I am an evolutionary and integrative physiologist who explores how snakes digest their food.

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One of my research questions:
Why do some snakes shut down their small intestine when they are done digesting, whereas many other snakes do not?

Technology I use:
I use fish, amphibians, and reptiles in my research with a special focus on the Burmese python. The python has an amazing digestive system that has allowed us to make interesting discoveries and address questions on how the gut can change its structure and function in response to feeding.

My most exciting discovery:
I found that some snakes can rapidly shutdown their digestive system after digesting a meal and then rapidly turn it back on when they eat the next meal.

To be a scientist, you need:
1) to love what you do...get real enjoyment in the research and teaching of biology; 2) to get broad training so you can understand your work across fields (in my case evolution, ecology, and cell and molecular physiology); 3) to always explore and learn (new techniques, discoveries and ideas); and 4) to be knowledgeable and caring about my research animals.

I knew I wanted to be a scientist when...
I caught my first snake at the age of eight. From that time, I just wanted to learn everything that I could about animals.

You can check out some science articles I’ve written at http://bit.ly/StephenSecorArticles

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