**Group Progress Report**

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

**Project**: Leg Load Monitor

**Date:** Nov. 6 – Nov. 10

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

With a focus on the finger tremor project:

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

For the leg load monitor:

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

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

Finger tremor:

1. We obtained all the parts from Matt.
2. We tested the photoresistor, and have decided to use that. We only got the photodiode in case we were unable to use the resistor, but decided to avoid it due to more circuit complexity.
3. We finished the PCB layout in Altium.
4. The enclosure is mostly done, but just needs to the PCB layout to be integrated into the design.
5. We are meeting this Monday (11/13) to work with Matt to etch the PCB.

Leg loading project:

1. We were unable to work on this yet since we have been focusing on the finger project.
2. We put together a document with design specs and are going to be passing it by Dr. Malkin for review this week.

**Goals for this week**:

Finger tremor goals:

1. Finish PCB etching and solder parts.
2. Test completed circuit, not inside enclosure.
3. 3D print enclosure and make sure it fits.
4. Test final device (with enclosure and everything).

Leg loading monitor goals:

1. Get Wiiboard testing platform working and conduct more trials with the Velostat. We just need a lot more data.
2. Turn in our design specs.

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

Hopefully, the finger tremor PCB etching and layout should go smoothly, but it could be difficult. Plus, we have to make sure everything fits together well.

**Other comments:**

We should be able to focus more on the actual design project once the finger tremor one is complete.