

Name: Sean Benler, PhD

Position: Computational Biologist

Affiliation: Aera Therapeutics

Location: Boston, MA, USA

Pronouns: He/Him

Please briefly describe your current role in your position

Identifying mobile genetic elements in prokaryotic and eukaryotic genomes

What is your terminal and/or current position in academia? Postdoc

How did you hear about your current position? Was it a career option that you were aware about during your educational process?

I heard about my current position in industry from my postdoc advisor and mentor. Industry was career option I was aware of throughout my educational process.

How did you end up working at your current affiliation?

My postdoc advisor was contacted by a colleague looking for computational biologists open to roles in industry. Since I was just wrapping up one project and starting another, I decided to "toss my hat in the ring" and hear what the role was all about. As it so happens, it sounded really interesting (to me): interrogate huge databases for novel mobile genetic elements. All of the other pieces kind of just fell into place after that.

How long have you been working at your current affiliation? >1 year

What type of position is your current job? *Remote*

Is your role more a managerial or individual contributor role? *Individual Contributor*

What are the defined roles of your position?

I perform basic research on mobile genetic elements using computational approaches, implement bioinformatic pipelines at-scale and manage scientific projects/relationships.

What are your day to day tasks that you perform in your position?

Some day-to-day tasks include curating genomic data, leveraging existing bioinformatic tools to produce analysis pipelines, read academic papers to stay current with the latest developments and sync up with others to get projects across the finish line.



What do you like best about your job?

The ability to work on interesting projects with brilliant, fun people is special.

What do you dislike about your job?

Working as part of an organization - large or small - introduces the need to communicate what you're working on and why to many different people. That can become tiring, at times, but comes with the territory.

If your job is outside of academia, what is similar and what is different about your current job and your terminal position in academia?

A scientist in academia or industry must convey the importance of their work to others, whether they be grant panelists, editors at a journal, or CEOs. Said another way, you have to sell your "product" in both academia and industry. The two environments differ in currency, papers/grants in the former and therapeutics/tools/services in the latter.

How did your microbial ecology education prepare you for your current position?

A formal training in microbial ecology equipped me with an abundance of tools to succeed. First and foremost is the ability to think critically about a system with many moving parts. More tangibly, I learned how to go from samples to publication. Of all the things involved in doing that, the part that clicked the most for me was bioinformatics, where I learned the technical skillset needed for my role.

What skills do you wish you learned during your educational process that would better prepare you for your current role (e.g. machine learning, management skills, etc.)?

That's a tough question, but given the fact it took me an extra year to complete my dissertation than most, a formal course in project management might have helped!

Do you have any recommendation and/or tips for early career microbial ecologists looking for jobs similar to yours?

Calibrating your message to your audience is critical. One mistake I see in job interviews (for bioinformatics) is when a candidate tailors their presentation for a general audience, in the process over-simplifying their technical accomplishments. They end up in purgatory, not really demonstrating prowess of anything. Go ahead and talk through the dirty details of your toolkit. You used Github to manage your code? Awesome, tell me about how you Forked it that one time. Yes, you may lose some people, but you will impress the people that actually make the hiring decision.