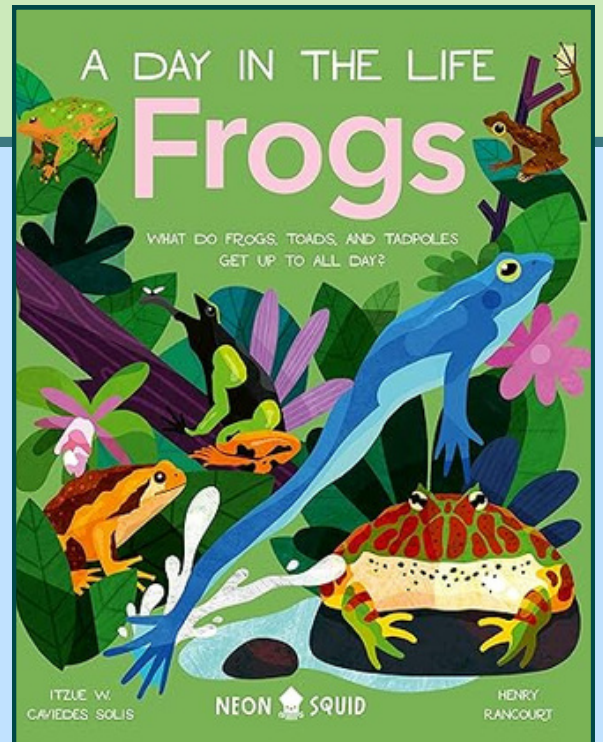


# An Interview with Author Itzue W. Caviedes Solis

*Frogs (A Day in the Life): What Do Frogs, Toads, and Tadpoles Get Up to All Day?,*  
Dr Itzue W. Caviedes Solis (Author),  
Henry Rancourt (Illustrator),  
Neon Squid, 2023,  
48 pages  
**Reading Age: 5-8 years**



Funny, joyful, and full of wonder, we loved *Frogs: A Day in the Life* so much we couldn't wait to visit with the author, herpetologist Dr. Itzue W. Caviedes Solis, a native of Mexico and assistant professor at Swarthmore College.

**You've shared that becoming a biologist is like "seeing the world with brand new glasses," making you aware of details you never noticed before. One of the things we love about your book is your knack for sharing amazing facts, such as frogs that turn blue or have see-through skin or create their own medicine. What's your favorite "fun fact" that you included in the book?**

It was hard for me to narrow down all the frogs I love and admire to a series of fun facts on 48 pages. To me they are all special.

Most people can picture a frog in their minds, but they do not know all the obscure details about them. My goal with this book is for kids and everyone to see the frogs with "brand new glasses." I select the fun facts hoping everyone at home will find a frog to connect to. We humans also have complicated dances, live in cozy burrows, and know dads that protect their little ones in their own ways. The fun facts in the book also provoke strong feelings. Imagine being a *Pipa pipa* mom with babies crawling out of your skin!

However, my favorite fun facts hide in the small things I learned while doing the research for the book:

1. I knew that toxic frogs acquire their toxins from eating arthropods, but I did not know arthropods acquire the toxins from the plants! And scientists do not know how they pass from one to the other!
2. My editor asked me to include a glass frog. Their translucent abdomens are cool but not my favorite. My favorite fact I learned about them is that the dads rotate their eggs with their hands for better growth and bring them water using their abdomen as a sponge to carry water.

And the fun facts keep coming; after the book was published a new article came out explaining how the glass frogs' blood is stored in their liver at night so they are even more translucent while they sleep! The more you read about frogs the more fun facts you can find!

**Your book is structured by the time of day and what frogs are doing in a variety of ecosystems at morning, midday, evening, and nighttime. If you could transport yourself to any ecosystem in any country, at any time of the day to see a specific frog behavior, where would you like to go and what would you like to see?**

I have been fortunate to see many species in the book in person, some in the wild and some in zoos. I have also witnessed first-hand four of the behaviors described in the book. Some collaborators and I published a scientific note about the *Kasina arboricola* from the story "Playing Dead" after we observed the behavior for the first time in the forest in Ghana. I have seen *Anothea spinosa* from the "Metamorphosis" story calling "bop, bop, bop" from a tree hole with its crown of spines and tadpoles swimming in the hole behind her. I helped a lab mate during my PhD with his research on *Ascapus truei* from the "Hold on Tight" story, and I had a tadpole's mouth attached to my finger the way they attach to the rocks! Finally, I have many fond memories of hearing *Kaloula puchra* from the "Sounds from the Underground" story calling "moooo" in the streets of Hong Kong while I lived there.

If I could transport myself to any ecosystem in any country, at any time I would like to shrink down to be able to ride a *Racophorus nigropalmatus* gliding frog over the rainforest in Borneo while being chased by a gliding snake!

**You write in *Women in Herpetology: 50 Stories From Around the World* that you see fewer people with your gender, race, and socioeconomic background working in science. You've also shared that you've received support from family, friends, and colleagues. What advice would you give parents who want to nurture their child's interest in science and choose it as a career?**

1. Promote exploration and curiosity. These are the pillars of science. There are many ways to get engaged with science that do not require money. For example, ask your kid early on questions about the natural world and help them find answers. Why do clouds look different every day? Did you know that tears are just filtered blood? I am currently living in Pennsylvania, so one more specific question that comes to my mind is, "Where does the salt in the road go after the snow is gone?" Give your kid an overload of salt on his tongue and ask what would a worm, fish, or frog feel when the salt is washing into their homes. Well, it turns out salt affects the sex of the frogs! So, it changes the number of males and females in a population. As a parent, you do not need to know all the answers. You can go to the public library and nowadays there are good YouTube channels to teach difficult concepts.

2. Acknowledge that learning is hard but keep a growing mindset. For example, if a kid says I am bad in math you can say, "You are not bad, you just don't know how to do this yet, but you will," or meet them halfway and show them there is a light on the other side: "When I was a kid, I also found it hard, but I eventually learned it."

3. Find role models for your kids. Representation matters. Depending on your own background, your demographics, and where you live this could be challenging. But showing them that someone like them can be a scientist is really important. There are also YouTube channels that help, and after-school programs or local museums or libraries that showcase a diverse group of people working in the sciences.

## **What would you like young people to know about pursuing science or herpetology as a career?**

We need more people caring about the creatures that do not get much attention. Herpetologists study amphibians and reptiles, and they need you! They need you to learn and tell people to care about them. We need diverse voices: We need your voice, both in herpetology and the scientific community in general.

There are many ways to get involved in herpetology and science: you do not need to wear a lab coat or be a professor. You can work doing science in a zoo, or at a nonprofit organization, and you can teach science to kids! There are many options to pursue a career in science.

While pursuing a career in science, there might be times when people will make you feel like you do not belong and that you are not good enough. There will be plenty of times that you will want to give up because of them. But I want you to remember that you are amazing; every bit that makes you you. You are not alone, and you deserve to be here. We want you to be part of the worlds of herpetology and science, and we are waiting for you to join our forces. Along the way you will also find people that will be your friends, that will have your back, and that will be there right with you. Find those people and care for each other.

## **What were the challenges you faced as you worked on this book? Were there times when the progress seemed swift and easy, and others when you faced difficulty getting the book done? What part of the process was fun, and what part of the process was more challenging?**

I became a herpetologist because I love frogs. Working on the book was the first time in my whole career where my time was dedicated exclusively to read and write about frogs. It was a good break from reading about cutting-edge methods or doing computer programming to do statistical analysis to publish papers. My job as a writer was to learn about frogs and write stories about them, and I LOVED every second of it. The more I read about frogs the more I wanted to keep reading. All the fun facts in the book come from reading dozens of scientific papers, just to be able to get one small sentence in for the fun facts I found. The most challenging parts were 1) getting other work done because I wanted to keep working on the book, and 2) deciding what to include and what to leave behind. Every species could have been its own book! The editors at Neon Squid were very organized and great at giving me guidance and feedback. Overall, it was a super positive experience.

## **Would you like to write another book? For kids? Or adults? Would you write about frogs again?**

Absolutely! I have always enjoyed doing science communication and books are a great venue to transmit complex scientific concepts to promote awe for all organisms. Writing more books is something I am constantly thinking about. I have a full draft of a fiction book about tadpoles, and I have a list of topics for kids' books about nature and science. I also love reading magic realism so I would love to write a book with short stories for adults.