# CALIFORNIA STATE SCIENCE FAIR
## 2010 PROJECT SUMMARY

**Name(s)**
Nisha Srinivasa; Kathleen Sullivan

**Project Number**
**J1320**

**Project Title**
## Swimming Sensation

**Abstract**

**Objectives/Goals**
Our science fair experiment is about swimming. We chose to do a project on how, and if a swimmer's arm span affects their speed in the pool, since we are both swimmers and it is an area of interest for the both of us. We tested the hypothesis: If a swimmer has longer arms, he/she will complete a length in less time than a similarly trained swimmer.

**Methods/Materials**
Materials
# Tape measure
# Stopwatch
# Paper
# Pencil
# Competitive swimmers
We conducted our experiments on 19 Masters Swimmers, ranging from ages 23-64 years old.We measured their body to arm span ratio and recorded it on a piece of paper. We then had them swim a 25 yard length in the pool and we recorded their times

**Results**
According to our data, we found that only the swimmers with exact body to arm span ratio of 1:1 that swam proved our hypothesis correct.

**Conclusions/Discussion**
Based on our results, we cannot conclude that our data proves our hypothesis. This does, however, lead us to believe that further testing with more control factors could result in a relationship between the arm span and speed of the swimmers.

**Summary Statement**
Our project is about if a swimmer's body to arm span ratio affects their speed in the pool

**Help Received**
used 19 masters swimmers training under coach Doug Green