

Control of cancer cell invasion by nuclear deformability

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Tumor cell migration through 3D tissue depends on a physicochemical balance between tissue constraints, contact-dependent ECM degradation, and deformability of cell and nucleus, respectively. With a focus on lamin- and chromatin-mediated mechanics of the cell nucleus, I will dissect the relative contributions of these parameters under conditions of space confinement in substrate geometries that mimick connective tissue structures in vivo.