



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> Mark A. Herron	<b>Project Number</b> <b>S1910</b>
<b>Project Title</b> Isolation and Sequencing of Mitochondrial DNA	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective in this project is to determine whether the amount of variation present within a population is sufficient to warrant a separation of the group into various species.</p> <p><b>Methods/Materials</b> DNA was isolated, purified, quantified, and visualized. Once the DNA purity was varified, isolates were exposed to PCR condntions and specified primers were used to obtain an 1100bp sequence of the mitochondrial gerone. The sequences were then run throguh an ABI flourescent sequence. Lastly, the sequences were compared using various computer programs to analyze and determine the degree of variation.</p> <p><b>Results</b> Ample variation was found to support the separation of the species into two distinct groups.</p> <p><b>Conclusions/Discussion</b> Additional research must be done in order to support the findings from this preliminary project.</p>	
<b>Summary Statement</b> My project was about finding the genetic variation within a large group of iguanas	
<b>Help Received</b>	