Lizzie Peabody: This is Sidedoor, a podcast from the Smithsonian with support from PRX. I'm Lizzie Peabody.

[MUSIC]

Lizzie Peabody: If you've ever had roommates, you know it can be a tricky relationship to navigate, but Roberto and Aram Sifuentes have a great relationship with their living partners, which is pretty amazing given that there are 13 of them.

Roberto Sifuentes: They're quite pleasant. We like having them around. We look at them, we talk to them, we feed them, and they are now part of our household.

Lizzie Peabody: But these aren't your typical roommates and not everyone is a fan. Aram, told me about this one time.

Aram Sifuentes: We had someone over and we were having lunch. And then they were like, "When is that crawling over on the floor over there? What's that? Are those leeches? Oh, those are leeches. Where are they coming from?" Our friend was like, "I'm never coming to your house ever again."

Lizzie Peabody: Roberto and Aram share their home with 13 live leeches. Yes, the parasitic worms that can suck your blood, which when they're not escaping across the floor live in a glass bowl in the dining room. Can I see them?

Roberto Sifuentes: Yeah, sure. Where are they gathered?

Lizzie Peabody: Roberto picks up the bowl. It's full of rocks and water and a plastic skull for ambiance.

Aram Sifuentes: Some of them are really liking the skull at the moment.

Lizzie Peabody: Some leaches are crawling out of the eye holes.

Roberto Sifuentes: Let me grab a couple.

Lizzie Peabody: He pulls out a leech. Wow, they are big.

Roberto Sifuentes: These ones are big ones.

Lizzie Peabody: It's about the size of a green bean, but black and rubbery looking. And surprisingly rambunctious. Oh my gosh. He's so fast. They are like, super fast.

Roberto Sifuentes: Yeah.

Lizzie Peabody: Roberto has to alternate hands, moving hand over hand over hand to keep the leech from escaping. It stretches out as thin as spaghetti and then scooches its back end up until it's as chunky as an eraser.

Lizzie Peabody: Oh, gives me the heebie-jeebies.

Roberto Sifuentes: It's like a very fast earthworm.

Lizzie Peabody: Yeah, an earthworm with teeth.

Roberto Sifuentes: Oh, he's is biting me too. He's hungry, I think.

Lizzie Peabody: Oh no. Are you going to let him do it?

Roberto Sifuentes: No, I got things to do today. I can't just be bleeding.

Lizzie Peabody: Which brings me to the obvious question here. Why? Why keep fanged parasites in your home? Well, the leeches aren't just a strange choice of house pet. They're actually artistic collaborators.

[MUSIC]

Lizzie Peabody: Roberto Sifuentes is a performance artist and a fellow with the Smithsonian Artist Research Fellowship. He's been performing with leeches for over a decade, feeding them on his own blood during his performances. And while most of us think of leeches as parasites, Roberto doesn't see them that way.

Roberto Sifuentes: It is a very symbiotic relationship that we have together. I use the animals as metaphors and they participate in these performances with me.

Lizzie Peabody: Roberto is challenging the way we look at leeches, and even those we see as leeches in our own human society. As one of the most loathed critters on the face of the planet leeches don't get a lot of love, but maybe that's we don't know them well enough. So, this time on Sidedoor, we're shining a new light on leeches.

[MUSIC]

Roberto Sifuentes: They don't like the hot lights. They don't really enjoy that.

Lizzie Peabody: Okay. A metaphorical light. We'll track leeches across the Smithsonian to learn how they wormed their way into medical science, every human cavity, and even performance art, and why we should thank them for it. In a word to the squeamish, we do talk about blood in this episode and it gets squirmy. Stick around.

[MUSIC]

Lizzie Peabody: For centuries, humanity has imagined a magical fountain that could unlock eternal youth. New scientific advances suggest this might actually be a reality in the not too distant future. Journalist Keith McArthur explores the mysteries of aging in Unlocking The

Fountain, from CBC Podcasts, where you'll meet dreamers, skeptics, and cutting edge scientists, including those who believe that the first person to live to be 150 years old has already been born. Listen to Unlocking the Fountain wherever you get your podcasts

[MUSIC]

Lizzie Peabody: There's this scene in the '80s classic film, "Stand By Me" that I will never, ever, forget. The four main characters, Gordie, Vern, Chris and Teddy are rough housing in a pond when one of them says-

Gordie: Hey, Vern, there's something on your neck.

Vern: Yeah, right. I'm not falling for that one, Lachance.

Gordie: No, Vern, there is something on your neck.

Teddy: It's a leech.

Gordie: Leeches!

Lizzie Peabody: They all run out of the pond and strip off their clothes. Their bodies are covered in big slimy brown leeches, that they're pulling off and flinging away.

Vern: Get them off. Get them off.

Lizzie Peabody: And then Gordie reaches a hand into his underpants and slowly pulls out the biggest leech of all. And then he faints.

Vern: Gordie, man, are you okay?

Chris: Gordie?

Vern: Gordie? Can you hear me? Gordie?

Lizzie Peabody: This scene kept me out of ponds and lakes for my entire childhood. And I firmly believe it is because of my zero-tolerance policy for fresh water that I was never bitten by a leech. Just the idea of them grosses me out and the thought of one sneaking up and sucking my blood is terrifying. But Anna Phillips feels differently.

Lizzie Peabody: Is it fair to say you love leaches?

Anna Phillips: Yes, definitely. They've taken up a big part of my life.

Lizzie Peabody: Anna is a research Zoologist and Curator at the Smithsonian's National Museum of Natural History. And one of the world's leading leech experts.

Anna Phillips: All right. Going to go in and see the leeches.

Lizzie Peabody: I met Anna at the Smithsonian's Museum Support Center, which is this giant storage facility in Maryland. Inside is a cold, sterile looking room, and in that room is a wall, and on the wall is a large wheel. And when Anna turns the wheel, you just basically opened up the wall.

Anna Phillips: Yeah.

Lizzie Peabody: And inside is a hallway of jars.

Anna Phillips: In this room, we have leaches from floor to ceiling.

Lizzie Peabody: This is the national leech collection, shelves and shelves of jars full of eerie looking squiggles and smushed up flesh, like the exact place a witch would go shopping for potion ingredients.

Anna Phillips: Right, so down here, we're going to have leeches on the left and the right.

Lizzie Peabody: The collection is huge, over 27,000 leach specimens from over 100 countries, all 50 states, and the District of Columbia, some of them collected over 100 years ago. Anna lets me poke around. What are these ones, Anna? Look at these ones, they're mouths are open. They look like small turtles. Can I touch this?

Anna Phillips: Yeah.

Lizzie Peabody: Or like flattened walnuts. What are those little brown things? They're like wide. Oh, these ones are really wrinkly, thick and leathery. Oh, Anna. She's a very patient tour guide. Okay, so there's a lot of different kinds of leeches, like close to 800 species, with more being discovered all the time. And they come in all different sizes from little brown specs the size of grape nuts to enormous.

Anna Phillips: This is Grandma Moses.

Lizzie Peabody: Wow.

Anna Phillips: This is quite a large leech.

Lizzie Peabody: That leech, that's even, that's...Grandma Moses is a giant Amazon leech, the largest kind in the world. I don't even know what question to ask. It's huge. They grow up to 18 inches long. That is longer than my forearm, elbow to fingertips. Take a look at your arm and think about that for a second. Yeah. Grandma Moses is grayish and ribbed. One end is narrow and the other is wide.

Anna Phillips: The thin end, that's the head.

Lizzie Peabody: Ooh.

Anna Phillips: Because the head being small helps the leech to get into little places to feed, in secret.

Lizzie Peabody: How leeches feed is what most of us find so creepy about them. But it's also what makes them extraordinary. Some have jaws with microscopic teeth that saw back and forth like tiny little bread knives. Others pierce the skin and drink through a hair-like straw. But all blood feeders have an anti-coagulant in their saliva, which keeps the blood from clotting so that it'll keep flowing and flowing until they're nice and full.

Anna Phillips: And then, even once the leech is full and it's stopped feeding and it's left, the wound will continue to bleed afterwards. This was really useful for bloodletting in the 17, 1800s, for medicine. Back then, they used leeches as a cure all.

Lizzie Peabody: If you're like me, you've probably heard of doctors in the olden days using leaches to bleed people, and you've probably been creeped out by it.

Rachel Anderson: Leeches have this terrible reputation. It's almost like they're icons of everything that was crude or brutal about old medicine.

Lizzie Peabody: Rachel Anderson is a Museum Specialist for the Division of Medicine and Science at the Smithsonian National Museum of American History. She says leaches were one of many tools used for bloodletting, which dates back to the ancient Greeks and Egyptians. The basic idea is that sickness can be cured by draining blood out of the body, and often that was done with sharp blades, but-

Rachel Anderson: You can miss the vein. You can cut the vein and not be able to stop the bleeding.

Lizzie Peabody: A leech on the other hand will make a tiny cut, drink its fill, and then politely be on its way.

Rachel Anderson: The leaches in this way are not only a more delicate instrument for doing bloodletting, but they do a lot of that job for the practitioner.

Lizzie Peabody: In the 17 and 1800s, bleeding was popular in the US and Europe as a way to treat all sorts of sicknesses, including any kind of inflammation. Leeches were best for the delicate areas where you would not want to put a blade, like if you had a swollen eye, you could put a leach there.

Rachel Anderson: Not necessarily on the eye or inside the eyelid because that skin is so delicate that the leeches sucking action could damage it, but right near it, to help clear that congestion.

Lizzie Peabody: That just sounds like not a thing I would want to happen.

Rachel Anderson: It sounds a little uncomfortable, doesn't it?

Lizzie Peabody: Yeah.

Rachel Anderson: I say this, and that's not even the extent of it, because leeches were also used to reach those really hard to reach places, internal areas....

Lizzie Peabody: Oh my gosh.

Rachel Anderson: ...and inside the orifices.

Lizzie Peabody: Oh my gosh.

Rachel Anderson: So, the gums, inside the nostrils, inside the cervix of the vagina.

Lizzie Peabody: What?

Rachel Anderson: The throat and the mouth,

Lizzie Peabody: Hold on. Wait, how would? I just need a moment Yes. Leeches sucked on people's insides too. How? This medical manual from 1874 helpfully explains.

Speaker 11: Leeches should never be applied to the tonsils, orifices of the uterus, or rectum, excepting by means of a glass properly constructed for the purpose. Otherwise they may get beyond reach and do much mischief.

Rachel Anderson: They developed special containers for leeches. Picture like a test tube. You put the leech in, and on one end of it, it's got a little hole that's just big enough for the leech to get its mouth parts out there. And the other hole, you cork it up. And then you can insert that leach tube, with leach into the orifice, and then you bring it out, and nobody escapes into forbidden territory.

Lizzie Peabody: It's like a diving cage, for a leech.

Rachel Anderson: It is. It is. (Laughs).

[MUSIC]

Lizzie Peabody: So, leeches really latched on as an accepted medical tool. They were so popular that the most sought-after medicinal leech actually became threatened in the wild. But by the early 1900s, bloodletting had fallen out of favor and leeches pretty much disappeared from mainstream medicine. The research on them continued, and over time scientists were able to figure out what it is in leech saliva that keeps blood from clotting, and start making that compound in the lab.

Rachel Anderson: And it's an important drug used for clotting disorders.

Lizzie Peabody: Wow. So that's how we get blood thinners?

Rachel Anderson: Like so many things, it's by looking at the particular talents of the animals around us, trying to understand how they do it, and then seeing if we can one up them on that.

[MUSIC]

Lizzie Peabody: But there are still some things that only the leech does best. Today they are back in hospitals as an FDA approved medical device, because even with all our newfangled medical whatsits, when it comes to getting blood circulation back to a reattached finger or skin graft, nothing beats a good old-fashioned leech.

Rachel Anderson: Leaches are magnificent at both of those things. They get the fresh blood flowing and they remove that older pool of blood.

Lizzie Peabody: Rachel says like any tool, leeches can be used poorly or used well, but a good craftsman, or doctor, does not blame his leech. Maybe it's time to revisit the leech's lousy reputation.

Rachel Anderson: We're starting to see them as an instrument of our wellbeing and as a little squirmy critter that can actually treat what is sometimes otherwise the untreatable.

Lizzie Peabody: I love that. Scooch on over the little leech pedestal, we're just going to prop them right up there.

Rachel Anderson: They deserve some gratitude. They deserve it.

Lizzie Peabody: Back at the national leach collection, Anna Phillips says leeches deserve thanks for more than just their contributions to medicine.

Anna Phillips: There's also the fact that they do serve as a major food source for a lot of animals in these ecosystems. Wetlands are one of our most critical ecosystem types because of their connection through the water cycle. And fresh water is something that is critical to life.

[MUSIC]

Lizzie Peabody: Well, this is really cool, Anna. Thanks for showing us around this wall of leaches.

Anna Phillips: What you should see is a live leech.

Lizzie Peabody: I think I've seen enough leeches in here. This is enough for a lifetime. Why should I see a live leech?

Anna Phillips: I don't know. I think you really fall in love with an animal when you see it alive.

Lizzie Peabody: I'll take that into consideration.

Lizzie Peabody: After the break, leeches unleashed on the art world, and maybe also on me. At Anna's urging, I face up to a lifelong fear as we seek out the leech in its natural habitat. Don't go away.

[MUSIC]

Roberto Sifuentes: You can feel them crawling on your body. And then you feel a little bit of a prick.

Lizzie Peabody: Roberto Sifuentes has been bitten by a lot of leeches in his life, usually in front of a live audience.

Roberto Sifuentes: They latch onto your body and then you kind of feel them get into the rhythm of your blood flow, strangely enough. Your heart is beating, so you feel them kind of take it in, you see them swell a bit, and then they'll rest, and swell again. Because in performances I have up to 30 on my body at a time, and they're all in sync, which is really an odd feeling.

[MUSIC]

Lizzie Peabody: As an accomplished performance artist, Roberto uses his own body as the canvas for his work. He's the Chair of Performance at the School of the Art Institute of Chicago. And for the last decade, he's recruited leeches as his drawing implement. He collaborates with his partner, Aram, whose official title is-

Roberto Sifuentes: Leech wrangler.

Lizzie Peabody: Which is actually a pretty tough job because it turns out leeches are divas.

Roberto Sifuentes: Well, first of all, the leeches have a lot of stage fright. So, they don't want to be surrounded by hundreds of people.

Lizzie Peabody: These suckers are a lot pickier than I would've thought. And frankly, kind of judgey.

Roberto Sifuentes: If you have a lot of substances in your body, they don't like that sort of thing. So, if you're taking aspirin or if you're drink a lot of alcohol or those kind of things, they tend not to bite so much. So, they don't like a hairy body.

Lizzie Peabody: Wow. Leeches are such purists.

Roberto Sifuentes: Exactly.

Aram Sifuentes: We learned the hard way.

Lizzie Peabody: In a medical setting, leeches are kept hungry to make sure they'll bite. But Aram and Roberto don't want to starve their collaborators. Over time they've learned their preferences, figuring out how to coax the leeches to bite with a drop of pre-drawn blood. And it's this intimate experience with leech wrangling that drew Roberto to the Smithsonian Artist Research Fellowship, or SARF. How would you describe Roberto's performance art?

Josh T. Franco: It's not pretty.

Lizzie Peabody: Honest. That's very honest.

Josh T. Franco: It's never been pretty.

Lizzie Peabody: Josh T. Franco is the National Collector at the Smithsonian Archives of American Art. He was actually on the road collecting art when I reached him, so his audio is really not very good. Josh also sits on the SARF committee, helping connect artists with Smithsonian experts.

Josh T. Franco: I think Smithsonian's really ripe for undoing the binary between science and humanities. And artists kind of help break the conceptual walls between what I do as an art historian and what Anna Phillips does as the Parasitic Worms Curator.

Lizzie Peabody: Josh connected Roberto with Anna.

Roberto Sifuentes: She's basically just provided us with an amazing amount of research materials in order to understand the beings that we're working with in fuller way.

Lizzie Peabody: But the fellowship isn't just about giving artists access to Smithsonian research. It's also about helping experts see their own research subjects in a completely new way. Josh describes this one performance of Roberto's called exsanguination, which if you don't know Latin, sanguin is blood and ex is out, so-

Josh T. Franco: It's Aram delicately placing leeches on Roberto's face. You slowly watch them kind of undulate on his face, close up. And then blood starts dripping down.

Lizzie Peabody: Like tears of blood running down his cheeks. The leech's anticoagulant keeps it running and running, and he invites his audience to come close

Roberto Sifuentes: In performance, I am using these leeches to look at the fascination that our society and our audiences have towards blood violence, and particularly the violence that is occurring against our brown and black communities.

Josh T. Franco: If you're in the audience, physically, you will feel implicated. You don't really feel like a passive observer and that's kind of a magic trick of really good performance art.

Roberto Sifuentes: We also hand them magnifying glasses with little lights, all of this to encourage the audience to get closer and closer to the leeches, but also to this figure of this imposing brown man.

Lizzie Peabody: Roberto, who describes himself as Chicano, born and raised in Los Angeles, says leeches are more than just his drawing implement. They're also a powerful symbol when used to speak about people.

Roberto Sifuentes: Drains on our society, blood suckers, parasites, all of those things that are evoked when one talks about leeches are so similar when we talk about refugees, bordercrossers, brown people in the US. I am really interested in that kind of attraction-repulsion, that society has for this creature, that people have for this creature, and how that metaphor also can translate in this artwork.

[MUSIC]

Lizzie Peabody: Hey, Anna. Those are some big nets.

Anna Phillips: Yeah. Oh wait, I forgot the little nets. Hang on. I'll be right back.

Lizzie Peabody: Okay. How big are these leeches going to be? Leave it to the humble leech to bring science, art, and history together, in a swamp. On a hot muggy morning, the Justice Leech Avengers in the parking lot of the Smithsonian Environmental Research Center, or SERC. From the science corner, Anna Phillips. Repping art history: Hey, Josh.

Josh T. Franco: Hey, y'all.

Lizzie Peabody: Hey.

Aram Sifuentes: Hey, Josh.

Lizzie Peabody: Josh T. Franco.

Josh T. Franco: Oh, yay.

Lizzie Peabody: Are you excited?

Josh T. Franco: I'm totally excited.

Lizzie Peabody: And from the performance artist camp, Aram Han Sifuentes, leech wrangler extraordinaire. So, have you ever been out leech hunting before?

Aram Sifuentes: No, I haven't. I've attempted to just step into stagnant water here and there. And then Roberto usually stops me, but I've never been successful.

Lizzie Peabody: We are all united by a common goal, to see a real live leech in the wild, because I have to admit, by this time I have come to appreciate leeches from a distance. This feels like camp. But that's about to change.

Josh T. Franco: I know I love it out here. Have you been out her before?

Lizzie Peabody: Our swamp party sets off down the path headed for CERC's wetland ponds. They're covered in lily pads and tall grasses. Frogs leap into the water as we approach. How leechy does this look to you?

Anna Phillips: Very leechy.

Lizzie Peabody: Anna explains the plan.

Anna Phillips: What we're going to do is we're going to wade in. We're going to aim to go about knee deep. So, as we walk, the leeches can feel our movements. They also have eyes. They can see light and dark and some movement.

Lizzie Peabody: To find a leech, you need to draw it to you, as bait. As in you're the bait.

Anna Phillips: And then they're going to swim and try and detect where we are. So, they'll swim a little bit and they'll pause, and then they'll swim a little bit and they'll pause. They're going through the plants. We won't be able to see them necessarily.

Lizzie Peabody: Okay. Now, I want to be clear. Leeches are not dangerous. They don't carry human diseases like ticks and mosquitoes. They're harmless. But they can be harmless and still scary, especially when they're stalking you.

Anna Phillips: It's a little soggy, but I'm not sinking in too much.

Lizzie Peabody: As I step into the water, my sandled foot disappears under a cloud of brown swirls. I can't see my toes, but I can feel them and I can definitely feel things moving around them. Reeds, slimy stuff, grit.

Anna Phillips: This is the kind of water that you can't see your feet on the bottom of the pond and I think a lot of people have trouble when they can't see where they're putting their feet necessarily, because you don't know what's down there.

Lizzie Peabody: Yes, some people might have trouble with that.

Anna Phillips: Anyway.

Lizzie Peabody: Sorry.

Josh T. Franco: Frog?

Lizzie Peabody: I don't know.

Josh T. Franco: There's a lot of jumpy things in here.

Lizzie Peabody: I'm so sorry. I have a very strong startle impulse.

Anna Phillips: It's okay.

Lizzie Peabody: And even though I'm prepared, I might throw my microphone and end this for all of us. I'm so sorry.

Anna Phillips: All right. I'm going to come this way to give you a little bit of room.

Lizzie Peabody: Oh my God. My heart beat is so fast right now, I just want to say.

Anna Phillips: Now, that we've stirred up the water a bit, the leech is kind of nowhere around, but we have to do the leech dance to call them to us.

Lizzie Peabody: That's right. There's a leech dance.

Anna Phillips: Okay, so the whole point of the leech dance is to make ripples in the water across the pond.

Lizzie Peabody: So, keep your feet planted.

Anna Phillips: Yep.

Lizzie Peabody: And shake your legs.

Josh T. Franco: Oh, look at my ripples.

Anna Phillips: Josh is a natural.

Josh T. Franco: They're going so far.

Lizzie Peabody: You got to do a lot of hip thrusting.

Anna Phillips: And then at some point you want to give it a break and let those ripples settle. Let them get out there, give the leaches a chance to come find you. And in the meantime, we get to appreciate nature

Lizzie Peabody: And I get to reconsider every decision I made in my life that led me to this moment. And then-

Anna Phillips: You're going to want to do a leg check.

Lizzie Peabody: Okay.

Anna Phillips: And so, you're going to actually pull your leg out of the water, which might be a little challenging because I'm in pretty deep.

Lizzie Peabody: I take a deep breath, and I lift my leg out of the water. and there it is. I have one and it is very full.

Josh T. Franco: You're doing great, Lizzie.

Lizzie Peabody: It's on my ankle.

Anna Phillips: Your face is turning red.

Josh T. Franco: You're doing great.

Anna Phillips: Are you okay?

Lizzie Peabody: Yeah, I'm fine.

Anna Phillips: Do you want some help with this?

Lizzie Peabody: Anna examined my leech.

Lizzie Peabody: Okay. You see it?

Anna Phillips: Yeah.

Lizzie Peabody: Oh, it's very large. For the record, it was not very large. It was under an inch, for sure, but it felt large in my mind.

Anna Phillips: This is a good one. So, all I'm going to do is I'm going to remove his tail sucker with my fingernail. And then I'm going-

Lizzie Peabody: To get a leech off of you, all you need to do is break the section with your fingernail and it'll come right off.

Anna Phillips: This is a turtle leach.

Lizzie Peabody: Oh my gosh. It's so active. It's like writhing around and burrowing.

Anna Phillips: Well, yeah, it thought it had a good meal and now I took it off.

Lizzie Peabody: Oh my God. I feel a little silly admitting this, but once that sucker was off me, I got this rush of adrenaline and relief so powerful it felt like euphoria. And then a swelling of tenderness for this little leech that moments before was swelling with my blood. And that's my blood in it's body there? Oh, look at him. He's like, "What happened?" Actually, can I hold it?

Anna Phillips: Sure.

Lizzie Peabody: Okay.

Anna Phillips: Definitely.

Lizzie Peabody: Holding that stretchy shape shifter in my hand, I could admire so much weirdness in one wiggly package. It was like getting to know somebody and realizing they're completely different from who you thought they were. This villainous blood sucker from my nightmares is just a vulnerable little animal trying to do the thing it does well. It felt pretty cool. And then all of a sudden there were leeches everywhere.

Josh T. Franco: Oh my gosh.

Lizzie Peabody: Do you, you want to check your-

Josh T. Franco: Oh, I got, wait, is that one?

Lizzie Peabody: Yeah. Yeah. That's a leech.

Josh T. Franco: Oh my God. It's moving in a crazy way. Wound up in a ball.

Anna Phillips: Yeah. They've tasted blood.

Aram Sifuentes: Now there's two on there.

Anna Phillips: The taste of blood is in the water.

Lizzie Peabody: Oh my gosh. It's like sharks, tiny squishy sharks. Our mission was a success. By the end of morning, everyone had encountered at least one leech, and Aram, truly the leech wrangler, had like six. We circled up in the shade of a tree to debrief.

[MUSIC]

Anna Phillips: We've had leeches all over almost all of us today and nobody's lost their mind or their marbles. And I don't know, Lizzie, are you still terrified of getting leech on you?

Lizzie Peabody: No. I feel like this experience has de-fanged leeches for me, like thoroughly. My fear of leeches morphed into respect, and maybe even a little affection. And Anna really hopes that with a better understanding of leeches, what they do and how they do it, more people will see past the scary camp experience or scary medieval medicine to what makes leeches amazing. And collaborating with Roberto and Aram has helped her to appreciate them even more.

Anna Phillips: I'm able to see the leeches in a different light. I mean Aram knows how to keep leeches way better than I do. I think of them as specimens, something that'll go in the collection and last potentially 100 years or more for future researchers. But these two know the leeches in a much more intimate way, I'd say. What Aram and Roberto do, I couldn't do that, but I'm so glad that we can talk about it and see the same animals from those different perspectives.

Lizzie Peabody: Because let's get one thing straight.

Anna Phillips: There's always something left to learn about leeches.

[MUSIC]

Lizzie Peabody: You've been listening to Sidedoor, a podcast from the Smithsonian with support from PRX.

[MUSIC]

Lizzie Peabody: Special thanks this episode to Anna Phillips for guiding us through the National Leech Collection and leading the Great Leech Hunt. Anna actually led the team that identified and described the most recent new species of North American medicinal leech. We'll include more about her work in our newsletter as well as a video of and Aram doing the leech dance and a bunch of leechy extras that we just could not squeeze into this episode. Subscribe at si.edu/sidedoor.

[MUSIC]

Lizzie Peabody: Special thanks also to Josh T. Franco, Roberto Sifuentes, Aram Han Sifuentes, Rachel Anderson, Theresa Campagna, Randall Kremer, Bill Moser and Katrina Lohan. Also, to the Sifuentes family leeches, and the Sifuentes family puppy, Bubble Tea Sifuentes, or BTS, who really wanted to be interviewed as well.

[MUSIC]

Lizzie Peabody: Our podcast team is James Morrison, Nathalie Boyd, Ann Conanan, Caitlin Shaffer, Tami O'Neill, Jess Sadeq, Lara Koch, and Sharon Bryant. Episode artwork is by Dave Leonard. Extra support comes from Jason and Genevieve at PRX. Our show is mixed by Tarek Fouda. Our theme song and episode music are by Breakmaster Cylinder.

[MUSIC]

Lizzie Peabody: Are you a leech lover or a leach victim? Share your stories us on social media @sidedoorpod. And if you want to sponsor our show, please email sponsorship@prx.org.

[MUSIC]

Lizzie Peabody: I'm your host, Lizzie Peabody. Thanks for listening.

[MUSIC]

Lizzie Peabody: It's so fat and squishy.

Anna Phillips: Yeah.

Lizzie Peabody: This is, is not the mouth part. The little sucker protuberance, is it?

Anna Phillips: Is it the long string? Oh, that's his penis.

Lizzie Peabody: What? Wow. That's impressive.

Anna Phillips: Yeah, that genus has a particularly long male reproductive organ.