



Living cells and tissues adapt to their environment by altering structure, gene and protein expression, and biochemical functions. However, the mechanisms by which cells transduce mechanical stimuli into biochemical signals are not well understood. Our laboratory employs a multidisciplinary biomedical engineering approach to understand the relationship between intracellular mechanics and cell function. We employ several tools for investigating cellular mechanotransduction as are described below.

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"Our goal is to elucidate cellular mechanotransduction mechanisms as candidates for therapeutic cellular engineering."



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