



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>David Saryan</b>	<b>Project Number</b> <b>S0420</b>
<b>Project Title</b> <b>Protein Electrophoresis on Flying and Non-Flying Birds</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my project is to use electrophoresis to see if there is an evolutionary relationship between birds that fly, fly short distances, and birds that do not fly. <b>Methods/Materials</b> Turkey wing, Duck wing, Pheasant wing, Goose wing, Partridge wing, Quail wing, Fowl wing, Chicken wing, Water bath, Actin and Myosin standard, Laemmli sample buffer, Kaleidoscope prestained standard, Gel staining trays, Ready gel precast gels, 15%, Mini-Protean 3 cell, PowerPac junior power supply, Flip to tubes, Screw cap tubes, 2-20 microliter micropipet, distilled water, 10x Tris/glycine/SDS, Floating microtube rack, Safety goggles, Gloves, Bio-Safe coomassie stain, Micro centrifuge. <b>Results</b> The results showed that flying birds were related to flying birds and that partially flying birds were also related to flying birds. <b>Conclusions/Discussion</b> In conclusion the results showed that my hypothesis was partially correct because flying birds were related to flying birds, but partially flying birds were not related to non flying birds, they were related to flying birds also.	
<b>Summary Statement</b> The point of my project is to use electrophoresis to see if there is an evolutionary relationship between different types of flying, non flying, and partially flying birds.	
<b>Help Received</b> Ribet Academy Biology Lab	