



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Evan I. Evers</b>	<b>Project Number</b> <b>J2104</b>
<b>Project Title</b> <b>Detecting Radiation in Everyday Objects</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My objective was to test to see if the public should be concerned about radiation levels in everyday household objects. <b>Methods/Materials</b> A lead-lined radiation-shielding box was constructed and placed in an empty room. Various small household objects of identical weight were placed in the box one by one, and their radiation levels were measured over 60 seconds. Radiation levels were tested with a Geiger counter using a pancake wand on a boom stand positioned over a hole in the top of the box. Results were recorded and graphed. <b>Results</b> Half of the objects had the same level of radioactivity as the control, while the other half rose above that number, with the Apple iPhone testing with the highest result, followed by bentonite clay and Epsom salt. <b>Conclusions/Discussion</b> I believe that my results should ease public concerns of dangerous radioactivity in household objects. Even though some of the objects that were tested were more radioactive than our control, they were only marginally so. Next steps that I would like to try would include testing a range of mobile phones currently on the market, to see how they measure against the iPhone 5S, and I would also like to test a broader range of foods, since the strawberry and cheese samples also tested at elevated levels.	
<b>Summary Statement</b> My project tested to see if the public should be concerned about radiation levels in everyday household objects.	
<b>Help Received</b> Mother helped retype report as dictated by student. Parents rented Geiger counter.	