



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

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| <b>Name(s)</b><br>Jessica M. Cronin   | <b>Project Number</b><br><br>35124 |
| <b>Project Title</b><br>Variations in Heart Rate Pre- and Post-Exercise: Human vs. Equine   |                                    |
| <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b><br/>My goal was to find out whether a horse or it's rider's heart rate would be most affected after jumping a course of jumps.</p> <p><b>Methods/Materials</b><br/>Stethoscope, Stopwatch, Course of Jumps, Horse/Rider Combos</p> <p><b>Results</b><br/>The horse's heart rate was most affected according to percentages.</p> <p><b>Conclusions/Discussion</b><br/>If you look at the amount of beats per minutes the heart rates changed, it looks like the rider's heart rates were most affected. However, since human hearts beat slower than horse hearts, you must find the percentage of the change to see that the horse's heart rates actually changed more.</p> |                                    |
| <b>Summary Statement</b><br>My goal was to find out whether a horse or it's rider's heart rate would be most affected after jumping a course of jumps.  |                                    |
| <b>Help Received</b><br>Since I had to get heart rates before they could lower, I had the riders take their own pulse while I took the heart rate of their horse.   |                                    |