Delineating cell-matrix interaction at high resolution\textsuperscript{1} 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.

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