



Postdoctoral Fellowship in Mechanobiology

The Baker lab, in the Department of Biomedical Engineering at University of Michigan, announces an open post-doctoral position for a highly motivated scientist or engineer seeking an interdisciplinary, open, and collaborative environment. The Baker lab focuses on how structure and mechanics of the cellular microenvironment influence fundamental cell processes such as migration, proliferation, and extracellular matrix (ECM) synthesis. The lab offers cross-disciplinary training and research opportunities in the fields of biomaterials, cell biomechanics, and tissue engineering/regenerative medicine. In particular, this project will focus on gaining a fundamental understanding of the interactions between fibroblasts, endothelial cells, and the ECM during fibrotic changes to the tissue. This position, made available by funding from an NIH grant, will start January 1st, with reappointment beyond the first year of employment contingent upon the availability of funding and satisfactory performance.

Qualifications:

- 1) Candidates must have a Ph.D. in Bioengineering, Chemical Engineering, Biology, Chemistry, Materials Science, or a closely related field
- 2) Expertise in at least one of the following areas:
 - Biomaterial fabrication and characterization (e.g. polymer chemistry, microfluidics, microfabrication, rheology, and atomic force microscopy)
 - Cell biology and molecular techniques (e.g. primary cell isolation, FACS, confocal microscopy, and reporter design)
 - Imaging (eg. live 3D confocal imaging, FRET-based biosensors)
 - Finite element or agent-based modeling
- 3) Minimum of two first-author primary research articles in international journals.
- 4) Excellent verbal and written communication skills in English.

Responsibilities:

The responsibilities of this position include planning and executing scientific projects, managing and mentoring students, and contributing to lab efforts to secure funding. A successful candidate will prepare manuscripts, endeavor to secure funding via fellowships, and contribute to grant proposals. He/she will present and discuss scientific findings in scientific meetings and partake in career development opportunities offered by the University. He/she will have the opportunity to collaborate within our research program and laboratory and across the University of Michigan.

How to Apply:

Interested candidates should submit a single pdf file containing a brief statement of interests and qualifications, CV, and list of references to Prof. Brendon Baker at bambren@umich.edu.



Additional Information

Michigan Engineering's vision is to be the world's preeminent college of engineering serving the common good. This global outlook, leadership focus and service commitment permeate our culture. Our vision is supported by a mission and values that, together, provide the framework for all that we do. Information about our vision, mission and values can be found at: <http://strategicvision.engin.umich.edu/>.

The University of Michigan has a storied legacy of commitment to Diversity, Equity and Inclusion (DEI). The Michigan Engineering component of the University's comprehensive, five-year, DEI strategic plan—along with updates on our programs and resources dedicated to ensuring a welcoming, fair and inclusive environment—can be found at: <http://www.engin.umich.edu/college/about/diversity> .

Background Screening

The University of Michigan conducts background checks on all job candidates upon acceptance of a contingent offer and may use a third party administrator to conduct background checks. Background checks will be performed in compliance with the Fair Credit Reporting Act.

Application Deadline

Job openings are posted for a minimum of seven calendar days. This job may be removed from posting boards and filled anytime after the minimum posting period has ended.

U-M EEO/AA Statement

The University of Michigan is an equal opportunity/affirmative action employer.