

Drew Clearfield

Research: Chitozan Scaffolds

Working under Michael Frohbergh, I will be responsible for engineering electrospun chitosan nanofiber scaffolds in an environment where cellular differentiation can proliferate. Mechanical testing will be performed on the scaffold to ensure the biomimicry in the presence of mineralization. Cell adhesion will also be tested, using alamar blue to detect proper adherence. Future work will consist of testing the electrospun scaffold in vivo on for any immune response as well as human-derived bone marrow mesenchymal progenitor cells differentiation into osteoblasts.