



**CALIFORNIA STATE SCIENCE FAIR  
2013 PROJECT SUMMARY**

<b>Name(s)</b> Nicole E. Veloskey	<b>Project Number</b> <b>J0718</b>
<b>Project Title</b> <b>Correlation of Hand Dominance to Ear Dominance: Verbal Instruction Recall</b>	
<b>Abstract</b> <b>Objectives/Goals</b> About 70% of the population uses their right ear to listen to a phone call, which lead me to me topic. The purpose of this project was to determine which ear might better retain verbal instruction and if ear dominance is determined by hand dominance. I believed the dominant ear would be better at listening which would assist in better recall of information. <b>Methods/Materials</b> To conduct my experiments, I created a computer program to test which ear is better at basic memorization. The program played 10 different colors in a random order six times in either the left or right ear. In all, I performed 132 tests on 22 test subjects. <b>Results</b> After analyzing my test data, I found my hypothesis appeared to be supported. I found that the average correct score was 39.8% with the test subject's dominant ear and 34.8% averaged with the opposite eaer, which was a 5% out of 100% and a 12.5% relative difference between the two scores. I also tested whether one ear was better for active listening than the other. The test results were 37.1% for the left ear and 37.6% for the right ear, which implied that both ears are suitable for verbal instruction. <b>Conclusions/Discussion</b> I believe that my results supported my hypothesis in this experiment and showed that using the doninant ear may assist in greater potential for recall than using the nondominant ear in a memory task. However, I still recommend that more tests should be done on this topic to confirm the findings.	
<b>Summary Statement</b> The purpose of this project was to determine which ear might better retain verbal instruction and if ear dominance is determined by hand dominance.	
<b>Help Received</b> Father helped me come up with ideas for testing; Science teacher helped me with minor edits on report.	