

## **Testing System for Pressure Sensitive Cardiovascular Catheter**

**Client:** Colette Wagner  
Nancy Sweitzer, M.D., Ph.D.

**Team Members:** Danielle Ebben, team leader  
Anthony Wampole, communications  
Erik Yusko, BWIG  
Anita Zarebi, BSAC

**Date:** *Friday, Sept. 22<sup>nd</sup> to Thursday, Sept. 29<sup>th</sup>*

### **Problem Statement:**

In order to accurately measure internal blood pressures, a properly calibrated pressure sensitive cardiovascular catheter may be used. The current techniques for calibrating the catheter are unreliable, which causes concern about the validity of the test results. The goal of the project is to devise a testing system which more reliably calibrates and verifies the accuracy of the catheter in both atmospheric tests and tests which simulate internal bodily conditions.

### **Last Week's Team Goals:**

- Research Millar catheters
- Research calibration techniques
- Make list of questions for client
- Schedule another client meeting

### **Individual Goals:**

Danielle: Organize a team meeting times, research  
Tony: Contact client for a meeting, research  
Erik: Begin working on website, research  
Anita: Assemble team binder, research

### **Summary of Accomplishments:**

- Compiled list of questions for client
- Scheduled meeting with client
- Researched pressure sensors

### **This Week's Goals:**

- Continue researching catheters and pressure sensors.
- Get clarification on some product specifications.
- Begin brainstorming design ideas

**Project Difficulties:** Conflicting schedules among team members have made it difficult to schedule meetings with the client.

### **Activities:**

Team: Compiled list of questions	0.5 hours
Danielle: progress report, scheduled meeting times, notebook, research.	3 hours
Tony: E-mail client to set up meeting, research, brainstorming.	3 hours
Erik: Website setup, BSAC meeting (fill in for Anita)	3.5 hours
Anita: Notebook, brainstorming questions	2 hours

### Running Total

<i>Name</i>	<i>Hours</i>
Danielle Ebben	12.5
Anthony Wampole	9
Erik Yusko	9.5
Anita Zarebi	7.5
<b>Team total</b>	38.5

### Project Timeline:

<i>Week starting:</i>	<i>Accomplishment/Goal</i>	<i>Completed</i>
Sept. 8 <sup>th</sup> , 2006	Assemble team, exchange contact info, establish roles	✓
	Meet with client	✓
	Begin researching topic	✓
Sept. 15 <sup>th</sup> , 2006	Continue research	✓
	start PDS draft	✓
Sept. 22 <sup>nd</sup> , 2006	Finish PDS	✓
	Create list of questions to ask client	✓
Sept. 29 <sup>th</sup> , 2006	Meet with client and Divay Vj	
	Brainstorm	
Oct. 6 <sup>th</sup> , 2006	Choose three design alternatives	
Oct. 13 <sup>th</sup> , 2006	Work on midsemester presentation	
Oct. 20 <sup>th</sup> , 2006	Give midsemester presentation	
	Hand in notebooks	
Oct. 27 <sup>th</sup> , 2006	Choose design	
	Gather materials and begin building prototype	
Nov. 3 <sup>rd</sup> , 2006	Work on prototype	
Nov. 10 <sup>th</sup> , 2006	Work on prototype	
Nov. 17 <sup>th</sup> , 2006	Work on prototype	
	Begin testing prototype	
Nov. 24 <sup>th</sup> , 2006	Finish building prototype	
	Prepare for final presentation	
	Begin final report	
Dec. 8 <sup>th</sup> , 2006	Give final presentation	
Dec. 13 <sup>th</sup> , 2006	Hand in final paper and notebooks	
	Meet with advisor	

**Expenses:** none