

# PELVIC FLOOR BIOFEEDBACK DESIGN

**Client:** Dr. Patrick McKenna, UW Urology Department

**Advisor:** Dr. Amit Nimunkar

**Team:** Sam Lines (Leader)

Michael Simonson (Communicator)

Shawn Patel (BWIG)

Andrew Vamos (BSAC&BPAG)

**Date:** 9/1/2014-9/5/2014

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## Problem Statement

Pelvic floor muscle biofeedback systems have been used to educate and train people how to correctly control the process of urination in children and elderly patients. As devices slowly fail or get outdated, a new device and interface system that can be used in conjunction with videogame like training programs is desired. With the completion of a basic EMG biofeedback system, our goal is to continue to improve the functionality of the software while simultaneously designing hardware with commercial standards in mind. This product will be designed and tested so that use in a hospital will be safe for both the hospital staff and the patients.

## Last Week's Goals

- Form a new team to continue the project from Fall 2013
- Finish pre-proposal for approval of the biofeedback project

## Summary of Team Role Accomplishments

- Leader (Sam): Roles were decided
- Communicator (Michael): Roles were decided
- BWIG (Shawn): Roles were decided
- BPAG And BSAC(Andrew): Roles were decided

## Summary of Design Accomplishments

- Team created and new members were introduced to the project

## Project Difficulties

- In order to use USB power, we had to switch our op-amps from dual power supply to single power supply.

## This Week's Goals

- Introduce new members to the project
- Show Shawn and Andrew the current materials

## Activities

Person(s)	Task	Time (hrs)	Week Total	Semester Total
Sam	Introduce project	1	1	1
Michael	Introduce project	1	1	1
Shawn	Learn about project	1	1	1
Andrew	Learn about project	1	1	1

## Timetable

Pelvic Floor Biofeedback Games															
Month	September				October					November				December	
Week	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12
<b>R&amp;D</b>															
Prototyping															
Testing															
<b>Deliverables</b>															
Reports	x														
Papers															
Posters															
<b>Meetings</b>															
client															
Adviser															
Team															
<b>Website</b>															

## Expenses

- No current expenses