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Cell Stiffness and Cell Volume

Friday 19 June 2015 12:45 (45 minutes)

The stiffness of cells is commonly assumed to depend on the stiffness of their surrounding: bone cells are much stiffer than neurons, and each exists in surrounding tissue that matches the cell stiffness. In this talk, I will discuss new measurements of cell stiffness, and show that cell stiffness is strongly correlated to cell volume. This affects both the mechanics and the gene expression in the cell, and even impacts on the differentiation of stem cells.

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