



# MEET THE MVZ

A newsletter highlighting members of our community



The Three-Striped Poison Frog,  
*Ameerega trivittata*  
Photo by Diana Pinto

## MVZ HIGHLIGHT OF THE MONTH

In our December issue we highlight **Valeria Ramírez-Castañeda**, a second year PhD student in the Tarvin lab, for her tremendous efforts in promoting diversity and inclusion in the sciences



# INTRODUCING VALERIA RAMÍREZ-CASTAÑEDA

Bañía Málaga, Valle del Cauca, Colombia



*Erythrolamprus reginae*, by Diana Pinto



*Phyllobates terribilis*



Didelphidae

**Valeria's favorite vertebrates are snakes, frogs and opossums!**

## TELL US ABOUT YOURSELF!

I am Colombian biologist interested in interactions between snakes and frogs and how this shapes evolutionary changes in both groups. I also enjoy participating in science communication projects (particularly in Spanish), as well as in research on science-society relationships.

## HOW DID YOU GET INTERESTED IN EVOLUTIONARY BIOLOGY?

Even though I grew up in Bogotá, I went to school outside of the city, exposing me and enthraling me with life in one of the hotspots of biodiversity in the world.

## THE BIGGEST CHALLENGE AS AN ACADEMIC SO FAR?

A lot! Living far from my family, moving every couple of years, speaking and writing in a second language, being tired or unmotivated but close to a deadline, feeling limited by funding or time, among others.

## THE BIGGEST SURPRISE ABOUT BEING AN ACADEMIC?

Traveling to so many amazing places! Being close to nature and learning from the local community. Getting to know great people (my colleagues, I really admire them), learning new and very interesting things. Also, not having strict working times (I really love that).

## FAVORITE DEI INITIATIVES YOU ARE CURRENTLY FOLLOWING?



@thenapministry  
@soyciguapa



Ciencia café pa' sumercé  
Sumercesaurio kids



# RECOGNIZING AND CONFRONTING LANGUAGE BARRIERS IN THE SCIENCES

In a recent publication in PLOS ONE, Colombian biologist, Valeria Ramírez-Castañeda explores the challenges that accompany scientific research when your first language is not English. We spoke with Valeria to find out what inspired her to start this work, what she found along the way, and how other scientists have responded to her findings.

## WHAT INSPIRED YOU TO WRITE THIS PAPER?

It was mostly my experience and also my colleagues' experience in Colombia. We have always the sense that it's difficult to read in English and also difficult to read scientific literature. But I think the first time that I really thought about it... was when I was doing my master's thesis. A lot of people told me I should write it in English... And I actually tried for some weeks... It was impossible. It takes me so much time, so much effort. I [was] getting stressed just because it [was] in English, not the fact that it [was] a dissertation.

I think this kind of started a fear of publishing—all the effort that you have to do. It's not only what we all do...doing science that is already difficult. But also, you have to think about the language, and that takes a lot of time, more time than you have. I started to think, 'This is kind of unfair. To be a biologist, you need to have good English. If not, you are not a good biologist.'

This correlation between English and biology seemed natural for a long time. And I think for a lot of people, it still [is]. We have this idea...that's been used to justify English, [which is] we need a common language to communicate. And I agree with that; we need a common language. But that's what I'm trying to say in my article: that doesn't mean that all the efforts are to be put on the people that [don't] speak English.

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"It's not only what we all do...doing science that is already difficult. But also you have to think about the language, and that takes a lot of time, more time than you have"

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**Valeria shared stories of friends who faced setbacks in their careers due to this idea of English as the "common language", with some even giving up science because of it. Doing a master's in science communication allowed her to explore this and other global injustices that are products of colonialism.**



I discovered that there is literature about this subject...but not in natural science. I thought we need[ed] to bring this up and say something, and I started to do this work. I just wanted to show [the problems English as a Foreign Language (EFL) researchers face]...with numbers and with graphs and with a lot of scientific language, because the people that I wanted to reach are scientists.



## WHAT WAS THE MOST SURPRISING RESULT?

I would say several things, like not going to international conferences because of English. I super understand that. It's very difficult to present in another language, and I cannot image how stressful [that is]... Also this idea of asking favors for reviewing paper[s]. That would mean that there's a lot of non-paid labor on native English [speakers], and in the end that would mean dependence [of EFL researchers on native English speakers] to be scientists. That again would just strengthen this colonialist world, because our profession is dependent [on] other people, and these people come from the north of the world.

The time that we spend writing in English... It was almost one month more. But I actually calculated that [from working] eight hours everyday, and no one works eight hours on the same paper for that amount of time. So at the end, I don't know how much time it is but it may take [several] months more.

**Valeria mentioned that seeing all of the data itself was surprising. She loved seeing an idea she had have actual trends and data to describe what her and fellow colleagues have always known and felt.**



## WHAT HAS THE RESPONSE BEEN LIKE SO FAR?

I would say very successful! My main objective was to create this awareness, to make people talk about this, and I think I did it. Of course, not all the scientific world is speaking about this, but a lot of people [are]. To reach a lot of people is something that is important for me.

I think it's super beautiful to see people be like, 'Okay, let's do this!' Let's do something about this, right now! Not tomorrow, today! And I love that... It was my main goal.

**Valeria added that she's received interesting, supportive comments from scientists who use a different alphabet.**

There's a lot of layers... And it's not that we're going to have easy solutions... We really need context-focused solutions... It's something that we should start to talk [about] in our local environments... We need to think about how we make this more fair for everyone.



I think there are some studies about this...that we think differently in different languages. So at the end [of my paper], I put this point [saying] actually with missing languages, we're missing different observations of nature, and that would mean missing something for science too. We really need to engage this idea that we need to have diversity... I like that, and [non-native speakers] like this idea too. It's not only that we need to communicate. It's also that our diversity is important for science.

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"...with missing languages, we're missing different observations of nature, and that would mean missing something for science too"

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**Besides the positive reception received from other scientists, Valeria noted...**

Of course, my mom is super proud. I would say it was more because I had this newspaper article... from one of the most important [newspapers] in Colombia. For my mom it was like, 'Oh, your name is in the newspaper!' It was super cool.

**INTERESTED IN LEARNING MORE? CHECK OUT VALERIA'S [PAPER](#) AND THIS NEWS [FEATURE](#)!**