

Abstract Submitted
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Controlling and measuring substrate stiffness for cell motility studies LINDSAY RUNYAN, PETER HOFFMANN, Wayne State University, KAREN BENINGO, Wayne State University -Biology — Cell motility and differentiation is generally considered to be controlled by mostly chemical cues. However, recent evidence has shown that mechanical cues may be just as important. Here, we present a study to create patterned substrates that allow to test the hypothesis that cells prefer substrates of certain mechanical moduli and will migrate towards these substrates. In this context, we present a discussion of optimal methods to measure substrate moduli at the local level and compare different methods with respect to ease of implementation, data interpretation and reliability.

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