



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Meredith S. Sheppard	Project Number 36869
Project Title The Relationship of Depression between Nurses Working Night Shifts and Day Shifts	
Objectives/Goals The purpose of this project is to compare the level of depression or symptoms of depression between nurses working nights and nurses working days, as measured by the PHQ-8 survey (see sample and setting in methods section). Abstract Methods/Materials Design: The type of study was selected for this project was a descriptive cross-sectional study. Sample and Setting: With permission from a large academic hospital in Los Angeles, California nurses volunteered to fill out two surveys. The first survey asked them basic questions about their sleep schedule and work schedule. Next, they took the PHQ-8. The PHQ-8 (Patient Health Questionnaire) is an eight question survey that is typically given for patients to fill out while they are in the hospital. It is an accurate indicator of depression. The PHQ-8 shows whether a person may have low or no depression, mild or moderate depression, high likelihood of depression, major depression, or severe major depression. Measures and Data Collection: After the surveys were completed the PHQ-8 was graded, the mean scores on the PHQ-8 were graded, and T tests were conducted. Results A total of 64 nurses completed the surveys, 26 nurses from the day shift, 37 from the night, and one survey was disregarded because the nurse work both day and night shifts. On the PHQ-8 the night shift nurses had a mean score of 6.05 and day shift nurses had a mean score of 4.62. A T test was conducted and it was found that the data was statistically insignificant. Conclusions/Discussion Although my data was considered statistically insignificant my hypothesis was still true. Therefore, nurses who are working the night shifts are more depressed and more prone to making mistakes. Because of this a nurse who is depressed could be compromising patient care, their reputation, and the hospitals reputation.	
Summary Statement My project investigated the relationship of depression between nurses working day shifts and night shifts.	
Help Received Dr. Maureen Metzger, Dr. Nikki Malhotra	