Overview

You will choose research questions of your interest using **stressEcho** data. You will plan, execute, and present a data analysis on research questions of your own choosing. You should refer to the reference paper for modeling.

Due dates:

- Analysis plan will be submitted as HW 9 (Due Monday, 4/22/19)
- Analysis plan should include
  - research questions
  - study design
  - data description
  - statistical methods
  - provide tables and figures with legend without content
- Final reports due on the last day of class

Data Source

- **Vanderbilt link :** http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/stressEcho.html
- **NCBI (National Center for Biotechnology Information) link:** https://www.ncbi.nlm.nih.gov/pubmed/10080472

Project grading rubric

		Total	
Category	Description	Possible	Earned
Introduction and Overview of Research	Research questions, variables and hypothesis explained exceptional well and with relevance	5	
Exploratory data analysis	Thorough analysis of each research variable of interest with appropriate summary statistics, graphs and discussion	5	
Data preprocessing	Code predictors appropriately	5	
Model specification	Clearly state how is the final model determined	5	
Model estimation	Clearly state what techniques used to estimate the parameters	5	
Model assessment	Clearly discuss different measures of model performance including model validation, calibration, and discrimination	5	
Model presentation	Clearly summarize estimates of model parameters (β coefficients) in a table or a graph (such as nomogram)	5	
Conclusion	Conclusion includes a clear answer to the statistical question that is consistent with the data analysis	5	
Organization & Readability	Report is well organized and well written	5	
Technology	R code is well organized with proper comments	5	
		50	