

Impedence Cardiography

Clients:

Prof. John Webster

Elena S. Bezrukova

Team Members:

Kim Safarik (Leader)

Jacob Meyer (Communicator)

Terra Gahlman (BSAC)

David Schreier (BWIG)

Sept. 2nd to Sept 10th

Project Statement:

Impedance Cardiography is a medical procedure utilized in order to properly analyze and depict the flow of blood through the body. With this technique, four electrodes are attached to the body, two on the neck and two on the chest, which take beat by beat measurements blood volume and velocity changes in the aorta. However, this system withholds degrees of inaccuracy due to the mere fact that the electrodes are placed too far from the heart. Our collective goal is to design an accurate, reusable, spatially specific system that ensures more accurate and reliable readings

Initial Design Goals:

- Determine exact requirements and characteristics of the project
- Meet with client
- Research project and the technique of impedance cardiography

Project Status Summary:

Within the first week of project labor we have set up a meeting with our client and have begun the initial design processes. As a team, we each researched impedance cardiography and gained an understanding of what this method entails. A meeting with our client has been

scheduled so we can finely tune the project needs and requirements; afterwards we will begin initial design brainstorming.

Future Design Expectations:

- Begin to brainstorm of initial design possibilities
- Discuss possible materials

Work Hours:

Name	Work Performed	No. of Hours/Task	Total Hours
Kim Safarik	Research	1hr	2 hrs
	Progress Report	1 hr	
Terra Gahlman	Research	½ hr	½ hr
Jacob Meyer	Communication	1 hr	1 ½ hr
	Research	½ hr	
David Schreier	Research	1 hr	1 hr
Team	Meeting	1 hr	5 hrs