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By Derek Pridemore

After meeting with Dr. Hollis, our team brainstormed the three possible variations for mounting the motor. After some discussion, we decided that the worm gear will allow us to control the power and speed of actuation, and mounting it on the upper arm will be the most ergonomic and minimally invasive location for the motor.

We talked about the electrical side of the project, and decided to change our microcontroller from the Arduino Uno R3 to the Arduino Nano Pro as it is smaller, requires less power to operate, and still has the necessary input/output ports to operate this system.

Ryan will work on a fitness graph with respect to motor choice and gear reduction of the worm gear. This simulation will also verify our torque calculations.