**Female reproduction: Sexual swellings, hormones, and mating in wild baboons**

HYPOTHESES AND PREDICTIONS

*Hypothesis 1*: female sexual swellings are a cue of fertility that males can use to prioritize mating with fertile females

*Predictions*:



*Hypothesis 2*: high-ranking males are able to monopolize fertile females better than low-ranking males

*Prediction*:



SAMPLE SIZES

1. What is the total number of fecal samples in the dataset?
2. What is the total number of unique females in the dataset?

DATA EXPLORATION

1. What is female #1’s mean estrogen concentration?

DATA VISUALIZATION: PART ONE

1. On what cycle days do female sexual skin swelling sizes peak?
2. On what cycle days do female estrogen concentrations peak?
3. If females ovulate when estrogen concentrations are highest, on what cycle days do you expect females to be ovulating?
4. Based on your first two figures, do you think that female sexual skin swelling size is an honest cue of female fertility?

DATA VISUALIZATION: PART TWO

1. On what range of cycle days do alpha males mate with females?
2. On what range of cycle days do non-alpha males mate with females?
3. Based on your 3rd and 4th figures, which males get to mate with females when they’re more fertile?