**Title:** Growth plate measurement device

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

**Date:** 10/02/02-10/08/02

**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 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.

**Accomplishments:** Although we never actually heard back from Microstrain, we did enough website research to conclude that the device they are marketing will not work for our application. This realization led me to Dr. Webster for advice on the design of a non-contact measurement device that we could build ourselves that would be capable of measuring a 0.9 cm distance. I met with him on Monday and then met with the whole group to discuss his suggestions. He had helped me plan a few experiments that could be done with simple electrical components to test our ideas. The group decided to go through with the experimentation that Dr. Webster suggested and two of us will be completing that on Wednesday (Adam and I). Because we are not sure where this experimentation will lead, we also decided to continue formulating ideas for the modification of the current measurement method.

**Project Schedule:** Adam and I will spend the week experimenting with the non-contact device and Barry and Rafael will be formulating ideas for modification of the current measurement method.

**Difficulties:** Nothing aside from the obvious disappointment of the Microstain device.

**Activities:**
Barry - 1.0 hour class meeting, 30 minute group meeting, 30 minutes outside research and brainstorming.

Rafael - 1.0 hour class meeting, 30 minute group meeting, 1.0 hour additional outside research and brainstorming.

Adam - 1.0 hour class meeting, 1.5 hour web meeting, 30 minute group meeting

Andrea - 1.0 hour class meeting, 30 minute group meeting, 30 minutes on weekly PR, 30 minute meeting with Dr. Webster