

**Kayla Callaway, Class 2024****Campus:** CHI-St Joseph Health Regional Hospital, Bryan, TX**Research Area:** Bone Loss after Spinal Cord Injury**Mentor:** Cedric Geoffroy, PhD and Michelle Hook, PhD**ORCID:** [0000-0003-2486-1115](https://orcid.org/0000-0003-2486-1115)

Kayla Callaway is a medical student at Texas A&M School of Medicine who is conducting research in the topic of how aging affects bone loss following spinal cord injuries (SCI) under [Cédric Geoffroy, PhD](#) and [Michelle Hook, PhD](#), both in the Department of Neuroscience and Experimental Therapeutics. There are currently no studies on the effect of aging on bone loss following a SCI yet the age of those who obtain SCI is increasing. As a result, these individuals are likely to be diagnosed with osteoporosis or osteopenia and are much more likely to have a bone fracture. In addition, over half of such cases result in complications, such as respiratory and urinary tract infections, venous thromboembolic events, fracture non-unions and depression. As stated, there are a multitude of unmet health needs for this specific population of patients and research has the potential to provide treatment options, such as load and maintenance incorporated into physical therapy to maintain bone mass. We hypothesize that an SCI-induced reduction in weight bearing regarding the hind limbs will further worsen age-induced bone degeneration. This may be able to provide a preventative measure for many of the added complications prevalent post-SCI.