



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Briana C. Cureton</b>	<b>Project Number</b> <b>S1004</b>
<b>Project Title</b> <b>The Formation and Prevention of Cataracts in Cow Eye Lens</b>	
<b>Abstract</b> <b>Objectives/Goals</b> This experiment examines the formation of a type of cataract in a cow eye lens. The reason cow eyes were used is because of the similar size of cow eye lenses in relation to the human eye. <b>Methods/Materials</b> To preform these experiments a high intensity 300watt halogen light is positioned over the lens and the progression of cloudy changes in the lens is monitored. Different barriers are used to protect the lens from cataract formation. For example, clear glass, orange barrier, and dark lenses. <b>Results</b> This experiment shows that any type of protection will help slow down the process of the formation. The clear lens will protect the eye but not as well as the orange barrier does. Furthermore, the dark lens is the best protectoe out of all three barriers. <b>Conclusions/Discussion</b> As long as the lenses change from clear to cloudy, less light is transmitted through them. The radiometer measured that transmitted light and the results were graphed for each series. By protecting the cow lens with various barriers it will reduce milky clouding of cow's eye lens created by high intensity light. This experiment demonstartes dramatically the environmental dangers that we all face, day in and day out.	
<b>Summary Statement</b> The formation of catarcts in cow eye lenses from exposure to high intensity light are reduced with the use of colored barriers.	
<b>Help Received</b> Dad help me set up and get the supllies, Dr. Sammet helped me understand more about cataracts and how to get my project to work, Ms. Elder helped me set up my poster board and format my report.	