmm. And boy, those fifth graders were giving me a run for my money. OK. We'll meet these fifth graders and they will be in the program through and they would join the program for the sixth through eighth grade. And we would have these Saturday activities and we worked with them. And then they will build up to this one poster presentation. And it would just blow my mind to see how much they learned we would do these joint activities. I still think about my boost kids all the time,.

Titi: And I remember when I was in grad school with you, I was organizing graduate students from all different backgrounds to go to this middle school and talk about the work that they do like. Yeah, really relaxed kind of like TED talks style so that kids can see themselves in us basically and let them know like how he got there. Like a lot of people had struggles stories about how they got to being in graduate school. And it just kind of humanizes what a scientist is because what I would always ask them in the beginning, like what do you think a scientist looks like? And they would describe his old guy with a lab coat, pocket protector, glasses and all that. They basically were describing Albert Einstein. what they thought he looked like. And so I would bring these people in to say, look, I'm a scientist. They're scientists and we're regular. So it really I feel like it really helps to show those things to the K-through-12 students.

Zakiya: So I think, yes, is both exposing students and exposing students to careers in science and helping them see what a scientist looks like and then just given them a deep dove. Hands on experience in science. And our next caller has done that.

Dr. Serena McCalla: Hi. My name is Dr. Serena McCalla and I am the president and founder of iResearch Foundation,and iReasearch Institute. With regards to the foundation, we raise funds to support underrepresented and underprivileged young adults who are interested in science research, but maybe don't have access to complete science research projects. And at the foundation, we provide them an opportunity to work at iResearch Institute on either learning about research methods and the steps in order to become a researcher, how to write and abstract, how to write a paper, or at the four-week level where they're more advanced students. We actually help them create projects that we provide all of the reagents for and equipment for and allow them to use this arena, this laboratory to conduct novel experimentation that they could use to write again, research papers or to compete in some of the scholarship money that's available

for STEM students. So overall, the goal of iResearch Institute and Foundation is to really bring STEM to the masses. We want high school age students to be fully invested in the research process in any discipline of science that they are interested in, and we help them to achieve that goal through working with us.

Zakiya: And that last caller was being really modest.

Titi: Yes. Listen,.

Zakiya: She is a rock star science teacher.

Titi: Do your googles yall, do your Googles

Zakiya: That was Dr. Serena McCalla, who has seen amazing projects to the International Science Fair.

Titi: Not that science fair that y'all did

Zakiya: This is how a plant grows.

Titi: Exactly, not those kinds. We know that a plant goes with with water and light. We know that. We talking about.

Zakiya: Real projects.

Titi: Big projects.

Zakiya: These are high schoolers and you can learn more about her work and check her out. There's a National Geographic documentary called Science Fair that features her and nine of her students who go to International Science Fair.

Titi: I can't wait to watch it. The kid described it as cheer, but for science and I'm hooked already. Okay. So what Serena and Mercadi are doing is creating the future job market.

Zakiya: Yes,.

Titi: In the STEM field. And that is leads us to our next point. That STEM is not just.

Zakiya: Sitting at the bench,.

Titi: Sitting at a lab bench and mixing chemicals and dissecting things. No stem is an enterprise.

Zakiya: You're so right. I think too often we get into this tunnel vision of WDM sciences. This is having on a lab coat, is having a paper or is using a microscope. And I'm like, no, somebody's got to write these budgets. Somebody's going to write grants.

Titi: And they have to write it with the understanding of how these fields work. So write with a stem lens.

Zakiya: Yes. And I think that's something that's overlooked. When we think about careers in STEM, people say not everybody can be a professor. Hey, let me tell you, I was there. That's not the only career. OK.

Titi: And so our next caller is a perfect example of that. She went from being in more traditional STEM career, I should say, and using those skills to make a productive STEM enterprise.

Kierna Mason: Hey, Dope Labs. My name is Kierna and I'm receiving my masters in engineering management. Now, my engineering degree is not a traditional research base engineering degree, but before I got into my master's program, I received my bachelors in chemical engineering, where I spent some years as a research and development engineer in the nuclear industry. Being in the nuclear industry super important because so many people don't understand it. And it's really important that once you understand how fissin reactions work and how you work in nuclear, that you're not as afraid of it. But my master's program is something that's more focused on engineering management. And a lot of people think of management when they think of engineering. But engineering is more than just being in the lab or doing STEM research. There's so many different sides, including project management, product management, operations and black people need to be represented on all levels. So that's what really motivated me to get into my current program now.

Titi: Being a part of this industry is has been so rewarding for the both of us. Yeah, that's how Dope labs was born. You know, being black in STEM and being a part of groups that, you know, help foster our education and community and everything like that. And so we are always advocates for people finding community no matter where they are. And so that they can be their very best selves.

Zakiya: We loved hearing you guys talk about finding your true north. What drives you? What is not easy? What keeps you in the lab? When those results aren't looking right. What keeps you in the field when you're tired and you know you need to collect another date, another data point. Right? What drives you to go and talk to those kids even though they're talking while your talking.

Titi: Them kids be so bad. But we honestly really loved it because it shows that this community is growing and the folks inside of it we're lifting as we climb.

Zakiya: And you love to see it.

Titi: love to see it.

Chandler Funderburg: I love being a black woman and I love being an engineer. I get to represent us, but even more than that, I get to help bring our perspectives to the table in each of our respective STEM fields and hopefully start a bigger conversation that can trickle down and

positively affect young black boys and girls who may see themselves in us and realize that they're more than capable of excelling in any fields.

Dr. Cinda Scott: They really want to encourage young people, especially students of color out there, to get involved in our environment and to work in fields where we're severely underrepresented. Marine biology in particular is one of those fields, as is environmental studies and conservation. And I think conservation for so long has had one narrative and it usually does not even include the very people who are affected by the policies that are put in place. And that needs to change and more voices need to be heard. And so there are some days when I'm out there doing fieldwork and we're like the only boat out there. And I think, how is this possible that no one else is out here? Am I the only person out here looking at this? And what is this black crow from Boston doing out in the mangroves in that isolated area of Panama, surrounded by a bunch of islands and and fish? And does any of this work even matter? And the answer is absolutely yes. And I absolutely love it.

Dr. Serena McCalla: I'm here now, and I hope to help the next generation to achieve their goals and to fall in love with the sciences the way I have .

Kierna Mason: But at the end of the day I'm an engineer a stem enthusiast at heart and a stem-inist to the day I die. And I'm blackity, black, black.

Zakiya: That's it for Lab 024 and semester 2.

Titi: Oh my god. We're gonna miss you guys for going on a break, but we will be back.

Zakiya: Dont forget to check out our website for some links to amazing scientists who we love.

Titi: Make sure You're following up on Instagram and Twitter sp that you can keep up what we're doing during our break.

Zakiya: Yes. And we will announce when we are coming back we want you to be the first to know.

Titi: Yes,

Zakiya: You can also find us on Twitter and Instagram @DopeLabspodcast. Titi is on Twitter at @dr_tsho

Titi: And you can find Zakiya @zsaidso.

Zakiya: follow us on Spotify or wherever you listen to podcasts. Special thanks to our guests, Dr Sarah Perkins Kirkpatrick. We have some links to her work and some resources she provided. If you want to learn more about what's happening.

Titi: And some links on how you can help with the effort in Australia.

Zakiya: This episode of Dope Labs is produced by JEnny Radelet, Master of WaveRunner studios and Elizabeth Nakano, Mixing and Sound Design by Hannis Brown. Special thanks to Masako Fukui.

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Titi: Titi Shodiya.

Zakiya: And Zakiya Whatley.