

#### Welcome

- Who are we
- Why are we here
- How are we going to get there
- When is this going to be done
- Where do we go from here

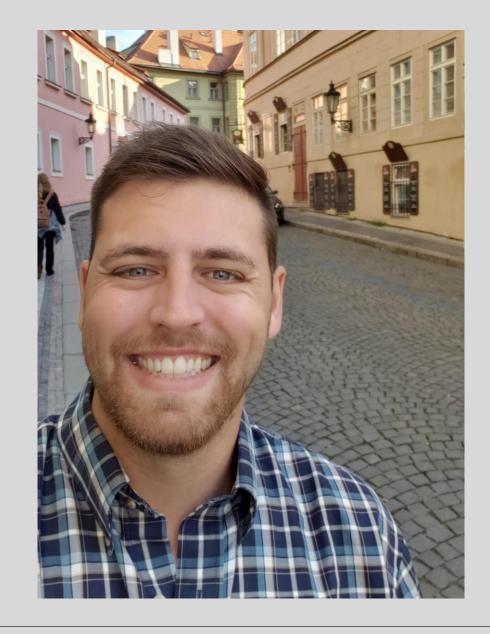
### WHO ARE WE

#### Ellis Hughes

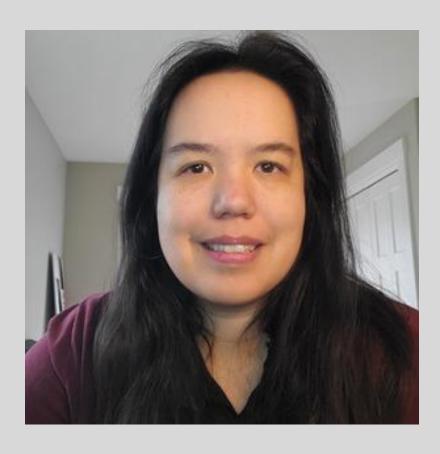
- Statistical Programmer
  - Statistical Genetics
  - Vaccine Research
- Community
  - Seattle UseR
  - Cascadia R
  - R/Pharma
  - TidyX Screencast



thebioengineer



#### Marie Vendettuoli



- Statistical Programmer
  - R package developer
  - Industry & gov regulatory experience
  - Recovering wet lab scientist





### WHY ARE WE HERE

#### Workshop Goals

- 1. An understanding of basic package development
  - Structure
  - Function writing
  - Documentation
- 2. How to Validate an R Package
  - what is validation
  - the R Package validation Framework
  - {valtools} R package

#### Workshop Code of Conduct

Review the <u>Cascadia R Conference Code of Conduct</u>

https://cascadiarconf.com/policies/

Issues can be brought to our attention by

- 1. contacting an organizer
- 2. email <u>cascadiarcon@gmail.com</u>

Do not record this workshop to respect the privacy of others.

We do this to create an open, collaborative space where people can feel comfortable to learn and grow.

## HOW ARE WE GOING TO GET THERE

#### Workshop Materials

#### bit.ly/R\_Validation\_Tutorial

Slides folder contains presentation slides

Materials folder contains exercises 2 types of exercises: Spartan or Verbose

Workshop slides and exercises are online now and will be available after the conference too.

#### Slack Chat

#### bit.ly/cascadia\_validation\_slack

- Polls to understand where the everyone is on the examples
- Pose questions for the instructors to answer
  - Alternatively, directly message one of the instructors
- Pose questions to the rest of the class
- Zoom Chat has been disabled

## WHEN ARE WE GETTING THERE

#### Workshop Schedule

Time	Section	Content
10:00-10:10	Welcome and Orientation	
		Package Elements & Structure
10:10-11:20	Package Elements & Structure	Package Documentation
		Deploying R Packages
11:20 - 11:30	Break	
11:30 - 12:00	Concepts of R Package Validation	Introduction to the R Package Validation Framework
12:00 - 1:30	Lunch	
		Intro to {valtools}
130 - 2:30	Introduction to {valtools}	Structure of Test Cases and Code
		Elements of a Validation Report
2:30- 2:40	Break	
2:40-3:10		Re-Validating a Package
3:10 -3:30	Closeout	

# WHERE DO WE GO FROM HERE

What if this is too much?!

What if this is too basic?!

## What if I find an issue in the documentation?

What if I get stuck?

What if we are in the middle of a pandemic, there are killer bees, and ...!?

### READY? LETS GO!

Clone https://github.com/FredHutch/R\_Package\_Validation\_Tutorial