

## Week 7 Meeting Notes

- A single leg with body prototype was constructed out of wood. Muscles were attached to the bottom 2 joints. Testing was done with two muscles on the middle joint and one muscle on the ankle joint with all three muscles firing at the same time successfully.
- Prototype revealed
  - the need for the muscles to be in tension before firing
  - the use of stops will be important in setting the tiger up for the ready to jump position
  - no problems encountered with parallel muscles; they provided a larger force and fired at the same time
- Testing of Arduino was tested and successfully used to actuate solenoids.
- Significant progress was made on the Matlab simulation. Free body diagrams and equations of motion were finalized.
- Questions were raised about needing solenoids with larger output holes and using larger tubes. The larger the air ways, the quicker the muscles will fill, providing more force.