# Welcome to the Tidyverse

#### What is the tidyverse?



"The tidyverse is an opinionated collection of R packages designed for data science. All packages share an underlying design philosophy, grammar, and data structures."

## **Data Wrangling**

This series of tidyverse packages is exceptionally good for data wrangling.

- Cleaning messy data
- Data preparation
- Getting ready for analyses
- In this ecosystem, non-messy data is referred to as "tidy" data

## Lots and lots of packages

This is an ecosystem that contains A LOT of packages. We will specifically work with 3 of them:

- ggplot2
- dplyr
- tidyr

I personally find thinking of these packages as separate things really confusing. It's a series of packages, and (to me), it makes more sense to think of it as a hollistic ecosystem. Rather than separately installing/loading each package...

## Getting the tidyverse

...I prefer to install and load tidyverse packages as a single unit.

To install:

```
install.packages("tidyverse")
```

To load:

```
library(tidyverse)
```

Double check that you already have tidyverse installed. You should already have it from the 6: Packages Practice Set.

If you do not have this, go ahead and install it now.

#### Loading tidyverse

When you load the tidyverse package, it will autmatically load several packages for you. Rather than remembering which function came from which package, I personally only load the overall tidyverse package.

However, you can install/load each package separately. It just takes more work.

#### This section

There are 2 sections (in addition to this one) spanning the tidyverse.

- 1. The first will introduce you to the tidyverse syntax, as well as several functions from the dplyr package.
- 2. The second will introduce you to a few functions from the tidyr package.
- 3. We have already been introduced to ggplot2, but will cover it in much more depth when we get to the Data Visualization section.

You DO NOT need to remember which functions come from which package. I'm only breaking it up this way to keep things short and sweet.