

# Reproducible-Mini-Project

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## #Introduction

This is my manuscript. I am writing text in **Markdown** format. Markdown makes formatting easy:

- *italics* with ‘...’
- **Bold” ” with ‘...\*\*\*’**
- Lists with ‘-’ or ‘1’

I will be using the palmerpenguins package for my final reproducible mini-project. The palmerpenguins dataset is an openly available resource designed for data exploration and visualization, and it is frequently used in ecology education (Horst et al. 2020). Previous ecological surveys at Palmer Station have documented penguin species distributions in the region (Gorman et al. 2014). Morphological differences among penguins also carry important ecological significance (LTER and Gorman 2020). In this project, I will investigate whether penguin bill length differs by sex across species (Adelie, Chinstrap, and Gentoo). I hypothesize that bill length will differ significantly between males and females within species, and that the magnitude of this difference may vary among species.

## References

- Gorman, K. B., T. D. Williams, and W. R. Fraser. 2014. Ecological Sexual Dimorphism and Environmental Variability within a Community of Antarctic Penguins (Genus *Pygoscelis*). PLoS ONE 9:e90081.
- Horst, A. M., A. P. Hill, and K. B. Gorman. 2020, July. Allisonhorst/palmerpenguins: V0.1.0. Zenodo.
- LTER, P. S. A., and K. Gorman. 2020. Structural size measurements and isotopic signatures of foraging among adult male and female Chinstrap penguin (*Pygoscelis antarctica*) nesting along the Palmer Archipelago near Palmer Station, 2007-2009. Environmental Data Initiative.