EWH Aspirator
Client: Dr. John Webster
Team Members: Lucas Vitzthum (Leader)
               Tyler Lark (BSAC)
               Nick Harrison (Communications)
               Fan Wu (BWIG)

Feb Mar 2-Mar 9

Progress Report #6

Problem Statement
The objective of this project is to design a suction machine that can be manufactured from locally available materials with the ability to run off batteries, electrical power (when available) or human power. This device should provide the broadest range of possible applications while still remaining under the 100$ price limit.

Last Week’s Goals
• Decide on source of vacuum/ talk to ME professors
• Purchase parts for: receptical, suction tips, electric motor?

Summary of Accomplishments
Met Sunday at Wendt for weekly meeting. Discussed deadlines for the rest of the semester. Finalized PDS. Edited slides and practiced presentation for Friday.

Met with client on Friday to discuss current direction of project. Dr. Webster provided some very helpful engineering analysis in determining requirements for flow rate and electric motor power.

Obtained tubing and receptacle (non-sterile) from hospital lab.

Met Thursday night at tong to rehearsed mid semester presentation. Brought snacks and didn’t leave tong until the presentation ran smoothly.

This week’s Goals
• Decide on source of vacuum
  o Talk to ME professors
  o Investigate what sources will provide enough suction/flow rate
• Start designing/fabricating one way valves
• Write individual portions of the paper for group editing on Tuesday night.

### Project Timeline

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### Activities

**Lucas:**
- Weekly Meeting (1.5 hrs)
- Presentation rehearsal at Tong (2.5hr)
- Met with Client (1hr)
- Met with advisor/attended lecture (1hr)

**Total: 6 hours**

**Fan:**
- Weekly Meeting (1.5 hrs)
Presentation rehearsal at Tong (2.5hr)
Met with advisor/attended lecture (1hr)
**Total: 5 hours**

Tyler:
- Weekly Meeting (1.5 hrs)
- Presentation rehearsal at Tong (2.5hr)
- Met with Client (1hr)
- Met with advisor/attended lecture (1hr)
**Total: 6 hours**

Nick
- Weekly Meeting (1.5 hrs)
- Presentation rehearsal at Tong (2.5hr)
- Met with advisor/attended lecture (1hr)
**Total: 5 hours**
**EWH Aspirator**

*Client: Dr. John Webster*

*Team Members:*  
Lucas Vitzthum *(Leader)*  
Tyler Lark *(BSAC)*  
Nick Harrison *(Communications)*  
Fan Wu *(BWIG)*

*Feb 24-Mar 3*

**Progress Report #5**

**Problem Statement**

The objective of this project is to design a suction machine that can be manufactured from locally available materials with the ability to run off batteries, electrical power (when available) or human power. This device should provide the broadest range of possible applications while still remaining under the 100$ price limit.

**Last Week’s Goals**

- Contact Prof. Franziak for mechanical vacuum source ideas
- Work on slides for Midsemester Presentation
- Research material costs
- Research pressure ranges of current medical aspirators
- Establish field contact to better understand available materials/expertise

**Summary of Accomplishments**

Met Sunday at Wendt for weekly meeting, decided on design alternatives. Worked on design Matrix. Took apart laboratory aspirator with group.

Assigned roles/worked on slides for presentation. Scheduled group meeting for next Tuesday to rehearse presentation.

Determined pressure ranges/flow rates of current aspirators. Obtained hoses from laboratory aspirator.

Talked to Webster and set up a meeting for Friday at 2:30. Unable to get a response from Franziak.
This week’s Goals
- Decide on source of vacuum/ talk to ME professors
- Purchase parts for: receptical, suction tips, electric motor?

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Activities
Lucas:
Weekly Meeting (1.5 hrs)
Met with advisor/attended lecture (1hr)
Materials/Parts cost research (.5hr)
Created ppt slides (1hr)
Total: 4 hours
Fan:
  Weekly Meeting (1.5 hrs)
  Met with advisor/attended lecture (1hr)
  Created ppt slides (1hr)
  **Total: 3.5 hours**

Tyler:
  Weekly Meeting (1.5 hrs)
  Discussed available materials w/ contact (.5 hr)
  Met with advisor/attended lecture (1hr)
  Created ppt slides (1hr)
  **Total: 4 hours**

Nick
  Weekly Meeting (1.5 hrs)
  Met with advisor/attended lecture (1hr)
  Created ppt slides (1hr)
  **Total: 3.5 hours**
EWH Aspirator
Client: Dr. John Webster
Team Members: Lucas Vitzthum (Leader)
Tyler Lark (BSAC)
Nick Harrison (Communications)
Fan Wu (BWIG)
Feb Mar 2-Mar 9

Progress Report #6

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