

title	Isolation of stem cells from a novel source in the horse
name	Dr. Matthew A. Burd
phone	805-756-6110
email	mburd@calpoly.edu
additional	Dr. Daniel Peterson
department	ASCI
proj_desc	The overall goal of this project is to successfully isolate stem cells from a novel source in a horse. Stem cells are currently being used for the treatment of tendon injuries in race horses and these studies are being used as models for advances in human stem cell research. Stem cells obtained from bone marrow and fat but are usually found in low concentrations, Additionally, the methods of harvest of stem cells are invasive and expensive and stem cells from these sources have limited developmental abilities. Stem cell isolation from this source is a very recent undertaking in the scientific community that has not yet been accomplished in the horse.
inter_desc	This project offers the great opportunity to combine the disciplines of equine veterinary, biotechnology, and biomedical engineering. The combination of these disciplines is potent. The project requires the skill of the veterinary and pre-veterinary student in harvesting tissues from live horses at parturition followed by the timely transfer of custody of these tissues to the biotechnology lab. It is in this lab where undergraduate biotechnology and biomedical engineering students will endeavor to the forefront of biology. Indeed, never before have stem cells been collected from this area of the horse and the implications for therapy driven discovery transcends horse to human.
support	Draft Budget Supplies \$3000 Publication Expenses \$1000 Travel Expenses \$1000
students	1
majors	BMED
date_added	2007-11-19 17:02:24