**Welcome and Set Up**

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Welcome to your first class: Foundations of Programming for Data Science!

I’m Dr. Noelle Kosarek and I will be your instructor for this course alongside Dr. Monica Espinoza. You’re in luck, I’ve even taught this class several times before. I am a current Data Science Consultant at Dartmouth and I spend most of my days applying novel methods to single cell and spatial transcriptomics data sets. I’m occasionally set free to teach Master’s and Doctoral students. After I’ve frustrated myself enough behind my computer, I like to partake in any number of outdoor activities including running, hiking, biking, skiing, and horseback riding. My obese companion rabbit, Wilson, however, does not accompany me in these endeavors. He prefers to sleep in his napping chair. If anyone has a very cute dog, cat, fish, or armadillo, please provide photos of them to share with the class.

Before class begins in earnest, there are several checklist items you will need to complete:

1. Make sure you have a NetID: Dartmouth will issue a NetID upon enrollment. If you do not have a NetID, please reach out to me.

2. For my Windows folks, please download either [MobaXterm](https://mobaxterm.mobatek.net/) or [PuTTy](https://www.putty.org/). These are terminal environments for Windows machines. Mac folks, you will already have a terminal installed on your machine.

3. We will be working with [Cyberduck](https://cyberduck.io/), a cloud storage browser. This is a tool that makes it easy for us to move around an HPC system without scripting. Please download and install Cyberduck from the link provided.

4. We will be scripting in [R](https://www.r-project.org/) in this class. Please install R on your local machine. Much of our scripting will be occurring in [R Studio](https://posit.co/download/rstudio-desktop/). Please download and install R Studio from the link provided.

5. We will be pushing and pulling our projects to [GitHub](https://github.com/). Please make a GitHub account. In addition to command line Git, we will be working with [GitHub Desktop](https://desktop.github.com/download/) in this class. Please download and install GitHub Desktop from the link provided.

6. Finally, we will be generating pretty documents in this class for our final projects. Please create an [Overleaf](https://www.overleaf.com/) account.

If you have any trouble at all installing, downloading, or making accounts, please reach out to me as soon as you encounter an issue so we can address it.