



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Arya J. Barlinge</b>	<b>Project Number</b> <b>J1202</b>
<b>Project Title</b> <b>The Diversity of Fingerprints</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The goal of this project is to find out the difference between the fingerprint patterns of India and the USA.</p> <p><b>Methods/Materials</b> The materials required are a fingerprinting pad, fingerprinting forms, and a pen. First, the test subject would roll their right thumb in ink. Then, the test subject would press their finger down on the fingerprinting form. This process was then repeated with all the other fingers of the test subject. The age and gender of the test subject were then recorded. The same procedure was repeated with all other test subjects. The data was then analyzed and conclusions were made.</p> <p><b>Results</b> The results were that the population of the USA had 6% more arches than India's population. India had 1% more whorls and 2% more loops than the USA. It was also noted that although double loops are uncommon, they appeared more often than was expected in the test subjects residing in India. The test subjects in the USA rarely had double loops. India had 93% more double loops than the USA in the same amount of people fingerprinted.</p> <p><b>Conclusions/Discussion</b> There is only a slight change in the percentages of the fingerprint patterns between the two countries. The differences between India and the USA's fingerprint pattern were so minor, that there is practically no contrast. If the entire population of both countries were fingerprinted, then there would probably be no change at all. Therefore, the results show that there is no relationship between the country and its fingerprint patterns. These results are useful in showing that it is not possible to which country a person originated from, based on solely their fingerprints. Although the hypothesis was incorrect, a lot of knowledge was gained from the project.</p>	
<b>Summary Statement</b> My project is about comparing the fingerprints between Indian and America population.	
<b>Help Received</b> Parents & Aunts helped get test subjects; Advisor helped with research.	