

Title: Growth plate measurement device

**Names:** Andrea Schnelle, Barry Bass, Adam Graf, Rafael Connemara

**Date:** 09/25/02-10/01/02

**Problem Statement:** Develop a more accurate and physiologically sound method to measure the longitudinal lengthening of the growth plate in a lamb.

**Restatement of Team Goals (last weeks goals):** We are exploring industry web sites, performing patent and journal article searches, and verifying our understanding of the anatomy and physiology associated with the project throughout the week. In addition, we are all brainstorming preliminary ideas for the design of the project itself to be discussed in our group meeting on Friday.

**Accomplishments:** Through a search of various web sites, we were able to find information on a new technology involving a non-contact DVRT from a company called Microstrain, Inc. This is the same company that designed the current measurement device, the DVRT (Differential Variable Reluctance Transducer), that is currently used by our clients. The advantage to this device is that it doesn't involve an element that spans the transducers (one of our clients primary complaints). At our meeting on Friday, we compiled a series of questions for Microstrain on the ability of this device to work for our application. We have yet to hear back from them. In addition, we met on Monday, Sep. 30, to discuss the PDS and begin work on it.

**Project Schedule:** We are waiting to hear back from Microstrain on the questions we emailed them last Friday. We are also working on our PDS. In addition we feel it is necessary to begin discussing ideas for the attachment of the Microstrain device to the lamb bone provided the device is applicable to our project. We feel that even if the non-contact DVRT will work for measurement, we will still have to solve the issues with implantation and attachment of the device.

**Difficulties:** Not this week!!!!

**Activities:**

Barry - 1.5 hour class meeting, 45 minute group meeting, as well as additional outside research and brainstorming.

Rafael - 1.5 hour class meeting, 45 minute group meeting, as well as additional outside research and brainstorming.

Adam - 1.5 hour class meeting, 2 hour web meeting, 45 minute group meeting, as well as additional outside research and brainstorming.

Andrea - 1.5 hour class meeting, 45 minute group meeting, 30 minutes on weekly PR, as well as additional outside research and brainstorming.