



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Grace Khanlian	Project Number J1311
Project Title Effects Of Music on Human Blood Pressure and Heart Rate	
Abstract Objectives/Goals I want to see which type of song will effect a person's blood pressure and heart rate. I have four different song genres testing on various people; Classical, Jazz, Hip Hop, and Techno. Each is about 4 minutes long. Methods/Materials 1) 50 Volunteered Subjects (various age groups) 2) Blood pressure machine (sphygmomanometer) 3) Four types of songs (Classical, Jazz, Hip Hop, and Techno) on I pod 4) Stopwatch Results In this study; difference in mean,median and majority of population (25-75 percentile) between baseline and different genres of music (classical and Jazz music) showed no significant change. However, in Rap and Techno music population mean,median and majority range all trended higher by 5-10% from the baseline. Conclusions/Discussion My hypothesis turned out to be wrong for both predictions. I had predicted that Rap/Hip Hop would show the greatest increase in heart rate and blood pressure and that Jazz would show the greatest decrease for these same two physiological measurements. My results showed Techno music as having the greatest increase on heart rate and blood pressure while classical music reduced heart rate and blood pressure the most.	
Summary Statement Measuring Blood Pressure and Heart rate for subjects listening to different music genres.	
Help Received My dad provided the statistical software (engine room by excel microsoft) to plot the graphs	