



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

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Project Title The Relationship between Hand Dominance and Eye Dominance	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this project was to determine how whether a person has a dominant right or left hand affects whether they have a dominant right or left eye. It was hypothesized that more than 50% of people with a dominant right hand would have a dominant right eye, and that more than 50% of people with a dominant left hand would have a dominant left eye.</p> <p>Methods/Materials The subjects of the experiment were 124 humans. There were two experimental groups. The first group consisted of those humans in the sample population who were determined to have a dominant right hand in a least two of three different tests. The second group consisted of those humans in the sample population who were determined to have a dominant left hand in at least two of three different tests. The control group consisted of the entire sample population of humans. For each experimental and control group, the percent with a dominant right eye and the percent with a dominant left eye were determined.</p> <p>Results The experimental results indicated that more than 50%, in fact 67.5%, of the population with a dominant right hand had a dominant right eye. Exactly 50% of the population with a dominant left hand had a dominant left eye. When the results for subjects of the two sexes were separated, the hypothesis still held true, except for the population of males with a left hand. When looking at the sexes separately, the percent of females with a dominant right eye was always a little less than the percent of males with a dominant right eye, and the percent of females with a dominant left eye was always a little higher than the percent of males with a dominant left eye.</p> <p>Conclusions/Discussion While there seems to be a correlation between dominant eye and dominant hand, it is definitely far from a one to one relationship. It is clear there are a significant number of people who have a dominant right hand and a dominant left eye. It would be interesting to consider if there is something about differences in male and female development that might be the cause of the slightly increased tendency for females to have a dominant left eye.</p>	
Summary Statement The project investigated the relationship between hand dominance and eye dominance in a sample population of humans.	
Help Received	