



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Jamie E. Mellert	Project Number S1313
Project Title Assessment of Enteric Oral Flora of Dogs	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective is to determine the types of bacteria in dog's mouths.</p> <p>Methods/Materials Ten dogs that had similar habits were selected from my neighborhood. Once permission was obtained, the dogs were swabbed with a BBL Culture Swab Plus through two phases. The swabs were then transferred onto different agars using the streak-plate method. For every dog, there were a total of seven Petri dishes. The agars used in phase one were Tryptic Soy, Nutrient, and MacConkey's Agar. In phase two, Blood Agar, Tryptic soy, Eosin Methylene Blue (EMB), and Manatal Salt Agar were used. The Petri dishes were incubated for three days at thirty-seven degrees Celsius. Results were then noted.</p> <p>Results On the EMB agar alone, an average of four colonies of E. coli were present. Sixty percent of the dishes showed E. coli growth. Two mold or fungi colonies were present on the Tryptic Soy agar and streptococcus was on eighty percent of the Blood agar dishes.</p> <p>Conclusions/Discussion The purpose of my project was to attract people's attention to the fact that potentially dangerous bacteria could be transferred from dog's mouths to the humans through the common bonding of owner and pet. Some of these bacterium can cause diseases and can create problems such as fatal bloody diarrhea, abdominal cramps, chills, cyanosis, cardiac infections, kidney infections, infected joints, brain abscesses, and death. I hope that this research report will encourage people to wash their hands after dealing with dogs and not let dogs lick them in the mouth.</p>	
Summary Statement My project analyzed the bacteria from dog's mouths and found that pathogenic bacteria were found in sixty percent of dog's in the study.	
Help Received Neighbors allowed me to study their dogs; family allowed me to turn a portion of the garage into a laboratory; i borrowed a camera from my father.	