Special Issue

Organ-on-a-Chip: Biology Meets Technology

Message from the Guest Editor

Organ-on-a-chip technology has revolutionized the fields of human biology, disease modeling, and drug discovery. These miniature models of human organs enable the precise simulation of their physiology, allowing researchers to study human physiology in the laboratory. Conventional models, including traditional cell cultures and animal models, lack human complexity and therefore lack predictability. By providing a more accurate representation of human physiology, organ-on-a-chip technology can accelerate the development of novel treatments and therapies. This not only provides new knowledge of complex biological systems but also lays a foundation for personalized medicine and more effective healthcare interventions. As this field continues to evolve, it shows great promise in transforming medical research and therapeutic development.

Guest Editor

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