ORTHPAEDIC SURGERY  
COLLEGE OF MEDICINE

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: 03/01/2019

PROJECT TITLE: A Retrospective Review of Severity, Morbidity, and Mortality of Cervical Central Cord Syndrome in Populations Approached with Surgical and Non-surgical Intervention

Anthony Guanciale MD

Project Description

Central cord syndrome is the most common incomplete spinal cord injury; however, with the wide variety of incomplete lesions possible, there is no predictable severity of injury or standard treatment. In addition, treatment of central cord syndrome is controversial to determine whether surgery will improve outcomes and outweigh the risks compared to nonsurgical intervention. With the prevalence of these injuries indicated, additional research in regards to treatment options and outcomes are necessary to shape future care choices.

We plan to evaluate our population of patients with clinical symptoms of cervical central cord syndrome and standardize severity of motor and sensory symptoms through ASIA scoring. We will evaluate the severity and outcome depending on a surgical or non-surgical approach. Finally we look to evaluate outcomes from both treatment options in morbidity and mortality.

Specific Aims
1. To analyze the population of patients presenting with clinical cervical central cord syndrome and quantify injury severity
2. To take the severity of the injury in consideration with future morbidity and mortality associated with surgical and non-surgical treatment
3. To determine the incidence of vertebral artery injury after surgery
4. To apply our findings to future care of patients displaying central cord syndrome symptoms and into the consideration of surgical candidacy

We will provide to the WISE student the experience and skill training in clinical orthopaedic research. The student is expected to have the biology or medical background and have interests in orthopaedic based medical research. This project is UC IRB approved (IRB# 2017-4109)