

# STAT 545A Assignment 03: dplyr/ggplot2 Part II

```
library(tidyverse)
library(ggplot2)
library(gapminder)
knitr::opts_chunk$set(echo = TRUE)
```

## Instructions

Pick three of the six tasks below, and produce:

- a tibble, using dplyr as your data manipulation tool;
- an accompanying plot of data from the tibble, using ggplot2 as your visualization tool; and
- some dialogue about what your tables/figures show (doesn't have to be much).

## Task Option 1

Report the absolute and/or relative abundance of countries with low life expectancy over time by continent: Compute some measure of worldwide life expectancy – you decide – a mean or median or some other quantile or perhaps your current age. Then determine how many countries on each continent have a life expectancy less than this benchmark, for each year.

## Task Option 2

Get the maximum and minimum of GDP per capita for all continents.

## Task Option 3

Look at the spread of GDP per capita within the continents.

## Task Option 4

Compute a trimmed mean of life expectancy for different years. Or a weighted mean, weighting by population. Just try something other than the plain vanilla mean.

## Task Option 5

How is life expectancy changing over time on different continents?

## Task Option 6

Find countries with interesting stories. Open-ended and, therefore, hard. Promising but unsuccessful attempts are encouraged. This will generate interesting questions to follow up on in class.