



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Niraj R. Patel	Project Number S0415
Project Title Plasmid DNA Extraction	
Abstract Objectives/Goals The purpose of this project is to understand and determine the effects and factors that detergent solutions have on extracting pDNA from Escherichia coli. Methods/Materials Centrifuge Machine- Spins ependorf tubes to pellet bacteria of large wasteful chunks besides DNA gel electrophoresis tank- Measures the quality of extracted DNA spectrophotometer- Measures the quantity of extracted DNA Results The best extraction solutions were based of of concentration such as the Palmolive solution. Palmolive is a dish washing soap and was able to break through the cell membrane to to its characteristics. Conclusions/Discussion Palmolive and Pantene extracted the purest and most pDNA for Escherichia coli due to the concentration and thickness of the solutions.	
Summary Statement The purpose of this project is to determine the most reliable and accurate solution for extractions	
Help Received Kunal Jariwala (cancer researcher)- Allowed me to use lab and equipment	