

Unlocking the Genome

Laura Shihadah, core technician at the NUSeq Core Facility



Laura Shihadah, core technician at the [NUSeq Core Facility](#), helps investigators unlock a wealth of information hidden in the genome. Over the last year, Shihadah has focused on single cell RNA sequencing, preparing and sequencing large libraries of valuable genetic data.

Q&A

Where are you originally from?

I lived near St. Paul, Minnesota until I was 8 years old, then spent the rest of my childhood in the small town of Washington, Illinois.

What is your educational background?

I studied animal science at the University of Illinois at Urbana-Champaign, receiving my Bachelor of Science in 2014. I'm currently enrolled in a graduate program in conservation science through Oregon State University's online program. I'm very interested in conservation genetics and I'm aiming to pursue a master's degree with this focus.

Please tell us about your professional background.

After undergrad, I worked at the Illinois Natural History Survey performing entomology research on the effectiveness of genetically modified corn against western corn rootworm beetles. After that I worked as a research assistant at the Carl R. Woese Institute for Genomic Biology. There, I helped with a project studying photosynthesis in tobacco plants.

After moving to Chicago in 2016, I was an intern and then a temporary full-time aquarist at the Shedd Aquarium. I worked in the Special Exhibits team, mostly with the amphibians and jellyfish. I stayed on as a volunteer with the Amazon team at the aquarium and started working for the NUSeq Core Facility at Northwestern in 2018.

Why do you enjoy working at Northwestern?

Working at Northwestern has been a great experience. I'm proud to support research at such a prestigious university and of the amazing discoveries made here. It's also a very diverse and accepting work environment and I feel comfortable being myself here.

How do you help scientists and research students at the medical school?

At NUSeq Core, we assist many different labs with a wide range of projects. Most of our technicians do a little bit of everything. I do quality control of libraries, a variety of library preparation and sequencing on several instruments. Over the past year, I have been helping many researchers with their single cell RNA sequencing projects, processing their samples using 10x Genomics technology, preparing their libraries and then sequencing. We help scientists obtain crucial data for grants and publication.

What is your favorite part of the job?

My favorite part of this job would have to be the variety. The amount that I have learned since beginning my work here is massive! At any given time, I'm working on multiple projects of various types. Sometimes it's quite challenging, but I thrive when my brain is multitasking and constantly learning so this is a great place for me.

Another aspect of this work that I find valuable is the exposure to varied academia and industry. I'm meeting researchers from across many different disciplines and connect with industry representatives both as a necessary part of my everyday work and at work-related conferences. With so much learned and so many connections made across various fields, this position has been a very valuable experience — one I feel is unique to working at a core lab.

What exciting projects are you working on?

Recently, our lab has been involved in some ongoing COVID-19 research, which has been really new and interesting. This past spring, we had to very quickly set up new areas to process infectious samples, which was pretty unexpected and challenging, but I'm excited to see the publications that will come out of the projects myself and my coworkers are helping out.

What do you like to do in your spare time?

When I'm not working, I like to read, draw, travel, play video games and write fiction. I play piano, clarinet and bass guitar in an indie folk band. I also spend a lot of time training in the aerial circus arts, mostly trapeze and aerial hoop.