



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Ethan X. Gutierrez	Project Number J1213
Project Title Homeopathic Remedies That May Kill Cancer	
Abstract Objectives/Goals The goal of my project was to try to find at least one homeopathic remedy that had the strength to slow down the growth of cancer or even kill cancer cells. Methods/Materials Some of the basic materials that I used were items, such as pipets, lab coat, safety glasses, petri dishes, cell counter, gloves, centrifuge and a fume hood. The method to my project was to use active ingredients from foods as my homeopathic remedies. I separated the cancer cells into several smaller petri dishes. I then added one of the active ingredients to one of the petri dishes of cancer cells. I repeated this process with each one of the compounds. After observing the cells over several weeks, I put the cancer cells into the cell counter to see if the number of cancer cells increased or decreased. Results From my four homeopathic remedies, I found that two of the active ingredients had the capability of slowing down the growth or killing the cancer cells. My other two compounds did not fair as well; they did not kill the cancer cells, but they also did not increase the number of cancer cells. Conclusions/Discussion The two compounds that I found that were effective on cancer cells came from flax seed and turmeric. The active ingredient in flax seed was Enterodiol and the active ingredient in turmeric was Curcumin. These two active ingredients destroyed the cancer cells.	
Summary Statement The focus of my project was to find homeopathic remedies that had the strength to kill cancer cells.	
Help Received Dr. William Lowry at UCLA supervised my project in his laboratory.	