

# ***Bronchoalveolar Lavage Trap***

Group 17

Client: Christopher Green, M.D.

Dept. of Pediatrics

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Team: Laura Zeitler (Team Leader)

Kim Kamer (BSAC)

Ali Johnson (BWIG)

Elise Larson (Communicator)

February 6, 2009- February 12, 2009

## **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**

- Meet with client on Monday, February 9<sup>th</sup> at 7:30 am.
- Continue with more specific research based on brainstorming session.

## **Summary of Accomplishments**

- Met and discussed brainstorming ideas with client
- Attended Solidworks session
- Furthered research on materials and feasibility of brainstorming ideas

## **This Week's Goals**

- Meet with advisor to discuss brainstorming ideas
- Find an expert in the field of valves/membrane materials to talk to
- Continue with research
- Generate any other new ideas through individual brainstorming
- Start to funnel top ideas and create multiple design matrices

## **Project Difficulties**

It has been difficult to accept or rule out any ideas now because we are not experts on valves or material science. We are hoping to resolve this issue by finding a professor here on campus that specializes in this field.

## **Activities**

<b>Collaboration Group Activities</b>		
<b>Date</b>	<b>Activity</b>	<b>Duration</b>
1/9/09	Client Meeting	1.5 hours

<b>Team Member</b>	<b>Date</b>	<b>Activity</b>	<b>Duration</b>
Laura Zeitler	2/11/09	Progress Report Update	30 min
	2/5/09	Solidworks Training Seminar	1.5 hours
Kim Kamer	2/5/09	Solidworks Training Seminar	1.5 hours
	1/31/09	BSAC Meeting	30min
	2/11/09	Research	30min
Ali Johnson	2/6/09	Website Fix PDS/Make PDF/general time line outline	1.5 Hours
		Research	1.25 Hours
Elise Larson	2/8/09	Research	30min
	2/11/09	Research	45 min
	2/11/09	E-mail to Ebling	10min

### **Expenses**

<b>Date</b>	<b>Item</b>	<b>Cost</b>	<b>Comments</b>
N/A	N/A	0.00	No Expenses Yet

