

Avery August

Job title: Immunologist, Professor at Cornell University

Can you tell us a little bit about your job? What does an average day like for you?

I do research on how the immune system develops, and how it responds during infection, or in immune-mediated diseases such as asthma and allergies. As a researcher, I work with undergraduate and graduate students, as well as post-doctoral fellows in my laboratory, planning experiments, looking at results of experiments and interpreting data, coming up with new hypotheses on how the immune system works. It's quite amazing to see the results of an experiment and know that you are one of the first people to ever see this result, to discover new knowledge. In my capacity as a professor, I also teach immunology to undergraduate, graduate and veterinary students. Finally, as the chair of the department of Microbiology & Immunology in the College of Veterinary Medicine at Cornell, I spend some of my time doing some administrative work. An average day has me working on a grant proposal, interpreting data from experiments, meeting with students or with my colleagues to talk about research or about department activities. I try to walk as much as possible during my day, and drink cups of tea. While some days are challenging, they are never dull.



What sparked your interest in Science Technology Engineering Math (STEM)? How did you start on your path to a career in STEM and what did that path look like?

I think like most scientists, I grew up being fascinated by how the world works. As a child, I carried out experiments at home, like rediscovering the fact that plants grow towards the sun through very careful experiments in the bathroom. In high school my interests were encouraged by my biology and chemistry teachers, but I thought interest in biology meant becoming a physician, and did not know that one could make a living as a scientist. It was not until college at California State University at Los Angeles that I met some caring professors who mentored me and opened up the world of professional science for me. This led to me getting research experience in a chemistry lab with Prof. Phoebe Dea, and falling in love with research. She encouraged me to go to graduate school and I have never regretted my decision. I decided to do immunology after taking an undergraduate course in immunology that completely pulled me in.

Do you have any STEM heroes?

Growing up I had no heroes in STEM the way we think about it now, but certainly I admired my science teachers and professors. As an adult, I admire those who came before me and were able to do science under conditions where it was most difficult; those women and minority scientists (such as Rosalind Franklin and Charles Drew) who worked under conditions where they were felt not to be able to do science.