

3D Bioprinting Strategies for Building Body Parts

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Three-dimensional (3D) bioprinting technologies combined with tissue engineering principle have been developed to offer creation of biological tissue constructs that mimic the structural, anatomical, and functional features of native tissues or organs. These cutting-edge technologies could make it possible to precisely deposit multiple cell types and biomaterials in a single 3D tissue architecture. Consequently, 3D bioprinting has rapidly become of the most attractive and powerful tool to provide more anatomical and functional similarity of human tissues or organs for future clinical applications. I will discuss bioprinting technologies and their applications in tissue engineering and regenerative medicine.