



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Aurora K. Murphy	Project Number 35383
Project Title The Effect of Color on Facial Recognition	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals If the photo was in standard color, then the volunteer would be able to distinguish the persons ethnic background easier, because the facial features would be easier to recognize which could decide an ethnicity.</p> <p>Methods/Materials I made a Qualtrics survey account. Then I had a picture of a male and a female of the same ethnicity together in 3 different color pigments. (standard color, black and white, sepia) After I made the survey I launched it and let it run for 2 weeks. Last I shut down the survey and calculated all the data.</p> <p>My material most used was a computer.</p> <p>Results The data was separated into three graphs; Age Groups, Ethnicities, and Genders. Age Groups, 26-35 and 36-49 year olds, had the highest averages for color at and average percent of 62.9 and 59.4. The Ethnicities, Filipino and Caucasian, had the highest average percent of color at 66.6 and 56.3. Last, females had the highest average percent of color at 55.8. All was determined by how many people correctly answered the questions.</p> <p>Conclusions/Discussion In conclusion to the project, my hypothesis was supported by my data, because volunteers could distinguish between ethnicities easier when the picture was in a standard color pigment. The survey was tested in three different groups; Age Groups, Ethnicities, and Genders. In all test color was proven to be the easiest for volunteers.</p>	
Summary Statement The effect of Color on Facial Recognition	
Help Received Science Teachers Jack Chen and Vanessa Hooker	