

*** Progress Report 6**

*** Title:** Measurement of Pulse Transit Time

*** Names:** Blake Hondl (Team Leader)
Anna Karas (Communications)
Zak Cohen (BWIG)
Meghan Olson (BSAC)

*** Client:** Christopher G. Green, M.D.

*** Advisor:** Mitch Tyler

*** Date:** 10/07/05 – 10/13/05

*** Problem Statement:** Develop a device/method to measure pulse transit time (PTT) in pediatric patients using signals from an ECG monitor and an oximeter. This will allow a physician to monitor whether a patient is being aroused from REMS sleep and help the physician determine if the patient has obstructive sleep apnea.

*** Restatement of Team Goals:**

- Contact Dr. Green for facilitation with FLAGA representatives
- Research PTT, develop multiple design solutions
- Work on midsemester presentation

*** Summary of Accomplishments:**

- Spoke with FLAGA representative about their system
 - Obtained information about their signals
 - No software plug-in for PTT
- Dr. Green advised that we should continue speaking with FLAGA representatives to obtain a real-time signal
- Developed multiple design solutions
- Completed midsemester presentation work

*** Statement of Team Goals:**

- Team meeting to understand our current software capabilities
- Organize our approach to prototyping
- Begin coding to manipulate data

*** Project Schedule:**

Week		Activities
1	09/02/05	Assign team roles, contact client to set up meeting
2	09/09/05	Research design topics, define questions for meeting with client, start PDS
3	09/16/05	Meet with client, continue research on design topics, complete PDS
4	09/23/05	Meet with sleep lab neurophysiologist, establish possible design solutions
5	09/30/05	Choose the best design solution, research resources to help in the implementation of the design, start detailed design specification
6	10/07/05	Complete detailed design specification, possible work on prototype,

		work on midsemester presentation,
7	10/14/05	Midsemester presentation
8	10/21/05	Begin work on prototype
9	10/28/05	Work on prototype
10	11/04/05	Work on prototype
11	11/11/05	Work on prototype
12	11/18/05	Complete prototype
13	11/25/05	Work on poster presentation, Thanksgiving
14	12/02/05	Complete poster presentation, work on final report, final poster presentations
15	12/07/05	Complete final report, final report and notebooks due
15	12/09/05	Final meeting with advisor

* **Difficulties:** Meeting with client and/or his administrative assistant

* **Activities:**

Group:

Midsemester presentation work: 1.0 hr

Individual:

Blake Hondl

Midsemester presentation work: 4 hrs

Updating design notebook: 1.0 hr

Anna Karas

Midsemester presentation work: 4 hrs

Writing emails/contacting FLAGA: 0.5 hr

Team communications: 0.5 hr

Meghan Olson

Updating design notebook: 1 hr

Midsemester presentation work: 3 hrs

Zak Cohen

Weekly Total: 17 hrs

Semester Total: 67.75 hours

* **Expenses:**

	Item	Cost
Fall 2005		\$
		\$
Total		\$0