

Device for Maxillomandibular Fixation Following Facial Fractures

Week – September 2 - September 8

Client: Jeremy Warner, MD
Plastic Surgery, UW Medical School
Phone: (608) 262-2122 or (608) 829-2161
E-mail: jp.warner@hosp.wisc.edu or warner@gwu.edu

Advisor: William Murphy
Assistant Professor, Department of Biomedical Engineering
Phone: (608) 262-2224
E-mail: wlmurphy@wisc.edu

Team Members: Ashley Phillips – Co Team Leader
Nina Lewis – Co Team Leader
Joe Ferris – Communications
Sara Karle – BWIG
Emily Maslonkowski – BSAC

Problem Statement

Currently, patients with specific and common types of facial fractures are treated with "maxillomandibular fixation," known as MMF, which entails holding the upper and lower jaw together using metal arch bars wired around the teeth in conjunction with a series of rubber bands. This technique achieves its goal of holding the two parts of the jaw together until the fracture heals, but involves the time consuming process of wiring the metal bars around the teeth as well as the time-consuming process of placing multiple rubber bands to hold the upper and lower jaws together. In addition, the rubber bands can often come loose and need to be replaced. We propose a project to develop a new and innovative device that will achieve the same goals as the standard type of MMF, yet make the process less time consuming and more reliable.

Last Week's Goals

- Pick our groups
- Pick our project
- Decide on roles within the group

Accomplishments

- We pick our group in class on Friday, Sept. 2. The members in our group are listed above
- We picked the MMF project
- Our group gave our contact information to Joe to send out to the entire group
- We decided on the roles of the group members and they are listed above.

This Week's Goals

- Contact and meet with our client
- Begin researching our project

Difficulties

- We didn't have any difficulties during our first week.

Activities/Accomplishments

Group Member	Weekly Accomplishments	Time (hrs)	Running Total (hrs)
Ashley Phillips	Class time	1.0	1.0
Nina Lewis	Class time	1.0	1.0
Sara Karle	Class time	1.0	1.0
Emily Maslonkowski	Class time	1.0	1.0
Joe Ferris	Class time	1.0	1.0