

## Analysis of Previously Recorded Equine Heart Rate (HR) Data and Measuring the Therapeutic potential of Thera-tree<sup>®</sup> Technology Using Thermography, HR, and Behavioral Indicators

This SRP project will encompass two separate equine science projects. The first will involve completing a detailed statistical analysis of equine heart rate (HR) data collected during SRP 2015. The previous SRP project was a lengthy and highly controlled study which gathered a large amount of data related to equine HR over the period of a timed training ride. This data will now be used to create a model and write a manuscript on using HR as an indicator of "warm-up" and "cool-down" time for horses in the hunter-jumper discipline of equestrian sports. The second component will involve gathering preliminary data to assess the effectiveness of a new equine therapeutic device, the Tad Coffin Thera-tree<sup>®</sup>. This product claims to have significant therapeutic benefits related to equine behavior, performance, and pain relief. Our study will use HR monitoring, thermography, and equine ethograms to test these effects under a controlled environment.



*Sidney Clark '22, Amanda Rumore, Biology*