

**LAB 6: Troponin Data Analysis**

In this lab we will analyze the troponin example from lecture. The troponin dataset contains the following variables:

Subjid – subject ID number.

Stday – the day of the study.

Tropovr1 – whether or not the troponin levels were over 1 (1=yes, 0=no).

Ejecfrac – the ejection fraction of the heart (a measure of heart performance, with 100% being perfect and lower values indicating a poor performing heart).

Bloodpr – systolic blood pressure.

Hrtfail – whether the patient has a history of heart failure (1=yes, 0=no).

Hrtrate – heart rate.

Age – Age of the patient.

Sex – Sex of the patient (1=male, 0=female).

Hypertn – whether the patient has a history of high blood pressure (1=yes, 0=no).

Smoke - whether the patient has a history of smoking (1=yes, 0=no).

Diabetes - whether the patient is diabetic (1=yes, 0=no).

Highchol - whether the patient has high cholesterol (1=yes, 0=no).

Remember that the outcome is tropovr1 and that the primary predictor of interest is the Hunt-Hess score. You need to do the following things:

1. Decide on an analysis method.
2. Decide on which variables you need to include in the model. Be careful when handling the continuous variables to check the form of the relationship. Is there evidence of interactions?
3. Provide an interpretation of the relationship of Hunt-Hess score adjusting for the other variables in the model.

Warning: this is just to get you started - it is not a final model.

```
proc genmod data=work.troponin;
  class stday hunthess subjid;
  model tropovr1= sex eiecfrac hypertn bloodpr bloodpr*bloodpr
    hunthess/d=bin type3;
  repeated subject=subjid/type=exch;
run;
```