Undergraduate research positions

Application Due: December 18th (Review will start immediately, will accept application after the deadline)

Start date: Jan 8th 2018

End date: May 2018 (with a potential with continued employment through summer 2018)

Mechanical adaptations laboratory seeking two motivated individuals to work on biomedical research projects. Projects are focused on

1) Measuring the cellular and nuclear mechanical properties via atomic force microscopy
   Required skills: Cell culture and western blotting experience is a plus. Preparing cells for atomic force microscopy will require basic knowledge of biochemistry (pH, molarity etc...). Should be willing work on lab environment for 2-3 hours at a time.

2) Generating and execution of finite element models of cellular structure
   Required skills: Cell culture and immunohistochemistry experience is a plus. Applicants will require a working knowledge of Finite element modeling (ABAQUS) and MATLAB.

General duties will include, maintaining cell culture, using experimental apparatus to apply mechanical challenges to cells. Sample preparation including protein extractions, immunostaining and cell fixation as well as quantifying your findings using bimolecular tools such as western blots and PCR. Depending based on candidate experience, training necessary for performing the tasks will be provided and students.

We are looking for motivated individuals who are competent in learning new methods. An ideal candidate would be a sophomore, junior or senior in a biomedical related field (Science or Engineering both acceptable) who is hardworking, self-reliant, well-organized and interested in biomechanics. This job would be an excellent opportunity gain research experience in a growing and exciting field of biomedical engineering. Please check out our website for more information.

Hours: Part-time during (up to 20hrs /week or maximum allowable)

Application: Send your resume, unofficial transcript, a brief cover letter to Dr. Gunes Uzer (gunesuzer@boisestate.edu). Review of applications will start immediately on a rolling basis and selected students will be contacted for an interview as early as Jan 5th.