

Katie McKissic: teacher, biologist, blogger and scientist

Almudena Ponce Salvatierra

Summary— Katie McKissic grew up in Reno, she earned her bachelor degree in biological sciences from the University of Southern California, as well as her master's of arts in teaching. She created *Beatrice the biologist*, a cool tool for teachers and also for people willing to learn more about scientific facts in a funny way. Currently, she lives in Los Angeles, together with her husband and their guinea pig.

Key words— Beatrice the biologist, Katie McKissic, Amoeba hugs, blog, illustration.

WHO'S BEATRICE THE BIOLOGIST?

Beatrice the Biologist is the mascot for making science fun and understandable for everyone. I named my blog Beatrice the Biologist because I've always thought Beatrice was a very lovely name, and I liked the alliteration; that Beatrice and Biologist both begin with "b". Beatrice is now my pen name and alter ego where I explain science concepts in very silly ways.

How was she born?

It started out as just a blog. I started a Facebook page for it more than a year after I started blogging, and Twitter and Tumblr came much later.

Where does this idea come from?

I started the blog after I left the classroom. I wanted to have a website that was useful to teachers, so I started writing about common misconceptions about biology with the hope that teachers could print out the articles and use them in their classes.



What is the motivation behind?

I think science is important and interesting, and my happiest teaching moments were when my students would tell me that they thought they hated science before they took my class. I want more people to realize how amazing science is.

For how long were you a biology teacher?

Only for one year.

What is your job currently?

I currently work in the marketing and communications office for the USC Viterbi School of Engineering. There, I write stories about engineering research, which is always just fascinating. It's a great job for me because I get to communicate science, be creative, and tell stories in different formats: writing, illustration, videos, etc.

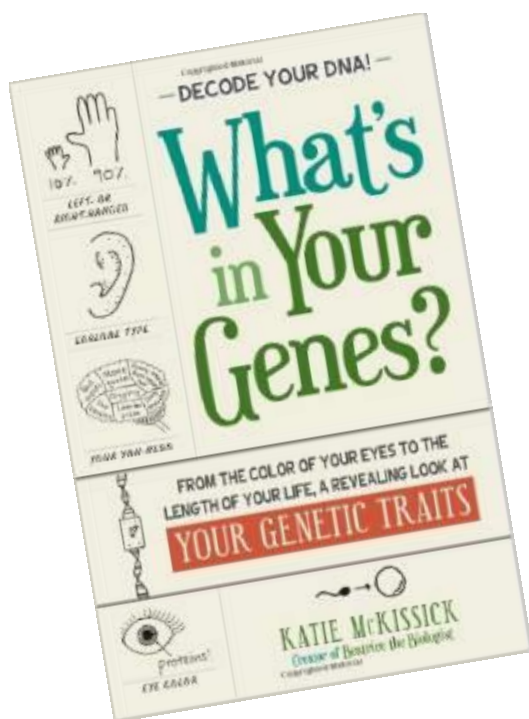
How did you start writing for *Scientific American*?

My co-bloggers Glendon Mellow and Kalliopi Monoyios asked me to join their science and art blog, Symbiartic. I was overjoyed to be joining their team!

Which of your books did you write first?

My first book, *Amoeba Hugs and Other Nonsense*, is a collection of some of my favorite comics at the time. A lot of people thought it was intended for children, since it appears to be juvenile, but it's not. But since so many seemed to want content from me to give to their children, I wrote a very short children's book about cells called *Little Cells*.

Those both were self-published projects, and I had a lot of fun doing them, but my latest book *What's in Your Genes?* is different: it's a full book with original content, original drawings, and it's written for adults. A publisher approached me about writing it, and I spent 3 months putting it all together.

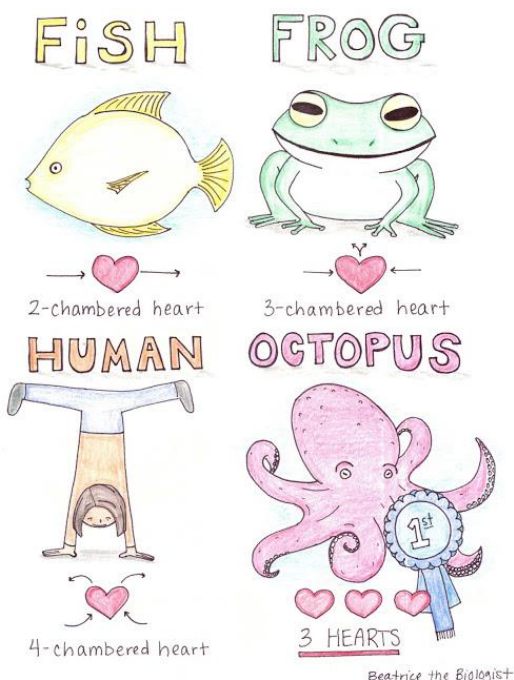


Does Beatrice receive many questions?

I do! I get a lot of random questions from people about their genetics, like someone who was very concerned he would go bald because his father is bald, and I explained why men inherit baldness from their mothers, not fathers.

Who are the target readers of your books and comics?

Teenagers and adults who like me, have a silly sense of humor and want to hear more about science while looking at goofy drawings.



Beatrice the Biologist

Which are your hobbies?

I love the ocean, so my favorite place is the beach, and I love boogie boarding and swimming. I also like sewing, gardening, and staying home with a cup of coffee, sitting in my comfy chair and reading a good book.

it is somehow an atypical "job" for a scientist... after university studies in sciences the obvious jobs such as medical doctor, pharmacist, researcher, working in industry, are the first ones coming to one's mind.

However, illustrating and writing about science in a way that anybody can understand is not the most usual thing.

How did this idea come to you? Did you ever know you wanted to teach?

I always thought I'd be a good teacher, but when I started college, I didn't know what I wanted to do. All I knew was that I did not want to be a doctor. I considered going into medical illustration, but wasn't sure if that was quite right. I decided to teach because I thought I'd be good at it, I loved my subject, and I genuinely wanted to give back to my community and help kids. When I left teaching, I decided I would keep up the bit where I make science fun and understandable, but from my own little corner of the internet instead of in a classroom.

I find this thing you do very inspiring, and I am sure many other people will feel it the same way.

Do you think Beatrice will meet any other friends in the future? Like for example Lea the chemist? or Andreas the physicist? I, personally, would love to be able to create one called "Almu the Crystallographer".

Haha yeah. When I do chemistry comics, I get people saying "wait, this is Beatrice the Biologist; what gives?" so at times I think that I painted myself into a corner putting biology in the name, but it would be great to have spinoffs of other science areas. Chleo the Chemist, Phoebe the Physicist, Emily the Entomologist.

A MORE ACCURATE SHORTHAND FOR "I LOVE YOU."



BEATRICE the BIOLOGIST

What are your future plans for Beatrice?

I want to write more books, produce bigger content like posters and t-shirt designs, and I want to find a way to support low income schools in my area.

For the guys that are reading now the magazine. Some of them are still bachelor students, some of them are master students, some are graduate students. Would you send them a special message?

Whenever you are having a rough day, think about the last 3.8 billion years of living things that all survived and reproduced and ultimately led to you. Think about the vastness of the universe, and the beauty of a single flower. There is wonder all around us!

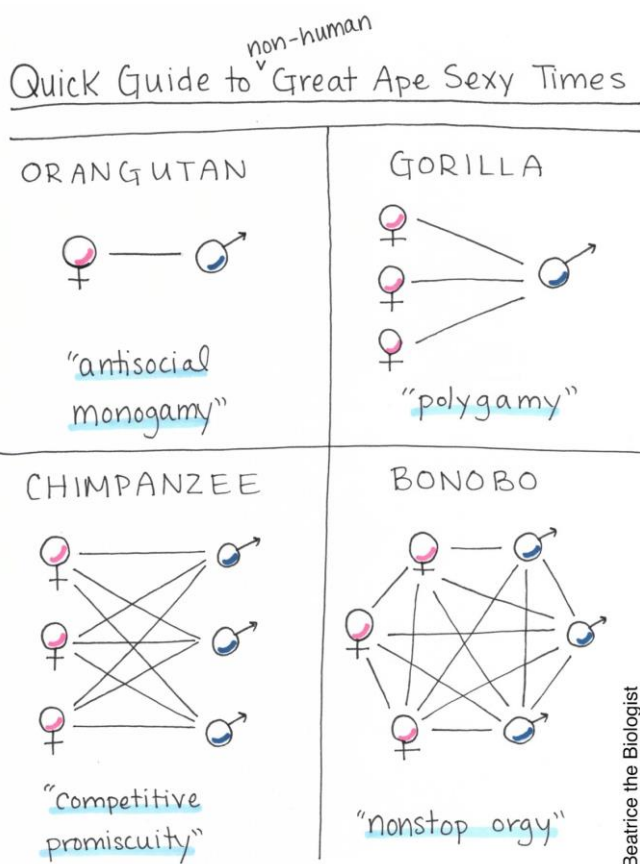
Which is your favourite topic to read about?

Evolution is my favorite, and neuroscience is a close second. Such big ideas!

How do you think your work could be fruitfully used by teachers? Either at university or at high-school?

I know teachers usually use my comics at the start of a class or lecture to get students laughing and thinking, and I know of a few teachers that want to use *What's in Your Genes?* as a class text. That makes me so happy.

Thank you Katie for the opportunity of having you in MoleQla.



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To Katie, for her time and availability.

REFERENCES

For more comics, illustrations and funny science, visit beatricebiologist.com.



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recibió el título de Licenciado en Farmacia por la Universidad de Sevilla en 2011, y de Máster en Cristalografía y Cristalización por la Universidad Internacional Menéndez Pelayo en 2012. Después de un año y medio trabajando en cristalografía de proteínas en el CSIC, se mudó a Alemania. En la actualidad lleva a cabo sus estudios de doctorado en el Instituto Max Planck de biofísica química en Göttingen.