



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

<b>Name(s)</b> <b>Juliana Carrillo; Jaclyn Rawnsley</b>	<b>Project Number</b>  36802
<b>Project Title</b> <b>Light vs. Sleep</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The object of this study was to determine how different colors of light affected you while sleeping. Out of the colors (purple, green, red and white), we believed that the purple light would affect our sleep the least.</p> <p><b>Methods/Materials</b> Fitbits - using the sleep feature; we tracked our sleep patterns to determine how long it took us to fall asleep, how many times awake/restless, and how many minutes we were awake/restless. Colored light bulbs (purple, green, red and white) - each tested while sleeping with light on all night.</p> <p><b>Results</b> We found we were able to sleep the best with the purple light and we had the worst sleep with the red.</p> <p><b>Conclusions/Discussion</b> Our goal was to find out whether light affects our sleep and how. This project showed us that purple light helped us sleep calmly and longer while the red light kept us awake and disturbed.</p>	
<b>Summary Statement</b> Our project is about finding how different colors of light affected you while sleeping.	
<b>Help Received</b> None. We created and tested the lights ourselves.	