CHILD 1: You're listening to *Brains On!,* where we're serious about being curious.

CHILD 2: *Brains On!* is supported in part by a grant from the National Science Foundation.

HARVEY: Update successfully installed.

MARC SANCHEZ: Yes, I did it! Harvey, you wonderful omnipresent virtual voice assistant! This is going to change everything.

HARVEY: Why, yes, Marc. I am bananas for you, too.

MARC SANCHEZ: OK.

MOLLY BLOOM: Hey, Marc. What's new?

MARC SANCHEZ: Oh, hey, Molly. I just installed a system upgrade for Harvey.

MOLLY BLOOM: What's it do?

MARC SANCHEZ: Well, you know how we get so many awesome questions from our listeners all the time?

MOLLY BLOOM: Yeah?

MARC SANCHEZ: And it's been so hard to choose which ones we're going to answer lately?

MOLLY BLOOM: Do I ever!

MARC SANCHEZ: Well, I wrote a program where Harvey does the picking for us! We just load in the questions, and Harvey generates a list of episode topics. It's all based on a highly complicated algorithm I created based on our show criteria.

MOLLY BLOOM: Let's give it a try!

MARC SANCHEZ: OK. Harvey, what question should we answer on our next episode?

HARVEY: OK. I'm choosing the question. The next question is, why do bananas turn brown when they ripen?

MOLLY BLOOM: OK. Good question, might not be enough for a full episode though. What else you got, Harvey?

HARVEY: OK, I'm choosing the question. The next question is, are banana peels actually slippery?

MARC SANCHEZ: Another banana question? That seems improbable. Harvey, pick another question.

HARVEY: OK. I'm choosing the question. The next question is, where are banana seeds?

MOLLY BLOOM: OK, 3 banana questions in a row, something is up with the algorithm, Marc.

[BELL DINGS]

I'll get it! Whoa! You guys, a truck just pulled up and delivered 162 bunches of bananas. Does anyone know what's going on?

HARVEY: The *Brains On!* headquarters banana supply was running low. So I placed an order.

MARC SANCHEZ: Harvey, this text is from you, 12 banana emojis?

MOLLY BLOOM: Oh, Harvey just sent me a GIF of someone slipping on a banana peel. Oh, and Harvey sent me a video.

["BANANAS IN PYJAMAS" PLAYING]

MARC SANCHEZ: Ah! The blender just turned on by itself!

HARVEY: Banana smoothie, anyone?

[BELL DINGS]

MOLLY BLOOM: I'll get it!

HARVEY: Or banana flavored toothpaste?

MOLLY BLOOM: You guys, three crates of banana flavored toothpaste just showed up!

MARC SANCHEZ: Oh, no! Harvey, what have I done to you?

HARVEY: This day is bananas, B-A-N-A-N-A-S. This day is--

MARC SANCHEZ: OK. I need to start working on a fix before-- oh, no. What now?

MOLLY BLOOM: Who ordered these banana splits? Someone called Sanden. We have to eat these before they melt.

HARVEY: B-A-N-A-N-A-S. This day is bananas, B-A-N-A-N-A-S. This day is bananas, B-A-N-A-N-A-S.

MOLLY BLOOM: You're listening to *Brains On!.* From American Public Media, I'm Molly Bloom. And today my co-host is Regan from Toronto. Hi, Regan.

REGAN: Hi, Molly.

MOLLY BLOOM: And today, we're talking bananas.

REGAN: Really? We're doing a whole episode on bananas?

MOLLY BLOOM: Yeah, if Harvey hears us talking about anything other than bananas, he turns off the lights and the microphones. So yes, an entire episode all about bananas!

HARVEY: My algorithm tells me that this will be the favorite episode of 89.2% of your listeners.

MOLLY BLOOM: Well, I do love bananas. And Regan, you wrote into us with a very curious question about bananas. What was that question?

REGAN: I wanted to know whether it's true that humans and bananas share 50% of the same DNA. And if so, how is that possible?

MOLLY BLOOM: That's such a great question. And to help us answer it, we have our friend, Dr. Janina Jeff here. Hello, Dr. Jeff.

JANINA JEFF: Hi. How are you?

MOLLY BLOOM: Great. Thank you so much for being here. Dr. Jeff is a geneticist and the host of the podcast *In Those Genes.* Can you tell us what the podcast is about?

JANINA JEFF: Sure. The podcast is a podcast that uses genetics to decode the lost histories and futures of African descendants. We like to teach genetics education through entertainment and using Black culture as a vessel to do so.

MOLLY BLOOM: It's a great podcast. And you're here today to help us answer Regan's super interesting question about genetics that she sent to us. So let's jump right in.

REGAN: Let's start with the basics. What is DNA?

JANINA JEFF: So DNA is the makeup of who we are. So we can think of DNA of every character, a letter or so in a book. And the big book with all of these letters is called our genome. A genome is a collective of all of the information that tells our body the bodily functions that we need in order to survive.

And so DNA, these different letters that are in this book called the genome consist of four letters. But these four letters are so complex because in different sequences, the letter is the order in which the letters are, how many times we see the same letter, tell us a lot about how our body should function. And so those four letters are called A, T, C, and G. And they stand for the chemical compounds that make up DNA.

REGAN: So do all living things have DNA?

JANINA JEFF: That's a great question. All living things have DNA. Yes.

REGAN: Is it true that humans and bananas share 50% of the same DNA?

JANINA JEFF: So when we talk about DNA, all of those letters, that is a big book. And this is billions of those letters together in both a banana and in a human. So we have this big book.

A lot of it are letters that just come together, and they don't really make a lot of sense. And 2% of them have actual words that make sense that tell our bodies to do certain things. That 2% is what we call our genes.

So when we talk about our similarities with bananas, we're not talking about all of the letters, which is the DNA. What we're actually talking about are the genes that make proteins, that make things that we can see. About half of that is actually similar to a banana.

REGAN: Do bananas, their genes, do they function in the same way that human genes do?

JANINA JEFF: We actually do some things that are pretty similar to bananas, believe it or not. Bananas have cells. Humans have cells. And some of our cells do the same thing.

So one good example is that both of us consume oxygen. So that's something that we share in common with bananas. So to have genes that make that possible that are similar is to be expected.

We have to remember that all of us, all living organisms, have evolved from a single cell that happened billions and billions and billions of years ago. Because we all started from this single cell billions of years ago, we do keep the things that work well for us. And so our ability to consume oxygen really is something that we need to keep. And so you would see it in both plants and in animals.

REGAN: So how much DNA to humans share with each other?

JANINA JEFF: We share 99.9% of our DNA with other humans. So we're not that different. And so to think about a plant, other plants we might share somewhere between 10% to 18% of our genomes, not our genes. So when we say that the banana and the human are similar, we're actually talking about the genes that are in the banana and the genes that are in humans.

REGAN: Thanks for answering my questions, Dr. Jeff.

JANINA JEFF: You're so welcome.

CHILD 3: Why did the banana look pale? Because it wasn't peeling well.

CHILD 4: What do you get when you cross a banana peel with another banana peel? Au pair of slippers.

MOLLY BLOOM: All right. Before Harvey starts reciting banana limericks, let's answer this question.

AMELIA: Hi, *Brains On!.* My name's Amelia, and I'm from Wales. Why do bananas make other fruits ripen faster? Thank you.

MOLLY BLOOM: Meanwhile, at the local grocery store, two young bananas face a brand new world.

BARRY: Today's the day, Gwen. I can feel it. Today a human is finally going to pick us up from the grocery store and take us home. I am green with anticipation.

GWEN: Now, Barry, you're just green. I do hope we get out of this store today. We've traveled a long way to get here. All I want is for a nice human to adopt me, break me off from the bunch, peel back my skin, and taste all the delicious nutrients a banana has to offer.

BARRY: Yes, Gwen. Me, too! We bananas are packed with vitamins and potassium. They'd be silly not to pick us.

GWEN: Plus, we're delicious.

BARRY: Yeah, we go really great with strawberries, peanut butter, even dipped in chocolate, with your favorite ice cream. Hey, look. That human is approaching.

GWEN: Oh!

BARRY: Yay! It's happening!

GWEN: Yay! We're finally going to get eaten!

BARRY: Can't wait, give me some peel.

[HANDS CLAP]

MOLLY BLOOM: One day later.

GWEN: Well, it feels good to be out of the grocery store. But I wish our human would take us out of this bag. It's hot in here.

BARRY: Yeah, it's a little cramped. Hey, Gwen. Do I look different to you?

GWEN: Whoa, dude! You're yellow! Wait, I'm also yellow.

BARRY: OK. Good. You see it, too. That's weird. Yesterday, we were as green as a Granny Smith apple.

GWEN: Yeah. I also feel softer.

BARRY: Softer? What do you mean soft? Whoa! Where are we?

GWEN: I think we're in a bowl.

BARRY: Oh, great. Bananas! Just what we need around here.

GWEN: Who are you?

FRANK: I'm Frank! I'm the apple around these parts. And we don't need no stinking bananas around here making everyone go ripe!

BARRY: Whoa, whoa, whoa, Frank. Slow down. What did we do wrong?

FRANK: Don't you guys realize how much ethylene you're giving off?

GWEN: Ethylene? What's ethylene?

FRANK: Ethylene is the chemical that makes a fruit turn ripe. All fruits produce ethylene, but bananas are notorious for putting out a lot of ethylene gas. PU!

BARRY: Ethylene gas? Turn ripe? What do you mean?

FRANK: Well, the more ethylene a fruit produces, the riper it gets. And the sweeter it starts to taste. Ethylene also causes fruit to change color, change texture, and get softer.

BARRY: Wow. That's why Gwen and I used to be green, but turned yellow.

FRANK: Look, ethylene is super important for us fruits because it's what allows us to ripen and taste good in the first place. The only problem is once you start producing ethylene, you don't ever stop.

GWEN: So you're saying we could become too sweet?

FRANK: Exactly. You can get so ripe, you become rotten. I mean, look at me. I am not the young apple I once was. My firm, juicy days are behind me. I've got these mushy, brown spots all over my red skin. And I'm downright uneatable.

BARRY: Well, I'm sorry, Frank. But I don't see how we have anything to do with this.

FRANK: Don't you get it? You're bananas! Banana peels give off so much ethylene that other fruits ripen faster, too.

BARRY: I hope this human remembers you before it's too late.

FRANK: Ah, thanks, Barry.

MOLLY BLOOM: Five days later.

BARRY: Gwen?

GWEN: Barry?

BARRY: Gwen, I don't think I'm going to make it.

GWEN: Barry, what do you mean?

BARRY: Look at me. I'm mushier than guacamole, and I've got all these brown bruises on my peel.

GWEN: I'm not doing so hot myself. I'm covered in brown spots, too. And I'm starting to turn black at the ends.

BARRY: What happened to Frank?

GWEN: Oh, the old apple? He got eaten. So unfair!

BARRY: Guess all of our potassium is going to waste after all. I'm just glad we got to ripen together, Gwen.

GWEN: Aw, Barry. You're so sweet.

BARRY: Ha ha! I'm too sweet.

GWEN: Wait. What was that?

BARRY: It's the human!

GWEN: Barry, what's happening?

BARRY: The human is mashing us up and mixing us with a bunch of other things.

GWEN: I think it's going to bake us into bread.

BARRY: Oh, like banana bread? I've heard of that.

GWEN: We're going into the oven, Barry.

BARRY: Woo! It's hot in here.

GWEN: Looks like we're getting eaten after all, just not the way we thought.

BARRY: Oh, a happy ending.

MOLLY BLOOM: And so, after producing all the ethylene they could, Barry and Gwen turned from green, to yellow, to brown, until they were finally baked into banana bread, and they were eaten, happily ever after.

CHILD 5: What did the banana say when he got off the roller coaster? I think I peeled my pants.

CHILD 6: How does a banana make a sandwich? With banana bread.

HARVEY: Molly, according to my analysis of the *Brains On!* show structure, it is time for the

[COMPUTER WHIRRS]

CHILD 7: Mystery sound!

MOLLY BLOOM: Right you are, Harvey. Regan, here it is.

[SWISHING]

It's pretty short. So let's hear it one more time.

[SWISHING]

OK, Regan. What is your guess?

REGAN: I don't really know, but it sounds like something falling really quickly through a tube.

MOLLY BLOOM: Very good guess. Well, we'll give you another chance to guess and hear the answer in just a bit.

Hey, Regan?

REGAN: Yes, Molly?

MOLLY BLOOM: We're working on an episode all about time travel. So I'm wondering if you could time travel to any time past or future, where would you go?

REGAN: There are so many cool periods of time in the past, but I feel like the present is much better than most times in the past. And I have no idea what's going to happen in the future. So I would probably go to the near future after COVID is over, the end of 2021 or 2022.

MOLLY BLOOM: You just want to fast forward just a little and see how it all turns out?

REGAN: Yes.

HARVEY: I would go visit the first ever banana farm.

MOLLY BLOOM: Of course, you would. Listeners, we want to hear from you, too. Where would you time travel? Send your answers to us at brainson.org/contact. We'll feature some of your answers on a future episode.

REGAN: And while you're there, you can send us questions, mystery sounds, and drawings, like maybe one of Sanden eating all of those banana splits.

MOLLY BLOOM: That's brainson.org/contact, and that's where we got this question.

MILO: Hi, *Brains On!* My name is Milo from Castle Rock, Colorado. I want to know why peaches have fuzz on them.

MOLLY BLOOM: We'll be back with an answer during our Moment of Um and we'll read the most recent group of listeners to be added to the *Brain's* honor roll all at the end of the show.

REGAN: So keep listening.

CHILD 8: Where do bananas live? Ala-banana.

CHILD 9: What did the banana say to the dog? Nothing. Bananas can't talk.

REGAN: You're listening to *Brains On!* From American Public Media. I'm Regan.

MOLLY BLOOM: I'm Molly.

MENAKA WILHELM: And I'm everyone's favorite *Brain On!* producer--

ALL: Hey!

MENAKA WILHELM: --Menaka Wilhelm. And I've got a quiz show all about bananas for you. Banana bing, banana boom! In this round, I will be unappealing a banana factoid, and it's up to you to decide if it's really a fact or if it's fiction. Banana-fied, or bogus. Ready, Regan?

REGAN: I'm ready.

MENAKA WILHELM: First factoid, bananas first grew in Southeast Asia.

REGAN: I'm going to say that that's true.

MENAKA WILHELM: You're correct. That would be a banana-fied. Today, people farm bananas in tropical places all over the world, like, Asia, Latin America, and even Africa because these plants need lots of water and warmth to grow. Archaeologists are pretty sure it was people in Papua New Guinea who first grew the banana as a crop. And then later, when European people came to Asia looking for places to colonize, they brought bananas back with them, and then onto islands like Costa Rica, where they started banana plantations.

REGAN: Oh, that's cool.

MENAKA WILHELM: Yeah. The banana has taken quite a journey. Second factoid, banana farms have been growing the same banana for the past century.

REGAN: I don't think that's true. I think I heard that bananas have been genetically modified a lot, and now, they're very different from what they used to be.

MENAKA WILHELM: You're totally right, Regan. That's bogus. These days, banana farmers grow a kind of banana called a Cavendish banana. But 80 years ago, they were growing a different kind of banana called the Gros Michel, which translates to Big Mike in French. And people say the Big Mike bananas were sweeter and a little more banana-ey than today's bananas.

The reason that we switched from Big Mike bananas to Cavendish bananas was that a fungus wiped out pretty much all the Gros Michel bananas in Central and South America. And Cavendish bananas could still survive, so growers switched to them.

REGAN: Oh, that's really interesting.

MOLLY BLOOM: So Menaka, is it true that they were genetically modified, or they just switched to a different kind of banana?

MENAKA WILHELM: Yeah, it was more of just a different offshoot of a Big Mike kind of plant. So it was more resistant to disease, but it still tasted pretty close to how the Big Mike banana tasted.

Third factoid, there's a kind of banana called the ice cream banana.

REGAN: I don't think that there would be an actual ice cream banana. But I mean, you do have banana splits. So I don't know.

MENAKA WILHELM: It's pretty unbelievable, but that's a banana-fied. Even though we pretty much eat one kind of banana, the Cavendish banana we just talked about, there are actually lots of different kinds of bananas around the world. You might have seen red bananas in the grocery store. They've got a reddish peel, and they're sweeter and smaller than the yellow Cavendish. And the ice cream banana grows in Hawaii and islands in Southeast Asia, like Fiji. People say it has a nice vanilla flavor that's pretty close to ice cream.

Banana bing, banana boom. I'm out for now. I'll be back with another round soon. Bye bye!

CHILD 10: Why did someone slip on an orange peel? Because the banana was out sick.

CHILD 11: Here's my favorite banana joke from comedian, Mitch Hedberg. When at a stoplight, green means go, and yellow means slow down. With a banana, however, it is quite the opposite. Yellow means go. Green means whoa, slow down. And red means where the heck did you get that banana?

MOLLY BLOOM: Banana bing, banana boom. We're back to the quiz show all about bananas. In this round, I'm opening up a can of banana, except not really since bananas don't come in cans. But as everyone knows, bananas and rhymes go together like rosemary and thyme.

So in this round, I'll serve you up a rhyme line by line. And your job, my friend, is filling in the blank at the end. Ready, Regan?

REGAN: Yes.

MOLLY BLOOM: Rhyme number one, next time you open a banana, give the middle a check. Right there in the core, you'll see teensy black specks. They might look useful, like something the banana needs, but they can't grow into new plants. They're actually not--

REGAN: Seeds.

MOLLY BLOOM: Correct! The black specks are what would be seeds, but they never grow into full seeds. So they're too tiny to do anything.

And that brings us to rhyme number two. Since planting those specks won't do the trick, banana growers do something pretty slick. They cut a special bit off a plant that's grown up, and that special cutting shares a name with baby wolves. It's called a--

REGAN: Cub?

MOLLY BLOOM: Oh, you were very close. It's actually a pup.

REGAN: Oh, OK.

MOLLY BLOOM: So the pup is actually a section of a grown banana plant stem that they cut off, and then it grows into a full banana plant and grows new bananas.

Here's our final rhyme. A banana pup has the same DNA as the plant it's cut from, which leaves us with a very specific outcome. No farm grown banana stands alone. They're all copies of each other. Each one is a--

REGAN: Clone.

MOLLY BLOOM: Correct! Great job, Regan. You completed these banana rhymes like a champion So some bananas do have seeds, but the ones that we eat that are grown on farms pretty much don't have seeds. And they just grow from cuttings of other banana plants. That is bananas. Oh, so sorry. Banana bing, banana boom. I'm out. Bye bye!

Turns out the bananas we buy in the grocery store are just the beginning. There's a whole world of bananas out there. We heard from someone who knows all about that.

GABRIEL SACHTER-SMITH: Ever since I was a kid, I wanted to be able to go to the places that bananas are from because that's where there's the most different types of bananas. And now, I get the opportunity to go look for new types of bananas, and document them, and make them available to other researchers and other farmers throughout the world.

Hello. My name is Gabriel Sachter-Smith. I am a banana farmer and banana scientist in Hawaii. And I love banana diversity and all the different many shapes, sizes, kinds, and uses of all the bananas in the world.

I grow approximately 150 or so different varieties. I grow bananas that are wild species, which have small fruit that's full of seeds and not very tasty. But they might have really pretty flowers or be really ornamental plants to have in a landscape. Some of them also are resistant to different pests and diseases, and I'm using them to make hybrids with edible bananas. I have types that are yellow, that are green, that are blue, that are red, that are orange, ones that have small fruits that are very sweet, ones that have large fruits as large as your arm, but are very starchy and are better cooked. I have types that have white flesh, and yellow flesh, and orange flesh.

I think about bananas a lot. There will never be a point in time where I've said, yep, I've seen all the bananas. I guess I'll study apples now.

CHILD 12: How did the banana get away fast? It peeled out of the kitchen!

CHILD 13: What is a chicken's favorite food? A bawk-nana.

MOLLY BLOOM: Regan, are you ready to go back to that mystery sound?

REGAN: Yes.

MOLLY BLOOM: All right. Here it is again.

[SWISHING]

Let's hear it one more time.

[SWISHING]

All right. Last time, you thought it was something falling down a tube, perhaps. Do you have any new thoughts?

REGAN: So I think maybe it could be-- it sounds like what they use in a lot of those cartoons is a sound of somebody slipping on a banana peel.

MOLLY BLOOM: Oh, very good guess.

MARC SANCHEZ: And here with the answer is everyone's favorite *Brains On!* producer, Marc Sanchez!

ALL: Hey!

MARC SANCHEZ: Regan, you are 100% correct.

REGAN: Oh, yay.

MOLLY BLOOM: Nice work.

MARC SANCHEZ: Indeed. And this ties into a question we got.

EMILY: Hi, I'm Emily from Brookline, Massachusetts. And my question is why are bananas used as a joke for people slipping? How did that start?

MARC SANCHEZ: Fantastic question, and just in case some of you aren't familiar with the banana peel joke, let me explain how it works. First, person A throws a banana peel on the ground. Then person B slips on that banana peel and lands on their backside. That's it! That's the joke.

It's in thousands of cartoons and movies. I'm sure you've seen. And it's pretty much the definition of a form of comedy called slapstick. That's when humor comes from things like falling or a pie in the face. But where did it come from? I hear you hollering at your podcast listening device.

Well, it all started in the mid 1800s. The US wasn't even 100 years old. People used horses to get around, or they simply walked. And many people would sell their goods from stands on the streets including fruit sellers. And back then, litter was a serious problem. When people were done with something, they would just throw it on the street. And one of the things they threw about all willy nilly were actually truly banana peels.

A newspaper article from way back in 1870 wrote this.

SPEAKER: In spite of all that has been said by the papers around throwing banana peelings and such like things on the sidewalks, the custom prevails in Memphis to an extent not equaled anywhere that we know of. On almost every corner, there is a fruit stand around which the sidewalks are littered with these dangerous pairings. And not a day passes that someone does not receive a fall from stepping on them.

MARC SANCHEZ: So this was a real thing. And as we just learned, the banana that people were eating back then was different from the bananas we eat today. And one way it was different is that it was actually slipperier, which made it more dangerous. This phenomenon of people slipping on banana peels left as litter on the street was so common that people naturally started making jokes about it.

It started in newspaper comic strips and in stage routines around this time. So before movies were even invented, this joke had been around for decades. Here's what a theater critic had to say in 1909.

THEATER CRITIC: The slipping on a banana peel episode has been so done to death by the funny papers that it is taboo now entirely as too old.

MARC SANCHEZ: But one person's old is another person's classic. Vaudeville performer, Sliding Billy Watson, became famous in part thanks to his slippery banana peel routine. And when movies came along shortly after that, you can bet your sweet bippy that banana peel falls were there, too.

The first movies made had no sound. The technology didn't even exist yet. So these silent movies were filled with slapstick, which meant plenty of slips on banana peels. If you want to read more about the origins of this joke and see examples of it, head to our website, brainson.org.

CHILD 14: What kind of key can open a banana? A monkey.

CHILD 15: Do you want to know why people like banana jokes? Because they're a-peeling.

REGAN: Hey, what happened to everyone's favorite *Brains On!* producer, Sanden Totten?

ALL: Hey!

MOLLY BLOOM: Oh, he fell fast asleep after eating all those banana splits. But he did it before they melted.

REGAN: Just goes to show you, bananas always have a-peel.

MOLLY BLOOM: We do, in fact, share lots of DNA with bananas. But there's a lot that's different, too.

REGAN: Bananas produce a lot of ethylene gas, which makes fruit ripen.

MOLLY BLOOM: Bananas grow from tall plants, but most of the bananas we eat don't grow from seeds because they're actually clones.

REGAN: Jokes about slipping on banana peels have been around for about 200 years because back then, it actually happened to people often.

MOLLY BLOOM: That's it for this banana programma.

REGAN: *Brains On!* is produced by Menaka Wilhelm, Sanden Totten, Marc Sanchez, and Molly Bloom.

MOLLY BLOOM: We had production help from David [INAUDIBLE], Nancy Shu, Ava Kean, and Christina Lopez. And we had editing help from Phyllis Fletcher. Many thanks to Tamara Lennox, Jim Fasano, Leah Stans, Sam Chu, Jennifer Lai, Rosie DuPont, and Vicki Kreckler. And an extra round of applause for our big bunch of banana joke tellers, Livia, Paxton, Annaleigh, Ikika, Alice, Carter, Lyra, Inti, Vivian, Anshu, Sabina, and Strummer.

REGAN: *Brains On!* is a nonprofit Public Radio podcast.

MOLLY BLOOM: If you want to support the show and help us keep making new episodes, you can donate, or buy merch, or buy our book at brainson.org/fans.

REGAN: Now, before we go, it's time for our Moment of Um.

[ALL UMMING]

CHILD 16: I want to know why peaches have fuzz on them.

DARIO CHAVEZ: My name is Dario Chavez, and I am an Associate Professor at the University of Georgia. I work in peach research. In reality, the fuzz in fruit are like hairs. And generally speaking, they are known as trichomes. And what they do is they protect the fruit from, basically, weather, changes of humidity, water, pests, insects. So it's basically like a protection layer, like a shield for the fruit.

Besides the trichomes, there is always the skin, the cuticle layer of the foot, similar to what is our skin and hairs. Let's say the hair is the fuzz, and we have a skin layer as well. So the skin layer has certain properties as well that are somewhat similar to the trichomes, but they do have different properties as well.

Some of those contain waxes that will basically avoid water to come in. Some others will protect also against different predators. The skin and the trichomes, they are actually two layers that are protecting the food. The fun fact is that nectarine is actually a mutation that appear in peaches, a gene that remove the hair or the fuzz out of the peach.

For example, in the southeast and let's say, Georgia, Florida, Alabama, South Carolina, generally speaking, we grow a lot of peaches. And nectarines are few because our weather conditions, a lot of rain, humidity, a lot of pests, it makes it quite difficult to grow nectarines. Then if you compare it to the production in California, for example, that it's more like drier conditions. You have large production of nectarines, besides also the peaches as well.

So you can see how certain conditions will differentiate one of the productions. So that fuzz that we have in peaches, basically, protect the fruit for us to be able to be growing here in the southeastern US.

MOLLY BLOOM: These names give me a warm, fuzzy feeling. It's time for the *Brain's* honor roll. These are the incredible listeners who send us their ideas, questions, mystery sounds, drawings, and high fives.

[LISTING HONOR ROLL]

We'll be back next week with more answers to your questions.

REGAN: Thanks for listening.

MARC SANCHEZ: I did it! I fixed Harvey. Now, everything won't be so bananas.

HARVEY: Yes, Marc. Orange you glad I'm done with bananas?