Tracie Delgado, Graduate Student, Microbiology, University of Washington

Tracie: I am Tracie Delgado, I am starting my 5th year of graduate school, so I've completed 4 years of my PhD program which is microbiology and I hope to graduate in next summer, with my PhD.

Interviewer: awesome this is all very interesting, Feel like I could ask you about it for a while.
um we like to talk about collaboration in science, can you tell us how you work with your other people in your lab? to do your work?

Tracie: sure, um, in our lab, we have um, three graduate students and we have a post doc, we used to have a few more post docs, our PI, a couple of undergrads and so it definitely is very collaborative because they know techniques well that I might not know well, for example, just even looking at proteins, I might have just done a few experiments trying to detect and measure proteins, and there's another person who's like, oh I looked at this protein all the time, and so even if I did my paper, I actually collaborated with the post doc and said you know I'm trying to detect how this, how these cells are dying with this drug, how the virus infected cells are dying and she helped me with looking up and detecting the protein and showing me how to do the technique and we end up collaborating and being published together because of that, and so It's very much collaborative and of course there's always the undergrads are always very essential because they make the reagents that I'm gonna be using or help me with the experiments and my PI is always very important because you know we go over the experiment together, talk about the theory and how to trouble shoot experiments and things like that

Interviewer: Do you mentor undergraduate students? do they help you with your work?

Tracie: Yes I do, yes um, I had one undergraduate student before and um he was working partly with um, looking at some other aspects of metabolism and I actually just got one that actually just started this summer and he's gonna be starting with me to start working on metabolism next month.

Interviewer: um..how about last question, what challenges do you face in your studies?

Tracie: challenges are, especially for me, my biggest challenges are doing something that hasn't been done before, it's you know especially you know people have looked at cancer and looked at metabolism and studied it but I'm actually changing the system having to provide viral infection on top of that and then study these same changes can be really tricky so its been a little hard especially since nobody works on this, there's not like other collaborators that I know like oh we're on the same type of things on a different virus or something that I can be like hey how would you do this experiment so it was a lot of figuring out myself like how can I make it work for my system? And I know this is true for many many areas of science its like how do I get these experiments to work for the way I need them to work because no one has ever tried to do them like this before, and so that was always hard, its just trying to figure out like how do I do this, how do I optimize,

how do I get it to work, but once you get it to work, then its amazing cause its finally like ok, now I know how to make this work and next time I do this experiment, it's gonna be really quick instead of like months of how do I, how can I do this? you know, what kind of reagent do I need? or this is gonna mess up the virus if I put it this way, and I obviously need to virus to work cause I'm doing virus infections with my experiment and so it was a lot of troubleshooting so that can be you know really hard and frustrating and can keep your science from progressing but once you get it to work and you get it going, and you can get it to figure out and discover what you want to do.