

DATA VERSIFY

Eric Randolph

Researcher Background:

Eric Randolph (he/him/his) is a bioinformatician (which is a scientist who uses computers and advanced statistics to interpret large datasets to solve biological questions) at the University of Alabama at Birmingham. Working as a joint postdoc in both the Biga and the Riddle Lab, Eric studies sex-biased, age-related gene expression comparatively across the animal kingdom.



Q: How would you describe your science to a 5th grader?

A: Every animal is made up of hundreds to thousands to millions of cells, and each one of those cells uses proteins to do something. Proteins are made from genes being expressed within the cells. So, when genes are turned on or off, proteins will either be made or not made, and the cell will either do or not do something. Females and males are different in some ways as they age. I study which genes in females are turned on or off during aging and compare them with the genes that are turned on or off in males during aging.

Q: Why did you become a biologist?

A: I became a biologist after I saw a picture of a scuba diver taking pictures of fish in a career book. I was in my first semester at my local community college, and I had an assignment to research three different careers. I had never seen so many career options in my life, but I paused when I saw that picture. I wasn't sure of the best way to become a fish photographer, so I used my best judgment at that time. I said to myself,

"Fish are living things, so that's biology. And fish live in the ocean, so that's marine. I know those two words, so let's put them together, and I will become a Marine Biologist!"



Eric presenting his research at a scientific conference.

Q: What is your favorite part of your job?

A: My favorite part of my job is getting paid to learn. I do not know of another career where I can spend the whole day reading and not get in trouble for it. There is nothing greater than to get paid to become smarter.

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

A: I will start by acknowledging that my identity lives comfortably at the intersection of three of the most privileged groups: white, cis, and male. And yet, I am the child of a drug-addicted, single mother who would abuse me verbally, emotionally, and physically. I was homeless at 15, after she decided that she did not want to be my mother anymore. I slept on people's couches, in abandoned buildings, and in broken-down cars until I was 18. I have been locked up more times than I can count, starting when I was 14. I turned 18 in a juvenile detention center, halfway through serving a six-month sentence. I could not read when I was younger, and I have dyslexia. I read my first book, cover to cover, while I was in that juvenile detention center. To say I was poor is an understatement. Sometimes, the only food in my house growing up was stale bread that our neighbor would give to us from their church. I started college in my mid-20s for the Pell Grant refund check. By the time I began college, I was a two-time convicted felon, and I had fathered two children.

I wasn't underrepresented; I was not represented at all during my time at University. By all accounts, I should not be in the position I am in. Which is why I now use the privilege I have to share my story, so any younger me's out there can have the representation I lacked. You can do hard things, you got this!

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

A: Imposter syndrome, or the feeling that I do not belong and am not good enough to be here. This is common as you get smarter and move up in your career as a biologist. I try to keep in mind that no one else feels this way about me. These doubts are coming from my own mind. "The call is coming from within the house!" This helps me relax. I remind myself that I am not the voice in my head, I am the one who listens. With that knowledge, I can choose not to listen or even tell that voice to be quiet.



Eric enjoying an event at a museum.

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

A: I enjoy working out, doing yoga, and reading. Additionally, I enjoy the theater, attending stage plays and concerts, and visiting museums and art galleries.

Q: What is your favorite thing about visiting art museums?

A: My favorite thing to do is to research the artists and learn why they made their works. I had a humanities professor once who taught humanities through art. He would often say that the best way to learn about people is to study the things they produce, especially their art.

Q: How did you get into visiting art museums?

A: While pursuing my degree in Marine Biology, I took up a minor in Art History. I enjoyed relaxing while looking at art after my intensive science courses. I feel it

is necessary to be a well-rounded person, and the arts and sciences blend well for me.

Q: What advice do you have for aspiring biologists?

A: My main advice for you, as someone interested in becoming a biologist, is to keep in mind that this is just a job. You are a whole, complete, and important human being outside of your work. Science can be tough, and oftentimes things do not go as planned. This can make someone feel inadequate. I am here to tell you that you are enough, even when everything goes wrong in your research. You are so much more than your degree and your profession. Your job is most likely the least interesting thing about you. Keep this in mind when things get rough, and you will do great!

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

A: Curiosity and an almost insatiable urge to learn.