Lesson 7: Basic customization

# Overview

This week we will learn how to make new kinds of graphs. This means learning some new geoms, the functions that make particular kinds of plots. But we will also get a better sense of what ggplot is doing when it draws plots, and learn more about how to write code that prepares our data to be plotted.

In this lesson we will discuss some useful features of ggplot and also talk about ways that these features can cause problems. They have to do with how to tell ggplot more about the internal structure of your data (*grouping*), how to break up your data into pieces for a plot (*faceting*), and how to get ggplot to perform some calculations on or summarize your data before producing the plot (*transforming*).

As I have mentioned both in class and in the labs, code almost never works properly the first time you write it. This is the main reason why it is important to type out the lab exercises and follow along manually. This gives you a much better sense of how the syntax of the language works.

Remember there is quiz the week. It will cover Lessons 4 – 6.

# Required Readings for Lesson 7

* Read: Healy, K. (2018). Chapter 4 - Show the Right Numbers. (pp. 73-82).
* Read: Healy, K. (2018). Chapter 8 - Refine Your Plots. (pp. 199-230).
* Read: Healy, K. (2018). Chapter 5 - Graph Tables, Add Labels, Make Notes. (pp. 115-121; 125-131).
* Read: Wilke, C. (2019). Chapter 22 - Titles, captions, and tables. (pp. 267-276).
* Watch: Wang, H. (2020). ggplot2 Theme Elements Demonstration. Retrieved November 8 from https://henrywang.nl/ggplot2-theme-elements-demonstration/

# Lesson 7 Lab

* Assigned: L5: Basic customization

# Week 7 Deliverables and Tasks

* Due: Lab L4 due in Blackboard
* Quiz 2 (Lesson 4 – Lesson 6)