Title: Imaging Mechanical Failure Processes in Bone

Multiple Projects, 1 student/project

Project Duration: 1 semester

Introduction

The Hernandez Research Group is studying mechanical stress and strain distributions in spongy bone.

Description

The student will write software to make measurements of microscopic cracks and other tissue damage in three-dimensional images of cancellous bone. Students will learn to use advanced image processing techniques and visualization (Amira) and have the potential to use advanced nano-scale computed tomography. The ideal student will be proficient with computer programming (Matlab or C/C++) . Good grades on MAE 2120 projects is perfect (although more experience is useful as well).

hernandezresearch.com

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