**Group Progress Report**

**Group**: Jocelyn Corey, Gauri Prasad, Tim Hoer

**Project**: Needle Localizer

**Date: 10/28/17**

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

1. Begin developing a project illustration and prepare for the first oral prototype demo
2. Narrow down design ideas and start combining ideas to develop a robust solution
3. Work on finger tremor counter project for lab

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

1. After preparing a rough sketch in class, a more formal illustration was completed detailing all of the features of our proposed laparoscopic needle localizer. In advance of obtaining our poster board, we have started outline the other content we plan to display.
2. We used our Pugh matrices to identify our best designs and ultimately chose our intraoperative metal detector design as our leading design for further development. Because many of our proposed solutions are so different, we have not discovered many ways to combine ideas but we will keep trying as we establish more of the specifics of our design.
3. We have completed printing our enclosure and have begun work constructing our proposed circuit on a breadboard. However, the lab did not have photoresistors stocked so we needed to request them.

**Goals for this week**:

1. Complete poster and plan prototype demo for poster presentation on Thursday.
2. Continue to develop finger tremor project by completing our breadboard circuit and beginning to write Arduino code.
3. Begin to construct metal detector circuit to test feasibility of our design. This is dependent on our parts arriving, which will not be ordered until Wednesday.
4. Begin Design Specifications assignment.

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

To test the feasibility of our proposed design, we will need to work with a new microcontroller and foreign ISCP connector. This will also require using a new programmer and environment to drive the controller. Currently, we are hoping to muddle through with the help of Matt Brown.

**Other comments:**

N/A