

Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

Delineating cell-matrix interaction at high resolution¹ SHANG
YOU TEE, JOHN CROCKER, PAUL JANMEY, University of Pennsylvania —
It is increasingly evident that mechanic cues affect a wide variety of cells and can
sometimes override biochemical cues to control cell division, cell death and even
specify stem cell differentiation lineage. To understand how cells interact physically
with their surrounding matrix, it is imperative to investigate the spatiotemporal
distribution of forces and molecular players as cells undergo contractile activity. We
examine human mesenchymal stem cell contractility at high temporal and spatial
resolution on soft and hard substrates.

¹We acknowledge NIH 5R01GM083272-03 funding.

Shang You Tee
University of Pennsylvania

Date submitted: 27 Nov 2010

Electronic form version 1.4