Multiple Regression Assignment

YOUR NAME HERE

# Multiple Linear Regression

## 1. Identify variables

* Quantitative outcome:
* Quantitative predictor:
* Binary confounder:

## 2. State the research Hypothesis

* Null hypothesis:
* Alternative hypothesis:
* Confounding hypothesis:

## 3. Fit the simple model

## 4. Fit the multivariable model

## 5. Interpret the regression coefficients.

## 6. Conclusion

# Logistic Regression

## 1. Identify variables

* Binary outcome:
* Binary predictor:
* Binary confounder:

## 2. State hypotheses

* Null hypothesis:
* Alternative hypothesis:
* Confounding hypothesis:

## 3. Fit the simple model

## 4. Fit the multivariable model

## 5. Interpret the Odds Ratio estimates

## 6. Conclusion

# Log Transformed Response

## 1. Identify variables

## 2. State hypothesis

## 4. Fit the multivariable model

## 5. Interpret the regression coefficients.

## 6. Conclusion

# Categorical predictors

## 1. Identify variables and their data type

* Outcome:
* Predictor:
* Predictor:

## 2. Write the mathematical model.

Define what each is, and write the mathematical model. State what group is the reference group.

* Let be
* Let when
* let when

The reference group

The mathematical model would look like:

## 3. State hypothesis in words and symbols

* Null:
* Alternative:

at least one is not 0

## 3. Visualize this relationship

## 4. Fit the multivariable model with both predictors.

## 5. Interpret the regression coefficients.

* :
* :
* :

## 6. Conclusion