**Finding Useable Data within TRP Study M-File Strategy**

Aim: The purpose of this code is to determine what blood flow data is useable (i.e. within the bounds of the min and max blood flow measured within the first minute of the test). The program will produce a 1x8 matrix (or the length of the test) where useable data is assigned a 1 and unusable data a 0. Data that is within 10% of the min or max value will be assigned a 0.5.

1. Enter subject specific information, possibly as a read only textfile.
2. Upload blood flow data: use xlsread().
3. Upload setpoint data to find start and end time (unique function named: *startAndEndTimes.m* ).
4. Match the initial and final time with the blood flow time data and determine correct indices for the start and end of the blood flow (unique function named: ).
5. Calculate min, mean, and max of the initial blood flow measured within the first minute of testing.
6. Determine the mean initial blood flow of each test.
7. Determine which test is useable (falls within the min and max bounds) or possibly useable (falls within 10% of the min and max bounds).
8. Create a plot which displays in darker color the useable blood flow data for each test.
9. Create a matrix with 0 for not useable, 0.5 for possibly useable, and 1 for useable data next to the trial number.