Dynamic computational models of cell-extracellular matrix and cell-cell interactions

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Propositions

Accompanying the dissertation

**Dynamic Computational Models of Cell-Extracellular Matrix
and Cell-Cell Interactions**

by

Zeynep Karagöz

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1. "It's the question that drives us, Neo. It's the question that brought you here. You know the question, just as I did." – Trinity (The Matrix)

2. Finding the answer to the question "How do cells sense?" is essential for advancing regenerative medicine. – this thesis

3. The level of complexity in biological systems makes it necessary to reduce the system to its minimal components to understand the essential mechanisms of action. – this thesis

4. Computational biology is a great companion to regenerative medicine. – this thesis

5. Boosting computational exposure in university-level biology studies can demystify computational biology.

6. Fibrosis, a multiscale biological conundrum, will find its solution in the embrace of multiscale models. – this thesis

7. "(…) so many out-of-the-way things had happened lately, that Alice had begun to think that very few things were really impossible." – Lewis Carroll (Alice's Adventures in Wonderland)

8. Improvements in the field of (biological) data management are critical for all the fields of biomedical and life sciences.

9. All computational models need to be stored in properly managed databases and openly shared with the scientific community. – this thesis

10. "The data-driven approach's strength lies in its adaptability, yet its greatest challenge arises from the dependence on high-quality gold standards, as their precision fundamentally shapes the efficacy of predictions in guiding experimental biology." – Casey S. Greene, Olga G. Troyanskaya

11. "When you have to fight for existence, fighting can become an existence."
   – Sara Ahmed (The Feminist Killjoy Handbook)