## ICA 3.2 multivariate plots

Attach the tidyverse and medicaldata packages here:

```
library(tidyverse)
library(medicaldata)
```

## Task 1 - Scatter plot

- 1. Make a scatter plot comparing polyps baseline (x) and number3m (y).
- 2. Add a smoother using <code>geom\_smooth()</code>. Note that this layer will need aesthetics. You can store the aesthetics in the parent plot object rather than each layer if you prefer.
- 3. Let's add color to show our two treatment groups. Add a color argument to aes() with treatment (our variable of interest) as the value.
- # P # your code here

```
# 1
pp <- ggplot(polyps)
pp + geom_point(aes(x=baseline, y=number3m))

# 2
pp + geom_point(aes(x=baseline, y=number3m)) +
    geom_smooth(aes(x=baseline, y=number3m))

# 3
ggplot(polyps, aes(x=baseline, y=number3m, color=treatment)) +
    geom_point() +
    geom_smooth()</pre>
```

## Task 2 - Bar chart

- 1. Compare the number of subjects in each polyps treatment group using a bar chart.
- 2. Change the chart's orientation using the x and y aesthetic mappings.
- # P
  # your code here

```
# 1
ggplot(polyps) + geom_bar(aes(x=treatment))
```

```
# 2
```

ggplot(polyps) + geom\_bar(aes(y=treatment))