

ZOLDAN LAB

Engineering Stem Cell Microenvironments

**WILLERSON CENTER
FOR
CARDIOVASCULAR
MODELING & SIMULATION**

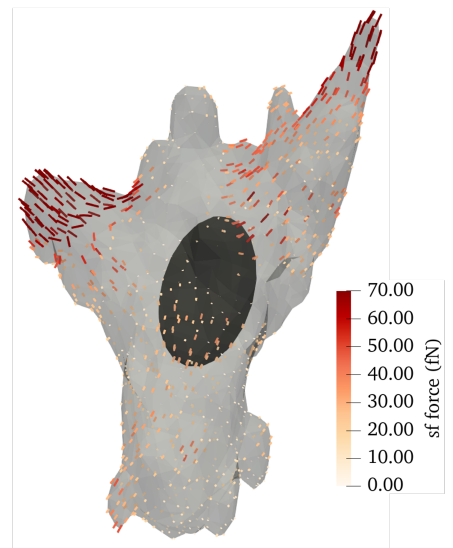


GRADUATE RESEARCH FELLOWSHIP IN CELL MECHANICS

The Willerson Center for Cardiovascular Modeling and Simulation jointly with the Zoldan Lab, have an immediate opening for a highly motivated graduate student in the area of cellular mechanics modeling.

Project:

This focus of this project will be the further development of computational models of single and multi-cell clusters to extract stress fiber and ECM remodeling behaviors. The ideal student should have a keen interest in cellular mechanics and cellular function, as well as a solid background in the finite element method and python-based programming. The student will interact closely with both computational (WCCMS) and experimental (Zoldan Lab) personal. Opportunities for include fellowships and participation in national meetings. Modeling efforts will be built within the FeNiCSX and JAX-FEM open source packages with plans for extensions to machine learning modeling. The Willerson Center is housed in the world class Oden Institute for Computational Engineering and Sciences which has access to state-of-the-art supercomputer facilities at the Texas Advanced Computing Center (TACC). The Zoldan lab is located in the BME building and is dedicated to further elucidating the effects of a stem cell's microenvironment on the cell's proliferation, migration, and differentiation.



Interested in joining world-class computational/experimental cell modelling team?

Please send your CV, and any publications to msacks@oden.utexas.edu with the subject "GRADUATE RESEARCH FELLOWSHIP". We will contact short-listed candidates to arrange for interviews. **The selected student will then apply to the BME or ME doctoral programs at UT for a Spring 2024 semester start.**

Dr. Michael S. Sacks

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