

Bronchoalveolar Lavage Trap

Group 17

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Team: Laura Zeitler (Team Leader)

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Problem Statement:

In order to diagnose respiratory problems in immunosuppressed patients, bronchoalveolar lavage is used to obtain a bronchiole fluid sample. A bronchoscope is guided through the respiratory tract and wedged into a bronchiole, which is then flushed with saline solution. The solution is then extracted with a vacuum and accumulates in the sterile collection trap. In the current procedural setup, the lavage trap is free-hanging and unstable. Manipulation of the bronchoscope and surrounding movement can displace the trap resulting in loss of sample to the vacuum line. To prevent unnecessary expense and patient inconvenience from sample loss, a new trap needs to be developed.

Last Week's Goals

- Finish prototype by adding ball and stopper
- Test hospital vacuum with final prototype
- Report results and put together poster for presentation
- Start final paper

Summary of Accomplishments

- Finished and tested 3rd prototype
- Finalized poster and printed
- Practiced presentation for Friday

This Week's Goals

- Present Poster
- Finalize Paper

Activities

Collaboration Group Activities		
Date	Activity	Duration
4/24/2009	Advisor and group meeting	1.5 hours
4/24/2009	Testing	2 hours
4/26/2009	Poster Work	4 hours
4/29/2009	Poster Practice	45 minutes

Team	Date	Activity	Duration
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Member			
Laura Zeitler	4/23/2009	Solidworks Figure Updates for Poster	45 minutes
	4/25/2009	Lab e-mail	15 minutes
	4/24/2009	Solidworks and prototype work	2 hours
	4/29/2009	Progress Report	20 minutes
Kim Kamer	4/24/2009	Finishing prototype 3, working on poster	2 hours 45 min.
	4/24/2009	Statistical analysis, working on poster	2 hours
	4/27/2009	Fixing poster	30 min
Elise Larson	4/24/2009	Finishing prototype 3	1 hour 45 minutes
	4/29/2009	Patent Research	45 minutes
Ali Johnson	4/24/2009	Solidworks/Figures for Poster	2 hr
	4/24/2009	Video for Presentation	1 hr
	4/26/2009	Fixing poster	30 min

Expenses

Date	Item	Cost	Comments
3/19/09	Miscellaneous Prototype Supplies	\$3.70	American Science and Surplus Store
3/16/09	First Prototype	\$8.44	Media Center
4/24/09	Second Prototype	\$4.22	Media Center

