

Team Spirometer Progress Report
August 6, 2009 – August 12, 2009

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Goals for the past week

- Finish remaining test reports
- Create a final hardware and software package for David to take with him to a conference
- Further develop the report outline

Accomplishments

- Finished testing report for testing done on August 5-6
 - Procedure tested the effects of length on laminar flow
 - Full report and Excel sheets are attached
- Manufacturing
 - Created one new prototype that uses screen in front of capillaries
 - Best yet, but still not totally laminar
 - Will send prototype with David to University of Washington conference
 - Test report will be ready later this week
- Patent research
 - Investigated numerous patents to figure out how others achieved laminar flow
 - Very few actually did, many used a spirometer with quadratic flow-pressure relationship
 - Some of these designs used two sensors
 - Further hardware development will be postponed until the Fall semester
- Software development (Interns)
 - Wrote program for Windows that can acquire data from the iLite and continuously output data in the IDE as well as to a text file
 - Currently working on porting over to Mac OS
 - This will also be sent with David to U-Wash

Goals for the upcoming week

- Finalize all components for David to take to his conference at the University of Washington
- Write a comprehensive report that describes our work this summer

Difficulties

- Jeremy was out of town and unavailable for half of the week
- Both members were also occupied with moving

Areas we would like assistance/feedback

- A quick review of the report outline we have prepared, and any other final words of wisdom you wish to give before we wrap up for the summer.