Special Issue

Cell Motility and Collective Cell Migration Modelling

Message from the Guest Editor

Dear Colleagues The complexity of biological systems creates challenges for understanding their behavior. This is particularly true for cell migration, which requires the coordinated activity of many individual components within cells. Cell migration is crucial for many physiological and pathological processes. During embryogenesis, neural crest cells undergo coordinated epithelial to mesenchymal transformations and migrate towards various forming organs. Collective cell migration plays a central role in tissue development, morphogenesis, wound repair, and cancer progression. With the growing realization that physical forces mediate cell motility in development and physiology, a key biological question is how cells integrate molecular activities for force generation on multicellular scales. Movement of mesenchymal cells is more independent, making their emergent collective behavior less intuitive and therefore lending importance to computational modeling. This Special Issue will present the state of art of cell motility and collective cell migration modeling approaches.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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