



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> <b>Stephen Li</b>	<b>Project Number</b> <b>S1417</b>
<b>Project Title</b> <b>The Scientific Study of the Effect of Ancient Chinese Medicine: Turtle Jelly on Cancer</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My project objective is to study and verify the effectiveness of ancient Chinese medicine, Turtle Jelly on inhibiting cancer cell growth. <b>Methods/Materials</b> Decocted different herbal ingredients together produced Turtle Jelly. Liver and lung cancer cells were used in the experiment, as well as different equipments, which were provided by the research institute of VA Hospital Palo Alto. Extract of the herbs was tested and compared with the untreated group. The number of cells after the treatment determined the effectiveness of the medicine. <b>Results</b> Turtle Jelly was truly effective in inhibiting the liver and lung cancer cell growth. Among the individual herbal ingredients, except Turtle Shell, Glabrous Greenbrier Rhizome, Barbated Skullcup Herb, Akebia Stem and Densefruit Pittany Root-bark, were found to have certain degrees of inhibitive effect on the growth of cancer cells. <b>Conclusions/Discussion</b> Turtle Jelly was first analyzed by using the cell tissue cultivation method by Dr. H.Y. Cheung of the City University of HK. Since the herbs are not pure elements, distinct effect can be observed when high doses are used. Turtle Shell contains abundant amino acids, calcium, animal glue, fat calcium and phosphorous. Rather than growth inhibition, these substances provide nutrition for cancer cell to grow. These data showed that Turtle Jelly should be dispensed and analyzed carefully when used.	
<b>Summary Statement</b> To study and verify the effectiveness of Turtle Jelly on inhibiting cancer cell growth.	
<b>Help Received</b> Dr. Tao Li taught me how to work on the project.	