My Reproducible Manuscript

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Meet Quarto

Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see https://quarto.org.

Meet the penguins

The `penguins` data from the palmerpenguins package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica. "Palmerpenguins R Data Package • Palmerpenguins" (n.d.)

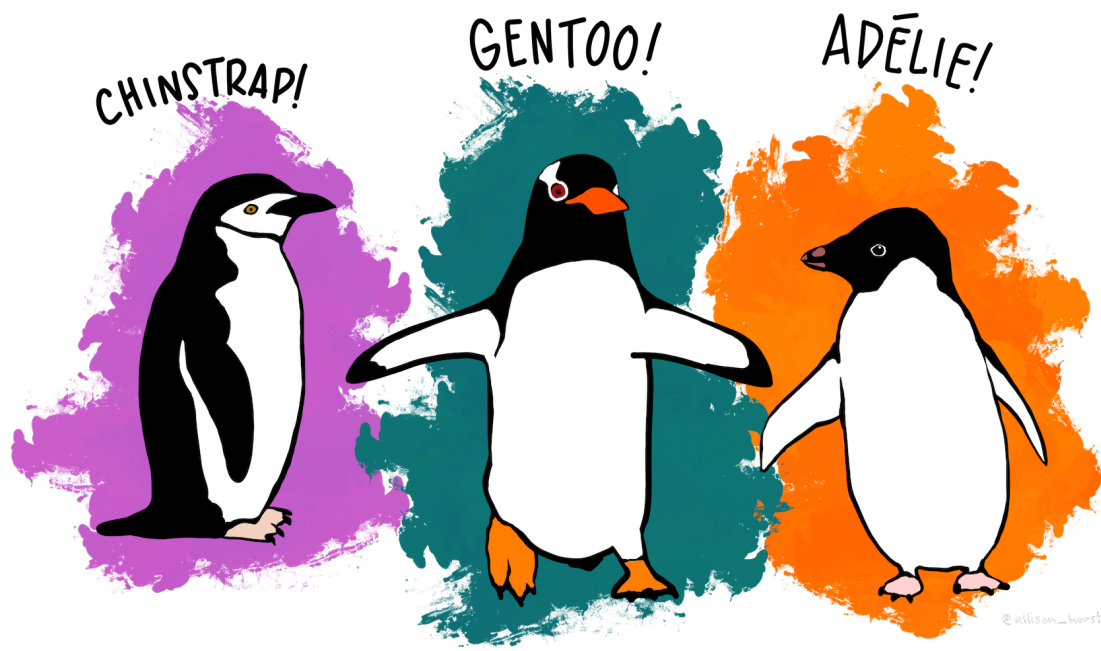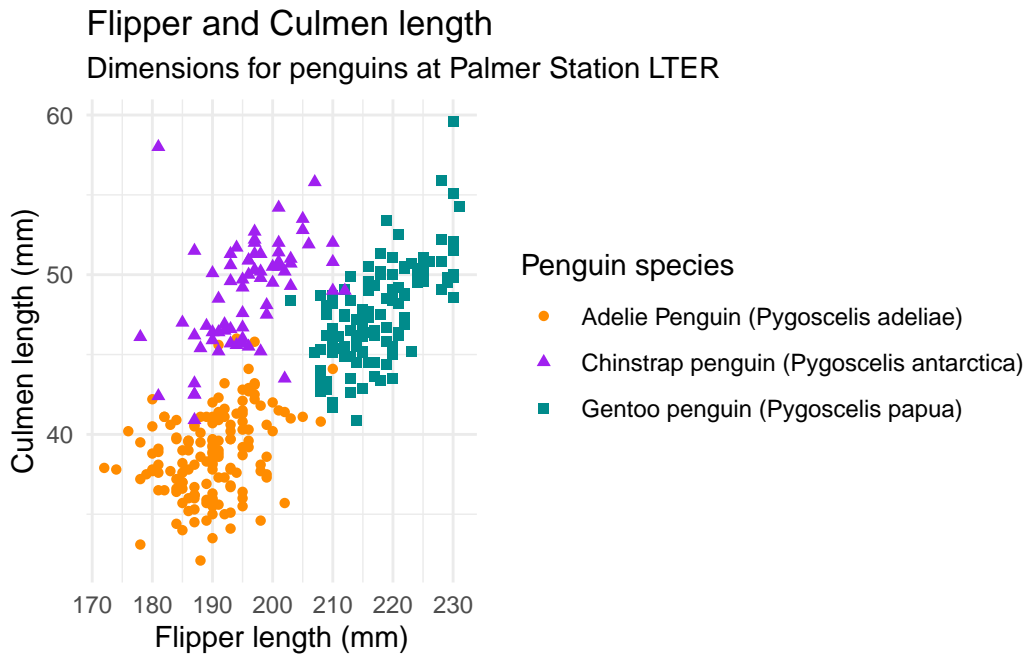If you want to know more about penguins, check out the this article: Subramanian et al. (2013)

Figure 1: penguins

Results

```
# Read data
penguins <- read.csv("data/data.csv")
```

```
# Plot penguins
ggplot(penguins,
       aes(x = `Flipper.Length..mm.`, y = `Culmen.Length..mm.`)) +
       geom_point(aes(color = Species, shape = Species)) +
       scale_color_manual(values = c("darkorange","purple","cyan4")) +
       labs(
               title = "Flipper and Culmen length",
               subtitle = "Dimensions for penguins at Palmer Station LTER",
               x = "Flipper length (mm)", y = "Culmen length (mm)",
               color = "Penguin species", shape = "Penguin species"
       ) +
       theme_minimal()
```

```
Warning: Removed 2 rows containing missing values or values outside the scale range
(`geom_point()`).
```

Flipper and Culmen length
Dimensions for penguins at Palmer Station LTER

There are more than 50 in total, and 124 Gentoo penguins and 68 Chinstrap penguins.

```
do_addition <- function(number1, number2){

        # Check that arguments provided are numberic
        if(class(number1) != "numeric" | class(number2) != "numeric"){
                print("Error: one or more of your inputs are not numeric")

        # Perform simple addition and return the result
        } else{
                result <- number1 + number2
                return(result)
        }
}
```

```
do_addition(1,1)
```

```
[1] 2
```

"Palmerpenguins R Data Package ● Palmerpenguins." n.d. Accessed November 18, 2025.

Subramanian, Sankar, Gabrielle Beans-Picón, Siva K. Swaminathan, Craig D. Millar, and David M. Lambert. 2013. "Evidence for a Recent Origin of Penguins." *Biology Letters* 9 (6): 20130748. https://doi.org/10.1098/rsbl.2013.0748.