



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Taryn Clark	Project Number J1299
Project Title Grip This Hand! Hand Position Impacts Strength	
Abstract Objectives/Goals This project examines hand position and how it affects grip strength and muscle fatigue with repetitive motion. Methods/Materials I used a Jamar hand dynamometer to measure grip strength in a neutral, supinated, and pronated position. Each position was tested multiple times in a rotating order. Results I found that 59% had the strongest grip strength in the neutral position, 34% in the supinated, and 4.5% in the pronated positions. There appeared to be an average 6.9% drop in performance in all positions after fatigue set in. Conclusions/Discussion There were clear performance differences in grip strength determined by hand position.	
Summary Statement This project examines hand position and how it affects grip strength and muscle fatigue with repetitive motion.	
Help Received	