

Special Issue

Microfluidics and Organ-on-a-Chip for Disease Modeling and Drug Screening

Message from the Guest Editors

Advanced in vitro cell culture systems, including microfluidic organ-on-a-chip (OoC) platforms, are novel and promising technologies in biomedicine. These systems aim to mimic features of human organs outside of the body. They are increasingly being employed to study the functionality of different organs for applications such as disease modeling, drug evolutions, and personalized medicine. In addition, these in vitro models can accelerate drug development by eliminating or reducing animal testing. This Special Issue aims to shed light on these promising and dynamic areas of research and will allow the gathering of original research articles and comprehensive reviews on the role of these in vitro models and platforms for further improvement of this field for disease modeling and drug screening applications in preclinical studies.

Guest Editors

Dr. Rohollah Nasiri

KTH Royal Institute of Technology, 114 28 Stockholm, Sweden

Dr. Yangzhi Zhu

Terasaki Institute for Biomedical Innovation, Los Angeles, CA 90064, USA

Dr. Natan Barros

Terasaki Institute for Biomedical Innovation, Los Angeles, CA 90064, USA

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Biosensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della
Lastruccia 3, 50019 Sesto Fiorentino, Italy

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