**Group Progress Report**

**Group**: Drew Levy, Sam Fox, Harvey Shi

**Project**: Leg Load Monitor

**Date:** Oct. 30 – Nov. 3

**Goals for the past week** (copied from last progress report)

1. Get client feedback on Moon shoe vs. insole designs.
2. Finish preparing poster presentations.
3. With connected Wii Fit board, test Velostat sensor for weight range, accuracy and consistency.
4. Buy more pressure sensors.
5. Obtain standard weights for testing.

**For each goal above, comment on your progress**:

1. We did not get feedback from our client about these design ideas.
2. We finished and delivered our poster presentation for our prototype.
3. We were able to connect to the Wii Fit Balance board and compare our Velostat measurements to the Wii Fit board’s weight calculation (used to determine how accurate our measurements were; the board was shown to accurately calculate weight, so we used it to measure the true weight and compared it with our calculated weight from the Velostat membrane).
4. We did not buy more pressure sensors this week.
5. We did not obtain standard weights for testing. We considered going to the weight room in the gym in the future since they have heavy, standard weights.

**Goals for this week**:

Our focus this week is to make progress on the finger tremor project. For this project, our goals are:

1. Obtain electrical components from Matt Brown, including light-sensitive components like a photoresistor or photodiode
2. Test electrical components, see which ones work best
3. Layout PCB in Altium
4. CAD electronics enclosure and 3D print
5. Setup meeting with Matt Brown to etch PCB

With regards to our leg loading monitor, our goals are:

1. Conduct more trials of Velostat to determine if signal drift and repeatability will be issues going forwards
2. Develop design specs for the device

**Are there any difficulties with which you need assistance?**

We may need assistance calibrating our device and accounting for baseline drift in the signal.

**Other comments:**

We met with Dr. Malkin this week. He was concerned about the reliability of the Velostat membrane. He wanted to see many more trials of data because he was concerned about drift in the signal.