Time for another installation of the life and times of a research assistant.
Thanks for tuning in!! ~ Chloe
It's safe to say I've always been CURIOUS.

Me at age 7!

Here's a page from the book I was reading then about seals.

Whoa! How do they stay warm in that freezing water?

ACORNYGIRL  Apr 10
I had that book when I was a kid too!

SPRUCESPRINGSTEEN  Apr 10
Haha my parents totally get sick of all my questions!
Everything I saw got me asking questions, like "How do birds know which way is South?"
My Dad and I used to play "Name that tree" when we were in the park

My dad and I walking through the park the summer before 4th grade

Red Oak
Birch (easy)
Cottonwood
When I didn’t know one, he’d make me look it up
I started this blog in high school, sharing cool facts I'd learned about nature and science in my biology classes and elsewhere.

My highschool. (come on, plant a tree!)
In college, I felt like a sponge as I took more biology classes and began wondering where it could take me.

Maybe I'd be one of the people making the discoveries I was learning about in class?
I wasn't so sure about working in a lab, but I thought I'd give it a shot. So I found a part time research assistant position in a forest ecology lab.
It would totally change everything!
Jordan, the lead researcher, was wonderful. She helped me see mistakes as learning opportunities and encouraged me to go to a local research conference. I learned a ton!
Before that, I thought you needed a PhD to contribute to science in a meaningful way. Turns out that's not true. We even worked together to coauthor papers.

The role of diversification in community assembly of the oaks (Quercus L.) across the continental U.S.

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Abstract

Evolutionary and biogeographic history, including past environmental change and diversification processes, are likely to have influenced the expansion, migration, and extinction of populations, creating evolutionary legacy effects that influence regional species pools and the composition of communities. We consider the consequences of the diversification process in shaping trait evolution and assembly of oak-dominated communities throughout the continental United States (U.S.).

Methods

Within the U.S. oaks, we tested for phylogenetic and functional trait patterns at different spatial scales, taking advantage of a dataset phylogenomic analysis of American oaks and the U.S. Forest Service (USFS) Forest Inventory and Analysis (FIA).
And they've encouraged me to use my art as a tool for communicating science.
This is my lab station, my home away from home!

Essential coffee!

Wood samples; looking at tree age;

Manipulating genetic sequence data!

Also working on the blog!
But at the same time, I don't want to sit in front of a computer all day. I get to collect data for projects during fieldwork, which gets me into the local woods by myself.

Technically, I am sitting in front of a computer, but hey!

Watchout! It also breaks easily (so I had to learn how to fix it)!
Here's a quick doodle of a cool White Oak Tree I saw while I was out collecting data today...

Why is this oak so much bigger than the ones around it?

Why do oaks live so much longer than maples?
I also got to work as a research assistant at a lab in Arizona. Being in an unfamiliar region was eye-opening, and the field work took me to some amazing places!

One serious cactus. 30 ft tall!!!
I've been exposed to research in a bunch of cool fields.

Dendrochronology!

Conservation Genetics

Ecophysiology!

Systematics!
More than anything, I've loved being part of a team.

Simon: Been here forever and magically makes things work.

Joanna: Best coworker to complain to when my code doesn't work.
Working with different researchers has shown me that nobody sciences the same way.
And it's helped me shape the way I ask questions.

Why are these white pines here and not anywhere else?

Can I apply my understanding of where other tree species prefer to grow to help explain this?
I could keep talking about how awesome research assistant work is, but I should get back to some genetic sequencing data.

Send your comments and questions and I'll address them in my next post!