

**Title:** Device for acute rehabilitation of the paretic hand after stroke (Project #20)

**Team:** Medical College of Wisconsin: Dr. Michelle Johnson (client)  
Sasha Cai Leshner-Pérez (Leader)  
Mike Socie (Leader)  
Carly Brown (Communicator)  
Karissa Thoma (BSAC)  
Justin Lundell (BWIG)

**Date:** November 17, 2006 – November 30, 2006

**Project Design Statement:**

We will design a portable device that will facilitate hand rehabilitation in the acute phase (first three months) after stroke; the device will consist of a simple attachment to the impaired arm, comfort for the user and accommodations for almost complete universal use.

**Restatement of Team Goals:**

- Purchase materials
- Construct Prototype

**Individual Goals:**

- **Sasha Cai:** purchase materials, build prototype
- **Mike:** Build prototype, help with circuits for motor
- **Carly:** build prototype, contact client, start on ppt
- **Karissa:** Build prototype, help with circuits for motor
- **Justin:** Build prototype, circuits for motor

**Summary of Accomplishments:**

- 1) Continued fabrication of final prototype
- 2) Received base tray, hardware, tube, joystick, wood, motor, and battery
- 3) Started on final presentation/ppt
- 4) Met with Prof. Tompkins and Burke O'Neal for help with motor/circuits

**Team Goals:**

- Finish prototype
- Work on final paper/presentation

**Difficulties:**

After meeting with some of the BME faculty, we decided it was too late in the semester for us to have a chance to get the microprocessor up and running so instead we are going with a simpler switch system that will control the movement of the tube by the motor.

**Activities:**

<b>11/12/06 – Work on design mock-up/start final prototype</b>	<b>2 hour</b>
<b>11/29/06 – Meeting with Prof. Tompkins about microprocessor</b>	<b>0.5 hour</b>
<b>11/30/06 – Meeting with Burke O’Neal for circuits help</b>	<b>1 hour</b>

**Budget:**

Total budget: \$750  
 Spending this week: \$85.14  
 Total budget remaining: \$627.87

**Timetable**

Project Tasks	Due Date	Team Hours Work	Mike	
Progress Report	Every Thursday	3		1.5
Solidworks of Designs	October 15, Sunday	10		2
Midterm Powerpoint	October 18, Wednesday	2		0
Midterm Presentation	October 20, Friday	5		1
Midterm Paper	October 22, Sunday	10		4
Clinical Visit	TBA	5	TBA	
Client Visit	TBA	5	TBA	
Components/Materials	October 30, Monday	10		2
Manufacturing	November 17, Friday	73		18
Testing	December 1, Friday	15		2
Final Paper	December 4. Monday	5		1
Final Powerpoint	December 4. Monday	5		1
Final Presentation	December 4. Monday	5		1