

EWH Aspirator

Client: Dr. John Webster

Team Members: Nick Harrison (Communications)
Jonathan Meyer (BWIG)
Lucas Vitzthum (Leader)
Fan Wu (BSAC)

Oct 12- Oct 18

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

- Fan & Lucas- Build alternative 'piston' mechanism
- Jon- Build flapper check valve
- Nick- Write new EWH proposal with updated costs
- Everyone- Begin work on mid-semester presentation
 - Show last semesters prototype

Summary of Accomplishments

- Jon- Constructed flapper and funnel prototype
- Everyone- Made powerpoint and practiced Thursday night
- Fan & Lucas- Started construction on new piston mechanism
 - Use a rigid flat piece to maximize air displacement
 - Rigid member will allow in and out displacement

This Week's Goals

- Meet with Fronczak to discuss mechanics of device
- Continue to develop mechanical method for maximizing air displacement
- Write our individual sections of paper
 - Meet on Monday night to put paper together and proofread

Project Timeline

Tasks	September				October				November				December		
	7	14	21	28	5	12	19	26	2	9	16	23	30	7	14
Project Research and Development															
Contact EWH	█	█													
Apply for funding			█	█											
Research		█	█	█	█	█	█	█	█	█	█				
Brainstorming		█	█	█	█	█									
Design Prototype			█	█	█	█									
Test Prototype							█	█	█	█	█	█			
EWH instructions							█	█	█	█	█				
Website		█	█	█	█	█	█	█	█	█	█	█	█	█	█
Deliverables															
Mid Semester Presentation						█	█								
Mid Semester Report							█	█							
Final Presentation													█	█	
Final Report														█	█
Progress Reports	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Meetings															
Semester Wrap Up															█

Activities

Lucas:

- Powerpoint practice (3 hrs)
- Prototype construction (2 hrs)
- Team Meeting (1 hr)
- Advisor Meeting (1 hr)
- Total: 7 hours**

Fan:

- Powerpoint practice (3 hrs)
- Prototype construction (2 hrs)
- Team Meeting (1 hr)
- Advisor Meeting (1 hr)
- Total: 7 hours**

Jon:

- Powerpoint practice (3 hrs)
- Prototype construction (2 hrs)
- Team Meeting (1 hr)
- Advisor Meeting (1 hr)
- Total: 7 hours**

Nick

Powerpoint practice (3 hrs)

Team Meeting (1 hr)

Advisor Meeting (1 hr)

Total: 5 hours