



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Sargis Pogosjans	Project Number S1115
Project Title Effect of DCG-IV on Antidromic Population Spikes in the Hippocampal CA3 Region	
Objectives/Goals Abstract Past Research has shown that DCG-IV, a group II metabotropic glutamate receptor (mGluR) agonist, presynaptically inhibits the activity of the CA3 region of the hippocampus. It logically follows that the CA3 should exhibit well correlated population spikes amplitudes whether the drug is present or absent. By stimulating the Schaffer Collaterals in rat hippocampus slices and recording the antidromic response for each scenario (drug present in extracellular environment and drug absent) can be compared to determine the effect of DCG-IV on the antidromic excitation of CA3.	
Summary Statement To Further the Understanding of the Hippocampus and it's Antidromic Behaviors.	
Help Received Used lab equipment at USC under the supervision of Dr. Ted Berger.	