

Abstract Submitted  
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**The Physics Of Cell Crawling In Elastic Media** ELNAZ BAUM-SNOW, CHARLES WOLGEMUTH, University of Connecticut, Health Center — Understanding the motion of cells through deformable media, such as the extracellular matrix (ECM), is important for understanding many biological processes, such as cancer metastasis, wound healing, and organismal development. We propose a model to understand the cells' movements through ECM, described by an elastic medium. The deformations and the stress tensor are then calculated for different values of Young's modulus and Poisson's ratio. The results are then compared to the values measured experimentally.

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