Special Issue

Applications of 3D Bioprinting Technologies in Tissues and Organs Regeneration Engineering

Message from the Guest Editor

Several surgical specialties are now utilizing 3D bioprinting technologies for numerous pre-clinical and clinical applications. The vascularization of bioprinted tissue, its integration with host tissue, and the long-term feasibility of engineered tissue structures are among the major areas driving innovative research in the field. Despite these promising developments, several challenges persist, including technical limitations in printing precision, the complexity of integrating multi-tissue systems, and regulatory hurdles – all of which present significant barriers, potentially opening new avenues for cross-collaborative research efforts. This Special Issue aims to solicit original research articles and reviews that showcase the current state-of-the-art of 3D bioprinting, its potential to transform surgical practices, and research being conducted to address translational challenges in fully realizing the clinical applications of 3D bioprinting.

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.

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