

# Week 1 In-Lab

BIOE 320 Systems Physiology Laboratory

<b>Student Name:</b>	<b>Total Grade: /15</b>
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## Data Viewing Tools

2. Select the different markers (found above the marker bar in blue diamonds) and note from the markers what experiments were performed with this data set.

(a)

(b)

(c)

## Channel Measurement Box

2. Using the first cycle (first beat), answer the following questions:

(a) What is your measured value for delta T?

(b) What does delta T represent?

(c) What is your measured value for BPM?

(d) What does BPM represent?

(e) What are the "max" and "min" for the waveform on ECG?

- (f) What are the "max" and "min" for the waveform on Pulse?
- (g) What do the "max" and "min" values represent?
- (h) Try out the options for "area", "P-P", "integral", "stdev", and two additional ones (see Table ?? at the end of this protocol for available options and explanations). Describe a physiological example when each of these measurements may be useful.

## Markers

1. How do you insert a marker while data are being recorded?
2. How do you insert text for a marker?
3. How do you insert an event marker after data have been recorded? Do this as practice.

## Practice

1. Maximum values of:
  - (a) First wave?
  - (b) Second wave?
  - (c) Third wave?
  - (d) Fourth wave?
2. Frequency of single waveform?
3. Minimum and maximum amplitudes found between the first and fourth peak?
4. Interval of time between:
  - (a) First and fourth peak?
  - (b) Third and fourth peak?
5. Briefly describe the function of the following tools:
  - (a) Selection tool
  - (b) I-Beam tool
  - (c) Zoom tool
6. You have lost track of where you are in the data due to zooming, scrolling, etc. List 2 sequential steps you can take to make sure the complete data file is on the screen.