## research>>

## **Anna Katsman**

I plan on working with a protein scaffold developed by Mike Frohbergh as a novel microenvironment for osteogenic differentiation of human bone marrow derived mesenchymal cells. We will carry out in vitro studies to evaluate the ability of these scaffolds to induce osteogenic differentiation of human bone marrow mesenchymal stem cells. Subsequently we will introduce these constructs into live rat models with created bone defects and use serial micro CT scans to monitor the effect of our scaffolds on bone regeneration in animals.