

**Title:** Device for acute rehabilitation of the paretic hand after stroke

**Team:** Sasha Cai Leshner-Pérez (Leader)  
Carly Brown (Communicator)  
Lee Linstroth (BSAC)  
Nathan Kleinhans (BWIG)

**Date:** November 9 – November 15, 2007

**Project Design Statement:**

Design a portable automated device that will facilitate hand rehabilitation in the acute phase (first three months) after stroke within a clinical setting; focus of rehabilitation will be supination/pronation movements of the wrist and gross flexion/extension of the fingers. Both active and passive movements will be focused on for rehabilitation, and the device should be able to simultaneously or independently assist rehabilitation of the two degrees of motion.

**Team Goals:**

- Finish prototype
- Work on programming
- Finalize hand grasper design

**Individual Goals:**

- **Carly:** Construction of device, make sure to be in communication with Michelle to monitor progress of proposal,
- **Lee:** Construction of prototype
- **Nathan:** Construction of prototype
- **Sasha Cai:** Working on microprocessor programming,

**Summary of Accomplishments:**

- 1) Continuing construction of device
- 2) Learning C++/began programming
- 3) Mock up of hand design

**Difficulties:**

Problems programming and H-bridge shorted and exploded, waiting for replacement.

**Activities:**

<b>Advisor Meeting:</b>	<b>11/09/07</b>	<b>.25 hours</b>
<b>Team Meeting:</b>	<b>11/12/07</b>	<b>1.5 hours</b>
<b>Client Meeting:</b>	<b>11/14/07</b>	<b>2.5 hours</b>