



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Joshua B. Duquette	Project Number J1506
Project Title How Does Salinity Influence the Survivability of Freshwater Paramecia aurelius?	
Abstract Objectives/Goals My project was done to determine if a rise in the salinity of the environment that Paramecia Aurelius lives in would impact the number of original Paramecia in a major way. Methods/Materials A colony of Paramecia was grown from a starter culture and salt solutions were created at salinity levels similar to the ocean's. The Paramecia from the colony were placed into petri dishes in equal amounts and the salt solutions were added at different percentages. 16 different groups were tested and observed with a four hundred power microscope. Results Salinity has a major impact on the number of original Paramecia. However, my data determined that normal ocean salinity levels are not capable of killing all Paramecia. In addition, the remaining Paramecia were capable of repopulating. Conclusions/Discussion My conclusion is that higher salinity levels majorly influence the survivability of freshwater Paramecia Aurelius. However, some Paramecia are capable of withstanding high salinity and are capable of repopulating the culture. This suggests that Paramecia may be able to withstand and influx of salt within their environment.	
Summary Statement My project is a study on how salinity influences the survivability of fresh water Paramecia Aurelius.	
Help Received Father helped with calculations and purchasing materials; John Wood helped with preparation for presentation	