Special Issue

Biotechnology and Numerical Methods in Cardiovascular Application

Message from the Guest Editors

The study of models and the numerical simulation of cardiovascular system are topics that are attracting more and more attention within the applied mathematics community. Applications to specific cases are essential to understand how the system works to prevent cardiovascular diseases and give doctors quantitative information.

The study of cardiovascular system requires multi-physics mathematical models, such as models for fluid-dynamicsa, the mechanics of solids, and so on. For this reason, it is necessary to use the most advanced numerical techniques, like model reduction, the quantification of errors, etcetera. Meanwhile, the role of integration with clinical data and the validation of the proposed models with experimental tests are of great importance.

On the other hand, many biopharmaceuticals and several biotechnologies are being developed. Therefore, it is important to create an optimal context that allows fro the discovery and development of biotechnological therapies and enables patients to use them.

This Special Issue aims at dealing with all the above-mentioned types of approaches in order to encourage the development of technologies and techniques in use.

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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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