



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Mark A. Herron	Project Number 22862
Project Title Isolation and Sequencing of Mitochondrial DNA	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals 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>Methods/Materials DNA was isolated, purified, quantified, and visualized. Once the DNA purity was verified, isolates were exposed to PCR conditions and specified primers were used to obtain an 1100bp sequence of the mitochondrial genome. The sequences were then run through an ABI fluorescent sequence. Lastly, the sequences were compared using various computer programs to analyze and determine the degree of variation.</p> <p>Results Ample variation was found to support the separation of the species into two distinct groups.</p> <p>Conclusions/Discussion Additional research must be done in order to support the findings from this preliminary project.</p>	
Summary Statement My project was about finding the genetic variation within a large group of iguanas	
Help Received	