

“Jamming on the Job”

Episode 15: Marine Scientist

[PBS KIDS music]

PBS KIDS Announcer: From your friends at PBS KIDS.

[a tour bus zooming down the open road]

Andrés: Vamos amigos, it's time to go.

Christina: Get ready BoomBox, we have a show.

[Music: Jamming on the Job theme song]

Christina, Andrés, and BoomBox: (singing)

Jamming on the Job

Ja, Jamming

Jamming on the Job

Wooh Ooh

I'm Christina,

Y yo soy Andrés

And we play music

All over the states

We jam and learn

With people who

Work in jobs

They love to do!

If we get stuck

Or something goes wrong

An expert helps us
And we write a song!

[BoomBox beats]
Hey...Go BoomBox...¡Vamos!

Jamming on the Job
Ja, Jamming
Jamming on the Job
Wooh Ooh

[Water, birds, boats, people speaking Spanish]

Andrés: ¡Hola, Jam Fam! ¡Y bienvenidos a Vieques, Puerto Rico!

BoomBox: PUERTO RICO, PUERTO PUERTO RICO!

Christina: Andrés, BoomBox and I are here in Puerto Rico, “La isla del encanto.” Vieques, where we are right now, is a small island off the coast of the main island of Puerto Rico! Puerto Rico is in the Caribbean, and it’s part of the United States. But it’s a unique place of its own. For one thing, ¡en Puerto Rico se habla español! Spanish is the first official language, and English is the second.

Andrés: We love it in Puerto Rico! One reason is because there is so much beautiful nature to see.

Christina: We’re heading to a dock to catch a ferry, so we can get back to the capital of Puerto Rico: San Juan. It’s on the main island, and it’s where we’re playing our big show!

Andrés: I’m loving all of the amazing sounds here! Are you getting these, BoomBox?

BoomBox: RECORDING! ¡GRABANDO!

[BoomBox remix]

BoomBox: ¡GRABACIÓN COMPLETA!

[Boat horn]

Christina: ¡Mira! ¡Allá está el ferry! Our ferry is pulling up to the dock now so we can get on!

Andrés: Amazing!

[Quieter boat horn]

Andrés: Hmm... Just one question. Why does it look like the boat is getting smaller and smaller, like it's going farther and farther away?

[Even quieter boat horn]

Christina: Uh... uh-oh... I think we...

Andrés: ¡Ay!

[record scratch]

Christina and Andrés: Missed it!

Christina: Oh, um, uh, okay okay... [nervous laughter]... No problem, I'll just check the ferry schedule...

[SFX: Paper rustling.]

Christina: Checking the times... okay, ¿a qué hora viene? Oh, look! We're fine! The next ferry comes in five hours! Wait...

Christina and Andrés: ¿Cinco horas? Five hours?!

Christina: We can't wait that long! Our show is in THREE hours!

Andrés: Oh no! Well... There are some other boats over there... Maybe someone – ¡alguien! – can take us to San Juan!

Christina: Well it's worth a shot! Let's go ask!

[Upbeat music, Christina and Andrés asking for rides in the background]

Andrés: I couldn't find anyone to take us to San Juan. Did you?

Christina: Nadie. I guess we have to give up and cancel the show.

Andrés: ¡No! ¡Nunca! I know we can do it, we just have to persist! That means we just have to keep trying!

BoomBox: KEEP TRYING! KEEP TRYING! KEEP TRYING, KEEP TRYING!

Christina: Keep trying? Well... Tienes razón, Andrés. All of the people who have tickets to our show would be so disappointed if we didn't make it. We HAVE to keep trying!

Andrés: But we might have to try something new, because asking all the people up there by the ferry dock isn't working!

Christina: Oh... Well, uh... there are some boats way down that way!

Andrés: We can try asking people there! Let's go!

[Upbeat music, Christina and Andrés running]

Andrés: ¡Perdón! ¡Disculpe!

Christina (out of breath): ¡Disculpe! [Linda: ¡Sí!] Por casualidad... Is there any chance... are you...are you going to San Juan, (laughs nervously) and if so we please could go with you? We have to get there for a big show and we missed the ferry! Ah, we asked a lot of people but so far no one can take us! (sighs)

Linda: Sounds like you persisted... you kept trying. And guess what? You found the perfect person to take you to San Juan... [Andrés: Huh?] Me! (laughs)

Christina: ¿De verdad?

Linda: Yup!

Christina: Phew!

Andrés: Woohoo! I'm so glad! (sighs)

Linda: I will have to stop at a few places for my job on the way, if you have time?

Christina: Well, we should! Uh, we have a little less than three hours before our show.

BoomBox: THREE HOURS! ONE, TWO, THREE, THREE HOURS!

Linda. Ok... It'll be a little tight, [Andrés: Huh.] but we should make it. And plus, the stops will be amazing because my job is amazing! I'm a marine scientist, [Christina: Ohh...] and I'm checking on two super important ocean habitats for my team today.

Andrés: A marine scientist? You mean you study animals in the ocean?

Linda: ¡Sí! ¡Los científicos marinos estudiamos todo tipo de seres vivos en el mar! [Christina: Wow!] Marine scientists study all kinds of ocean life: animals, plants, teeny tiny bacteria. But my specialty, hmm-hmm, just happens to be one of the coolest animals of all: the humpback whale!

Christina and Andrés: (gasp) ¡Ballenas!

Linda: ¡Aplausos, aplausos, por favor!

[Andrés and Christina gasp and applaud.]

Andrés: Wow!

Christina: Wow! ¡Increíble! Well we love meeting new people and learning about their jobs.

Linda: Well I love meeting new people and telling them about my job! So, we're pretty matchy matchy! [Andrés laughs] Yo me llamo Linda, by the way. ¿Y ustedes?

Andrés: I'm Andrés, this is Christina...

Christina: ¡Y te presento a BoomBox!

BoomBox: BOOM B-BOOM BOOM BOOM B-BOOMBOX!

Linda: ¡Me encanta! I already love BoomBox.

Christina: And we also have our Jam Fam with us, the listeners of our podcast! And I think they'll love hearing about your job, too!

Andrés: Definitely! Sounds like we've got a job to jam on!

BoomBox: WE'VE GOT A JOB TO JAM ON! WE'VE GOT A JOB, WE'VE GOT A JOB... JAM!

Christina: Woohoo, ¡vamos!

Linda: Okay!

Linda: Right this way, watch your step.

[boarding the boat]

Linda: Here are your life vests...

Andrés: A ver me lo aprieto.

Linda: Very important when you're on a boat!

Andrés: ¡BoomBox, te vamos a poner chaleco!

[Christina laughs. Boat motor starts]

Linda: And we're off!

[Boat zooms off]

Andrés: Whoa it's wobbling!

Christina: (laughs) Yeah!

Andrés: Wow!

Christina: So, how did you become interested in marine science, Linda?

Linda: Well, I was the kind of kid who asked a zillion questions. ¿Por qué esto? ¿Por qué lo otro? Why? Why? Why? [Andrés: Hmm...] And then I loved science class in school, porque en la ciencia we're basically asking

“why why why” all the time! [Andrés: Ha!] Marine scientists know a lot about the ocean, but there are still so many mysteries to solve.

BoomBox: MYSTERIES! MYSTERIES... MYSTERIES!

Andrés: Oooh, like what?

Linda: Oh wow, so many. Like... What’s on the ocean floor? Where did all the water come from? Why do my beloved humpback whales sing like that?

Christina: So cool! And when you say “mystery-solving,” uh, what do you do to solve the mysteries?

Linda: Well it’s a lot of listening, tengo que escuchar con cuidado. I listen to recordings of the whalesong, and notice how the songs change over time. [Christina: Oh!] I’ve been working on it for a while, and I have some ideas, but there’s still so much to learn. Like, do they use them to find each other? [Andrés: Hmm] Quizás, could be. Are they singing songs for fun, like we do? [Christina: Huh...] Es otra posibilidad. There’s some research that shows that some of the songs might even be whale names.

Andrés: Whale names? (laughs) ¿Cómo te llamas, ballena? (laughs) Love it!

[Music, boat coming to a stop]

Linda: Okay, first stop, a mangrove forest! ¡Un bosque de manglar!

[Christina: Oooh!] My colleague Yadiel, someone I work with at my job, he studies mangroves, and he asked if I would stop by to check on the forest for him.

Andrés: Okay!

[Sounds of animals in the forest]

Andrés: Wooow!

Christina: (gasps) ¡Qué bonito! Jam Fam, we're going through like a beautiful river, and it's going through a tunnel made out of trees!

Andrés: And the trees' roots look like red spider legs that are going into the water!

Linda: These are the mangrove trees! Red mangrove trees, to be specific, are the ones that grow right by the water. I'm sad to say that people have been cutting these forests down. [Christina: Oh...] ¡Pero son muy, muy importantes! These trees are important because they help block water from flooding the island, and they make incredible homes for lots of different animals.

[Mangrove cuckoo calling]

Linda: Like that one! The mangrove cuckoo!

Andrés: (gasps) ¡Mira!

Linda: (gasps) ¡Escucha! Do you hear it?

Christina: ¡Sí, sí, lo oigo!

Andrés: Listen!

[BoomBox samples remixes the name and sound of the Mangrove Cuckoo]

Linda: ¡Ah bravo, BoomBox! Now it's a bop! [Christina: Yeah!] The mangrove forests are home for lots of animals – crabs, shrimp, fish, a lot of other birds, too. Y los manglares también limpian el aire. They help clean the air by removing dangerous carbon pollution.

Andrés: I know about carbon pollution. That comes from burning oil and gas, right?

Linda: Exactamente. My colleague Yadiel also asked me to check out this area. Let's see...

[Music, boat traveling to another area]

Linda: Yes! ¡Mira! ¡Mira, allá! See those little trees? [Andrés: Uh-huh.] Looks like this part of the forest ya se está recuperando! It's starting to grow back!

Andrés: Really?

Linda: Yup! Hemos bregado mucho en eso. A lot of people from the community came to help plant these baby trees. It was hard work – especially on hot days – but they kept trying until the forest started to grow back!

Christina: So, ¡siguen intentando! They kept trying, just like we had to keep trying to find someone to take us to our show!

BoomBox: KEEP TRYING, KEEP TRYING, KEEP TRYING, KEEP TRYING!

Linda: ¡Así mismito! Okay, I'm gonna collect some water samples so Yadiel can check them later.

[Water pouring into container]

Linda: He'll look at them under a microscope, but to me it looks really good. A lot of tiny creatures floating in it, which is a VERY good sign. [Andrés: Huh!] Especially for my friends, the humpback whales, who might have some of those little fish for lunch!

Andrés: Mmmm... ¡Almuerzo!

[Christina and Linda laugh. Linda's watch beeping]

Linda: Oh hey, we gotta go! We've got one more stop and then we've got to get you to your show!

Christina: ¡Sí, por favor! It starts in two hours.

BoomBox: TWO HOURS! ONE, TWO, TWO HOURS!

Linda: ¿Dos horas? Oh! Okay! ¡Vámonos!

[Boat engine revs]

Andrés: Woohoo!

[Music, boat zooming to next location]

Linda: Okay! It's coral reef time! Now I don't study coral reefs, but this is actually what my colleague Maria studies. She asked me to check on the coral reef for her and do some important work to help it.

Christina: Oooh! I've seen coral reefs before! Uh, the corals are animals, aren't they?

Linda: Ajá, son animales.

Christina: I knew it! Some look like cactuses, and some look like bushes, but they're animals. And there are always colorful fish swimming around the coral's branches, right?

Linda: Mm-hmm! Colores y colores y más colores, así mismo. And just like the mangrove forest, it's an incredibly important habitat for lots of animals, like crabs and eels and fish. [Andrés: Wow!] The reef protects the coast

from storms, just like mangroves do, and it also cleans the air. Such a superhero habitat. They're the MVPs!

Christina: Oh, wow! Oh, but... I thought corals were colorful. This coral reef right here, looks all white and... empty.

Linda: Yup. The bad news is, coral reefs don't do so well when the water gets a little warmer, and this water has been getting way too warm for them. Coral gets its color from tiny, tiny creatures called dinoflagellates.

Andrés: Dinoflagellates?! [Linda: ¡Sí!] Are they... the smallest dinosaurs ever?

[Christina and Linda laugh]

Linda: No. But great guess. Dinoflagellates are tiny organisms that live inside the coral. [Christina: Oh...] The coral needs the dinoflagellates to stay healthy. Pero cuando el agua se pone demasiado caliente, when the water gets too hot, [Andrés: Uh-huh...] the dinoflagellates leave to go find somewhere cooler. Then you have a very sick, bleached coral reef, like this one.

Christina: Oh, I get it...

Andrés: That's so sad!

Linda: Sí, muy triste. Pero the good news is, that's where my colleague Maria comes in! Ella cultiva un coral nuevo, and this new coral that she grows can survive in warmer water. [Christina: Oh! Andrés: Uuf!] It took her a LOT of tries to figure out how to do it, but she kept trying and trying and...

BoomBox: KEEP TRYING! KEEP TRYING, KEEP TRYING, KEEP TRYING!

Linda: And now, ¡míralo! The brand new coral is right here in these plastic buckets!

[Buckets opening. Christina gasps]

Andrés: Aww, the corals are so cute! They're like little yellow cactuses!

Linda: Yes! Can you help me get them onto those rocks there?

Christina: Sure!

Andrés: I would love to!

Linda: ¡Excelente!

Christina: Nos gusta ayudar! We love helping!

Linda: Okay, put this one here. Can you help me reach?

Andrés: ¡Ajá!

Linda: Thank you! Here's this one, just one more.

Andrés: ¡Ven aquí baby coral!

Linda: There there there, perfect! All done! Gracias por tu ayuda. Now, we should get you to your show. Let's go!

Christina: Okay!

[Linda's phone starts vibrating]

Linda: Hold on a second. This is my fisherman friend calling. [Andrés: Okay...] [phone beeps] ¡Hola Jason! Dímelo... [muffled phone voice]

¿Qué? ¿Cómo? ¿De verdad? [muffled phone voice] ¿Dónde? [muffled phone voice] Okay voy pa 'lla ahora mismo. [phone beeps]

Christina: Um, what's wrong?

Linda: Jason says there's a little baby humpback whale that got separated from her pod, the family of whales she travels with. And the baby is heading towards dangerous shallow waters!

Andrés: Oh no! ¿Podemos ayudar?

Christina: Are we gonna go try to help?

Linda: I'd love to... do you have time?

Christina: Well, we only have about an hour and a half before our show... But... this is important! Let's do it!

Andrés: ¡Tenemos que hacerlo!

Linda: ¡Gracias amigos! Let's go!

[Music, boat speeds off, boat comes to a stop]

Linda: There she is!

Andrés: Oh, she's so beautiful!

[baby whale grunting]

Linda: She's very beautiful and very lost. [baby whale sprays water] Where is your pod, baby girl? (gasps) I know!

[bag unzipping]

Christina: (gasps) Oh! ¿Qué es eso? Is that... a microphone?

Linda: Yes, it's an underwater microphone called a hydrophone, and we can use it to listen for the baby whale's family. We just lower it into the water and...

[Splash of the hydrophone going into the water. Whale splashes, squeaks and grunts, amplified through hydrophone]

Christina: Wow! Did you hear that?

Andrés: Yeah!

[hydrophone comes up out of the water]

Linda: That's our little friend! And we might be able to hear her pod... Let's see.

[hydrophone goes back into water]

Andrés: Do you hear anything?

Linda: Nope... [hydrophone comes out of water] Remember, my job is a LOT of listening. Let's be super quiet and maybe we can hear something! We don't have much time!

Andrés: (whispering) Okay! Shhh! Let's be super quiet and listen, Jam Fam!

[Hydrophone goes back into water, whalesong in distance, hydrophone comes out of water]

Linda: There they are! Amazing!

Andrés: Are you getting that, Boombox?

BoomBox: RECORDING!

[BoomBox replays the whalesong]

Linda: But... she's not swimming towards her family. She's still going into shallow waters! [Christina: Oh no!] Maybe she can't hear them... [Andrés: Aww...] I'll move the boat towards the pod, maybe the baby will follow us.

Christina: Okay.

[Boat motor churns slowly. Baby whale splashes, squeaks and grunts.]

Christina: Uh-oh...

Andrés: She's still going the wrong way!

Linda: Maybe if we had a way to make the whalesong again... Oh, no! I don't know, maybe it's too late.

Christina: Oh, but we have to keep trying! Wait... BoomBox! Can you play the whalesong?

BoomBox: WHALESONG!

[BoomBox replays the whalesong. Baby whale sprays and splashes.]

Linda: ¡Sí, sí BoomBox! It's working! She turned around! Keep going!

[BoomBox plays the whalesong. Baby whale splashes, squeaks and grunts.]

Linda: ¡BoomBox! ¡Ay, santo! ¡Lo lograste!

Andrés: Yeah!

Linda: You did it, BoomBox! She's heading towards her pod!

Christina: ¡Sí sí sí!

[whales happily reuniting]

Linda: She's safe now. [Christina: (gasps) Yay!; Andrés: ¡Sí!] Awww, I knew I loved you Boombox!

BoomBox: BOOMBOX LOVES YOU, TOO!

Linda: (sighs) You know, these beautiful animals almost went extinct. [Andrés: ¿Qué?] There would have been none left on Earth, because people were hunting them a lot. [Christina: Oh!] But marine scientists and their friends worked so hard to learn about how incredible whales are, and convince people to help save them. [Andrés: Ooh!] In Puerto Rico we like to say "Seguimos bregando." We keep trying!

BoomBox: KEEP TRYING! KEEP TRYING, KEEP TRYING, KEEP TRYING!

Andrés: ¡Nosotros también, Linda! We keep trying, too! Right, Jam Fam?

Christina: Speaking of which... (laughs nervously) Our show! It's starting in about an hour!

BoomBox: ONE HOUR! ONE, ONLY ONE, ONE HOUR!

Christina: Are we gonna make it?

Linda: You know it! Let's go!

Andrés: ¡Vamos!

[Music, boat zooms off, boat comes to a stop]

Linda: And here is San Juan!

Christina: Aw, yes!

Linda: Awww, you three have helped me so much! I'll forever be grateful.

Christina: (sighs) Well we are so grateful to you, Linda! You got us to San Juan, and you showed us so much about being a marine scientist.

Andrés: I can't wait to write a song about you!

Christina: Actually Linda... Do you think you'd be able to come see our show?

Linda: Um, yes! I'd love to!

Andrés: Yay!

[transitional music, crowd cheering]

Christina: How are you doing today?

[crowd cheering]

Andrés: We made it here because of an incredible marine scientist named Linda, who gave us a ride on her boat and taught us all about her awesome job. We even wrote a song about her! Would you like to hear it?

[crowd cheering]

Andrés: Okay! Hit it, BoomBox!

Christina, Andrés, and Boombox: (singing)

Out in the sea so many mysteries
We look for answers to solve those inquiries
Like, why do these microorganisms glow?
What does this coral need to thrive and grow?

I'm a marine scientist
And I'll keep trying, I will persist

We keep trying
Seguimos bregando
We keep trying
Seguimos intentando

We're on a mission to research the reefs
Protect the coastline, the animals, the beach
I scuba dive, study weather and the tides
I love the ocean, and that's one reason why

I'm a marine scientist
And I'll keep trying, I will persist

We keep trying
Seguimos bregando
We keep trying
Seguimos intentando

I collect samples, I study the water
To see if it's salty, or if it's getting hotter
Then I teach people all about the ocean
Es importante, let's keep it flowing

I'm a marine scientist, and here's what I do
I study the ocean, fish and bacteria, too
Gotta take care of our planet, 'cause it's at risk

But I know we can, I'm an optimist!

I'm a marine scientist
And I'll keep trying, I will persist

We keep trying
Seguimos bregando
We keep trying
Seguimos intentando

Marine scientist...

We'll keep trying

We'll keep trying

We'll keep trying

We'll keep trying

We'll keep trying

We'll keep trying

We'll keep trying

[audience cheers]

Andrés: Linda! Would you come up to the stage?

Christina: Ven, Linda, ¡por favor!

[footsteps]

Linda: Don't have to ask me twice! How great was that, San Juan?

[applause]

Linda: And I know that every one of you is going to keep working to save all the marine life we can, learn what we can about them, ¡y seguimos bregando! We keep trying!

[applause]

BoomBox: KEEP TRYING, KEEP TRYING, KEEP TRYING... KEEP TRYING!

Andrés: That was so incredible. I hope we can come back to Puerto Rico soon!

Christina: It really made me think about how being curious about the world around us is the perfect first step towards the hard work of taking care of it. Y hay tantos animales tan increíbles, here in Puerto Rico, ¡y en todo el mundo!

Andrés: What animal are you curious about, Jam Fam?
(beat)

Andrés: I hope you get to learn all about it!

Christina: And now let's splash over to BoomBox for the credits. We'll catch you next time, on...

Christina and Andrés: Jamming on the Job!

Christina, Andrés, and BoomBox: (singing)
Jamming on the Job
Ja, Jamming
Jamming on the Job
Wooh Ooh

BoomBox / Pierce Freelon: (singing and rapping)

Jamming on the Job is hosted by Christina Sanabria and Andrés Salguero
(Andres Salguero)

AKA 123 Andrés they got a GRAMMY on their shelf (mm-hmm!)

And my name is Pierce Freelon, we wrote these songs together

I play BoomBox and bring Hip Hop

Whatever job Jam Fam wants a song about next

Cause I got a couple GRAMMY nominations myself

Issa Lopez played Linda the marine scientist

Benjamin Weiner he wrote the script

Terence Bernardo and Aaron Keane did the sound and the mix

Daniel Rinaldi and Isaac Klein produced

Executive Produced by David Huppert

And if you wondered

Where you could listen and discover

More jobs, more songs and fun to be had

Visit PBS KIDS or wherever you listen to podcasts.

Christina: Jamming on the Job is made possible by a Ready To Learn grant...

Andrés: ...from the U.S. Department of Education through the Corporation for Public Broadcasting.

Christina and Andrés: ¡Hasta pronto!

[music ends]

Original Production Funding for Jamming on the Job is provided by a Ready To Learn Grant from the U.S. Department of Education through the Corporation for Public Broadcasting. The contents of this podcast were developed under a grant from the Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government. The project was funded by a Ready To Learn grant [PR/Award No. S295A200004, CFDA No. 84.295A] provided by the Department of Education to the Corporation for Public Broadcasting.
Copyright © PBS North Carolina. All rights reserved.