

## **Progress Report #3: EEG Biofeedback System**

BME 400

September 21, 2006 – September 28, 2006

Client: Daniel Muller, MD, PhD

Team Members: Cullen Rotroff (Leader/Communicator)  
Prakash Rao (Leader/Communicator)  
Joe Hippensteel (BSAC)  
Andrew Eley (BWIG)

### **Problem Statement**

The goal of our project is to design and build an inexpensive, portable electroencephalogram (EEG - brain wave monitor) that teaches meditation practitioners to achieve optimal meditation by indicating the presence of EEG alpha and theta waves. This shall be achieved through a relatively inexpensive, minimally distracting, and potentially portable device intended for commercial use.

### **Last Week's Goals**

- Refine PDS
- Finalize project schedule
- Continue background research
- Research electrodes and determine a method of production to begin testing
- Possibly meet with some of the individuals that Dr. Muller recommended talking to (researchers at Sleep lab, Richard Davidson).

### **Summary of Team Accomplishments**

- Team met on Friday 9/22/06
- Broke into two teams: electrode team, and circuit design team
- Each team continued literature research
- Electrode team has decided on an initial method of electrode production and will begin production promptly
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### **This Weeks Goals**

- Begin Electrode production
- Continue circuit design



