

## **Progress Report 9**

**Project Title:** Auto-Suture Device  
**Team Members:** Jennifer Wager, Joe Cabelka, Therese Rollmann, and Mark Yarmarkovich  
**Client:** Dr. Marcus, UW Hospital  
**Advisor:** Prof. Tyler  
**Date:** 3/23/07-3/30/07

**Problem Statement:** Our goal is to develop a device that will apply an intra-nasal purse-string suture in a single step for use in nasal surgery.

**Restatement of Team Goals:** Research electromagnets and batteries, develop magnet design.

### **Individual Goals:**

Jenny Wager:

1. Research needles and materials

Joe Cabelka:

1. Research materials

Therese Rollmann:

1. Research materials

Mark Yarmarkovich:

1. Research materials

### **Summary of Accomplishments:**

1. Researched some materials to be used in the coil and different gauge wires suitable for different batteries, and the associated current output of the batteries

### **Difficulties:**

This week our group was busy with schoolwork and exams so we were unable to dedicate very much time to the project. Also, the wire we purchased last week to be used in the coil of the electromagnet turned out to be non-insulated wire so it cannot be used in the coil.

### **Summary of Team Goals:**

1. Looked into materials for wire and batteries.
2. Design electromagnet and switch device.
3. Integrate closing mechanism with magnetic switch.

### **Project Schedule:**

1/29/07-2/7/07	Meet with client, research
2/7/07 - 2/26/07	Research, brainstorm, and develop PDS
2/26/07 – 3/09/07	Prepare oral presentation and Preliminary Design Report
3/09/07	Mid-semester oral presentation
3/16/07	Preliminary Design Report due

3/16/07 – 3/23/07	Decide on final design
3/23/07 – 4/23/07	Work on design and build prototype
4/23/07 – 5/03/07	Prepare final oral presentation and final report
5/04/07	Final oral presentation
5/04/07 – 5/08/07	Prepare final report, PDS, and design drawings
5/09/07	Final report due

**Activities:**

Team:

½ hour advisor meeting

	<b>Activities</b>	<b>Description</b>
<b>Jenny Wager</b>	-0.5 hr updating notebook -1 hr researching needles and materials	This week I researched materials that could be used to determine the amount of force required to pull the needle through the septum. Materials like silicon seem to be a good approximation of the septum.
<b>Joe Cabelka</b>	-30 min updating notebook and contacting Dr. Marcus	
<b>Therese Rollman</b>	-30 min reviewing information discussed last week	
<b>Mark Yarmarkovich</b>	- 30 min looking into materials	

<b>Total Team Hours (x 4 people) for Week</b>	<b>2 hours</b>
<b>Total Individual Hours for Week</b>	<b>3 hours</b>
<b>Cumulative Team Hours to Date</b>	<b>hours</b>