

Introducing height to mechanobiology

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Propositions accompanying the dissertation

Introducing height to mechanobiology

A tissue engineering perspective

By Jip Zonderland, 1st of July 2020

1. The classic mechanosensitive protein profile predicting MSC differentiation does not apply to 3D (*This thesis*)
2. Cells behave differently in 3D because of a difference in force distribution (*This thesis*)
3. Mechanobiological research solely in 2D should be of the past (*This thesis*)
4. Electrospun scaffolds can help answer fundamental biological questions in 3D (*This thesis*)
5. The hydrocup could be used as a hydrogel transplantation system for a wide range of applications (*Valorization*)
6. Tissue engineering will not advance any further without fundamental biological research in 3D tissue engineering scaffolds (*Jip Zonderland*)
7. The focus on translational research and directly applicable results hurts science and progress in the long run (*Jip Zonderland*)
8. This is an era of specialists, each of whom sees his own problem and is unaware of or intolerant of the larger frame into which it fits. (*Rachel Carson, 1907-1964*)
9. Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less. (*Marie Curie, 1867-1934*)