

# Heated Diagnostic Radiology Examination Table

Week 7 – March 6 to March 13, 2009

## Team Members:

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Joel Gaston ([gaston@wisc.edu](mailto:gaston@wisc.edu)) - Team Communicator

## Client:

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## Advisor:

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## Problem Statement

A frequent patient complaint is that current x-ray tables are hard and cold. A pad can be used to eliminate the first complaint; however the temperature of the table cannot be altered on standard tables. A heated exam table or attachment that has a temperature control to give patients added comfort during exams, needs to be developed. The materials used need to be radiolucent and may not obscure the body part being imaged. A mechanism must be implemented that eliminates the possibility of patient injury such as burn.

## Last Week's Team Goals

- i. Schedule a time to test radiolucency and contrast of tubing using “phantom”.
- ii. Finalize mid-semester report
- iii. Turn in peer reviews and design notebooks.
- iv. Meet with advisor.
- v. Begin planning prototype construction/ordering of necessary materials.
- vi. Finalize heating and pumping units.

## Summary of Accomplishments

- i. All group members prepared their assigned segment of the mid-semester report. The report was split up as follows: Tyler - Problem statement, background, design specifications; Joel – heating, future work; Paul – x-ray attenuation, proposed design; Joey – Padding, tubing. After Joey compiled the report we reviewed/edited the report. The report provides a good summary of our work up to this point and will be useful as a resource to look back on in the future.
- ii. We have begun to consider alternatives for fluid, heating and pumping, research is ongoing.
- iii. We plan to continue testing materials upon returning from spring break, a meeting has been scheduled for the Monday of return. We will develop new a new testing procedure and contact our client along with Dr. Vetter to schedule testing.
- iv. All team members have submitted applications and are in the process of acquiring a student shop pass. This will allow us the opportunity to use the student shop in the development of our prototype.

## This Week's Goals

- i. Rethink testing procedure, document the new procedure.
- ii. Schedule a time to retest radiolucency and contrast of tubing using “phantom”.
- iii. Begging planning prototype construction/ordering of necessary materials.
- iv. Finalize heating and pumping units.

## Project Difficulties

N/A

## Activities

3.6.2009	Team: Mid-semester presentations	2.5 hours
3.10.2009	Team: As a group reviewed and edited mid-semester presentation	2 hours
3.7.2009	Joel: Mid-semester report: Heating/future work	5 hours
3.7.2009	Joey: Mid-semester report: Tubing/padding	5 hours
3.8.2009	Joey: Compile mid-semester report	1 hour
3.7.2009	Paul: X-ray attenuation/proposed design	5 hours
3.12.2009	Paul: Updated website	.5 hours
3.7.2009	Tyler: Mid-semester report: Problem/background/design specs	5 hours
3.12.2009	Tyler: Wrote progress report	.75 hours

