Name: Holly Ganz, PhD

Position: Chief Science Officer

Affiliation: AnimalBiome

Location: Oakland, CA, USA

Pronouns: She/Her

Please briefly describe your current role in your position

Provides scientific leadership through envisioning and developing new testing and supplement products that leverage insights from the microbiome to improve companion animal health.

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

PhD student

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

I was aware that there were scientists working in industry and that this could be a career path. However, I found that in my region so many of these companies were focused on developing products for human health. And I was more interested in nature, microbes, and animals. The microbiome field provided the opportunity because the study of communities and ecosystems was now clearly related to human and animal health. Starting my own company allowed me to more closely follow my dreams.

How did you end up working at your current affiliation?

AnimalBiome is a company that I co-founded in 2016. After serving as the CEO for three years, I shifted into the Chief Science Officer role in order to focus more on R&D. I was not aware of this as a career option when I was in school. During my postdoc, I knew of others who started companies but I didn't know where to begin. As a research scientist, I received a fellowship that helped me learn about entrepreneurship and got me started.

How long have you been working at your current affiliation?

7 years

What type of position is your current job?

Hybrid (Remote & In-Person)

Is your role more a managerial or individual contributor role?

Manager

What are the defined roles of your position?

My role is to provide vision and leadership our research and development (R&D) efforts, including our intellectual property strategy. In addition to following the state of the art in the application of microbiome science in human medicine, we are also guided by insights garnered from veterinarians and pet parents to identify research topics and future products with the potential to make a significant

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What are the defined roles of your position? (Answer continued from Page 1)

impact in companion animal health. Then I work with our team to prioritize and develop plans for our research and product development. In addition, I also support our Operations and Customer Care Teams. And I work with our CEO to assist efforts to raise funds to support the organization.

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

I meet weekly with each of the directors and managers on the R&D team, including the computational team, microbial discovery, molecular biology, product, data, and field trials. In these meetings, we discuss results and progress in our ongoing research efforts. I collaborate with the team to make study plans, develop metrics to allow us to chart progress, and estimate the time and cost for these projects. We analyze our data and publish articles, and we collaborate with academic partners on research studies. I meet regularly with the Customer Care team to discuss customer and employee feedback on existing products as well as to discuss new products that are in development. I support our operations and logistics, and work with human resources to help write job descriptions, recruit and interview candidates, develop career paths, and perform performance reviews.

What do you like best about your job?

We are already making an impact on companion animal health, and we have plans for doing even more that are already underway. People tell us every day how much we helped them and their pet. This is because imbalances in the gut microbiome of cats and dogs are very common, likely due to the overuse of antibiotics. We are able to identify these imbalances with our testing and in many cases we can restore balance by reintroducing key groups of bacteria using oral fecal transplant capsules. And we have made tremendous progress in developing new probiotics with key gut anaerobes that will start to become available next year, with more coming in the years to come.

What do you dislike about your job?

I find it hard to take time off, raising funds from investors is hard, and worrying about funding can be stressful.

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

It's similar in that I get to read and write papers on the gut microbiomes of animals. And I like to hire recent biology graduates, help to develop their laboratory skills ,and later encourage and support them when they apply to graduate school. It's different because I have been able to employ all these people and to feel like we are having a more direct impact in the world. And it's different because the problems I am now trying to solve are much more applied and I have become very interested in how you bring a new solution out into the world and have it succeed.

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

In addition to the technical skills needed to set up a molecular laboratory, sequencing facility, and microbiology laboratory, analyze microbiome data, and more, learning to write grant proposals, seek and obtain funding, carry out research in remote locations on a shoestring budget, and report on annual progress, all helped me to become a successful entrepreneur and CSO. I also found it very helpful that I had begun to develop my public speaking skills through teaching opportunities and lectures during graduate school.

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.)?

I wished that the university had better supported graduate students in developing an individualized career path. This is something that we are now doing for our employees. I am also learning a lot of management skills on the job. Some investment in improving the management skills of the faculty might help their students, at least by osmosis.

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

Talk to people. Ask for informational interviews. Take an internship, it can lead to a full time job. Think about what you want to accomplish and what drives you. Consider starting your own company if you have an idea for something you are passionate about.