Week 9 Report

Work Completed

This week I focused mainly on the programming for the wireless portion of the device. I have begun to connect the CB220 and the LCD Remote to the ACODE 300. I also have researched possible ideas for an artificial urethra for the test setup.

Programming

I have been working on coding for the wireless portion of the device. I created a serial cable that I can connect to the CB220 and connect it to the computer for programming. I also separated all the circuits onto two different proto boards so we can completely divide the two systems and test them from different locations and debug the systems with ease.

Figure 1 – ACODE 300
Artificial Sphincter

Have been in contact with Alan and am still waiting to receive the fluid balloons for the system. Once the balloons are received we can continue to completely build the entire system.

Figure 2 – AMS 800

Artificial Urethra

This week I ordered some latex tubing that will be tested as a artificial urethra. We were experiencing issues with the artificial sphincter being able to close off the catheter completely, so we are going to test a few methods for the test setup. The latex tubing should be much easier to close; it has a thinner wall thickness than the catheter and is made out of latex which is much softer than the catheter. If this does not work I am going to try inserting a 1 inch cut out of a latex glove to the catheter to create an area that the sphincter can contract.

Future Work

This coming week I will continue working with the wireless system. I will continue to troubleshoot the issues and make sure that the ACODE’s are working properly. There was an issue with supplying too much voltage to the ACODE’s so their functionality needs to be verified. Also we are expecting to receive the fluid balloons and some latex tubing this week, once we receive these we will build the entire system and be able to test the device as a whole.

Hours Worked

This week I worked 11.5 hours. Most time was spent programming and researching the artificial urethra.