

Area of Research: **Reproductive Biology**
Mentor: **Sandra L. Ayres**

Project Description

Cryopreservation of embryos is an important technique for preserving the genetics of endangered wildlife and rare breeds of domestic animals. It is helpful to be able to collect embryos at distant sites and transport them for freezing at a second site. In large animals such as horses and cattle, it is possible to transport chilled embryos prior to freezing with minimal effects on post-thaw viability. There is no literature on the effects of chilling goat embryos prior to freezing. The purpose of this project would be to compare viability of chilled goat embryos with viability of goat embryos that have not been subjected to chilling. Techniques involved in this project would include collection of goat embryos, washing, grading, and sorting of embryos, in vitro maturation of embryos, and freezing/thawing of embryos. Work would be conducted in the Peabody Pavilion at TUSVM.