**Project Title:** Redesigning intramedullary rod surgical instruments used for canine long bone fracture repair

**Team Members:**
Erik Yusko – Leader
Danielle Ebben – Communications
Tony Wampole – BSAC
Anna Moeller – BSAC
Jon Sass – BWIG

**Client:**
Tass Dueland, DVM  
UW Veterinary School  
email: duelandt@svm.vetmed.wisc.edu

Professor Ray Vanderby, Jr.  
UW Biomedical Engineering and others  
email: vanderby@orthorehab.wisc.edu

**Date:** 10/5/05 – 10/13/05

**Problem Statement:** Improve the design of an intramedullary rod to fix canine long bone fractures. Specifically a device enabling surgeons to consistently drill to the screw holes in the nails without missing.

**Individual Goals:**
Erik – Technical drawings, keep notebook up to date, edit paper
Danielle – notebook, edit paper, technical drawings
Tony – notebook, BSAC, develop test to quantify force
Anna – notebook, BSAC, develop test to quantify force
Jon – notebook, BWIG, technical drawings

**Summary of Accomplishments:** The mid-semester power point has been completed and will be presented this Friday. A rough draft of the mid-semester report has been completed and will be edited over the next week. A design matrix has been developed and the team is currently deciding which designs to pursue/alter or combine.

**Statement of Team Goals:** The report must be finished and completed by Wednesday. The team would like to quantify the force required to displace the distal nail holes based on rotation at the extension – nail interface. With this data we would like to choose a final design to begin technical drawings and manufacturing.

**Rough Project Schedule:**
9/9/05: Met with Client
9/16/05: Developed a fluid PDS document and began brainstorming
9/16/05-9/30/05: Evaluated brainstormed ideas. Began mid-semester presentation and report.
10/14/05: Present Midsemester presentations
10/14/05-11/18/05: Build and finalize a prototype or design plans.
11/18/05-12/2/05: Test prototype, produce final poster presentation & report.
12/2/05: Final Poster Presentations
12/7/05: Final report due.

**Difficulties:** None at the moment.

**Activities week to date:**

- Erik – progress report, notebook, brainstorming, surgery: 5 hours
- Danielle – reading, notebook, report: 4 hours
- Tony – Research and brainstorming 2 hours
- Anna – further brainstorming, BSAC, report 6.5 hours
- Jon – BWIG meetings, brainstorming 4 hours

**Running Total:**

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<tr>
<th>Name</th>
<th>Hours</th>
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<td>Erik</td>
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