

DATA VERSIFY

Anne M. Bronikowski

Researcher Background:

Dr. Anne Bronikowski (she/her) is an evolutionary biologist at Michigan State University. The Bronikowski Lab studies how life histories evolve, and the ecological drivers of such evolution within and among species and communities. Her research focuses on reptiles due to their remarkable diversity in thermoregulatory modes, stress resistance, and variation in longevity, with an emphasis on traits expressed late in life.

Q: Why did you become a biologist?

A: I was always interested in why some people live a long time, and others don't. When I was young, my grandmother used to take me on walks in the nearby cemetery. I would read the tombstones and figure out who lived really long. When I went to school, I continued to be interested in what determines how long one lives, and I also became aware of animals that live longer than people.

Q: What is your favorite part of your job?

A: I love analyzing data and working with students on analyzing data. We collect a lot of data in the laboratory and out in the wild. My favorite part is bringing all those data together to tell a story.

Q: Do you have any aspects of your identity that you feel are underrepresented, marginalized, or minoritized in STEM or society?

A: When I was first starting out, I was surprised to discover that some people didn't think women could be good field biologists and experimental biologists. I was not raised that way, so it was quite surprising to me to encounter this in my mid-20s as a graduate student. Later in life, as an older faculty member, I have been surprised to again encounter these same attitudes, though now it is because I am in my 60s!



Anne with her two kids, Clara and Abi, in 2004.

Q: What obstacles have you overcome to get where you are?

A: I have had some health issues during my career, but with a supportive department, have been able to resume most of my research. Also, there were very few women studying snakes when I started out in 1993. I didn't have a lot of role models that I could identify with. But my (male) mentors never treated me any differently and it was a non-issue for them. I did wonder why so few women study reptiles. Nowadays, there are many more women studying snakes, which is really great to see.

Q: What are hobbies and/or interests that you have outside of your research?

A: I was a dancer throughout my childhood and early adult years. I still enjoy going to dance performances (ballet, contemporary, tap). I also sang for years in a choir and I play the piano. I enjoy reading mysteries, spending time with my adult children, my husband Fred, and my dog Kimber. I don't really like cooking, but usually once every other week, I'll make a big batch of soup or chili and freeze it so that I don't have to cook. I also really enjoy going to rock concerts.

Q: What is your favorite thing about reading mysteries?

A: I can pick up a mystery book and read for a few minutes or for an hour. I like light-hearted who-done-its, especially historical (like Agatha Christie). There are some really good recent novelists who write interesting historical fiction. Also, because I have to drive a lot, I listen to books when I drive. This makes driving more enjoyable.

Q: How did you get into reading mysteries?

A: When I was 13, my friends and I would read "Nancy Drew" mysteries. We didn't have phones, computers, or streaming, so we would read books. We would share the ones that each other didn't have. I can remember lots of summer days either riding my bike to see my friends or reading books.

Q: What advice do you have for aspiring biologists?

A: I think it is important to find something that you enjoy. If you enjoy doing experiments or collecting field data, then this hard work is worth it and can be fun.



Anne catching garter snakes as part of a long-term study of population dynamics and evolution.

Q: What do you believe are key elements to being successful in biology?

A: I think being committed and persistent are important to being successful in biology. Most experiments that we do in my lab fail at least the first few times. This is because we are always trying new procedures and experiments on animals that haven't been studied in this way before. So, there are a lot of failed experiments. But then, when things work, it is the most amazing feeling. Once we have a procedure working, we can collect data and see what the answer is.