Project 0 Overview:

* 2 control arms
* missing data
* pre-post design
* 2 outcomes

Project 0 Notes, Discussing in Class:

* just need to summarize missing data and discuss it – but do not need to address it statistically
* 2 outcomes – 2 separate models or multivariate
* are there outliers? check for them?
* use difference between pre-post as the outcome?
* don’t need to do multivariate analysis
* it is a randomized trial
  + Technically there should not be confounders
* are other demographic covariates useful in the model? how to use other variables given to strengthen the analysis
* want to understand effects for each treatment level
* control and placebo – do not group them until you study them more
  + placebo: medicine free gel to run on gums
  + control: no gel, normal dental hygiene routine
* homoscedasticity issue for different numbers of sites that are averaged
* the sample size is pretty small for there being 5 groups
* no a priori hypotheses of what group expect to do best

Think about:

1. What are you going to do with baseline?
2. What is your outcome? – difference or post
3. What are you doing with other covariates?
4. Do a model for each outcome – attachment and pocket depth

Our collaborators/support:

1. Other classmates in 6623 this semester
2. Nichole & Camille
3. Sarah Ryan & Matt Mulvahill (technical collaborators – coding & GitHub help)

Components required for a complete response:

1. Estimate
2. Confidence interval (credible interval for Bayesian), standard error
3. P-value (or DIC for Bayesian)
4. Decision

If in group 2: the worksheets are Bayesian