



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Isabella J. Negrete</b>	<b>Project Number</b> <b>J1220</b>
<b>Project Title</b> <b>Fingerprint Inheritance</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My objective of my project is if the type and pattern of fingerprints are passed down from parent to offspring and if they show resemblance between family members. My hypothesis stated that fingerprint patterns are inherited and passed down through family generations.</p> <p><b>Methods/Materials</b> The materials used in this experiment were a black ink pad, paper towels, drawing paper and two groups of related and unrelated people. For the experiment, I gathered up the two groups and had everyone wash their hands. Then, I had everyone print down their fingerprints on drawing paper using the black ink pad and then clean their hands with a paper towel after the printing. The fingers used were the 1st, 2nd, and 3rd fingers of the right hand. I then paired up the people and calculated an overall percent of resemblance for each group.</p> <p><b>Results</b> After all the tests, the results showed that the Unrelated Group had a 42% of resemblance and the Related Group had a 58% of resemblance. From this, it showed that related people have a higher rate of resemblance than unrelated people, showing that fingerprints are inherited through family members and generations.</p> <p><b>Conclusions/Discussion</b> My hypothesis said that fingerprint patterns are inherited and are passed down through family generations, and my experiment proves that this is so. With the results of this experiment in mind, another interesting study would be to see if close friends or people from the same area have the same type of prints. Also, to see if people who have the same astrological sign have the same type of fingerprints would also be an interesting study as well. Overall, this experiment can extend our knowledge about inherited traits and adds to our research of fingerprint patterns.</p>	
<b>Summary Statement</b> My investigation focused on fingerprint inheritance and figuring out if fingerprint patterns are passed down from parent to offspring.	
<b>Help Received</b>	