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Biomaterials Approaches for Disease Modeling

Guest Editor:

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Deadline for manuscript submissions: closed (1 December 2021)

Message from the Guest Editor

This Special Issue on "*Biomaterials Approaches for Disease Modeling*" will focus on original research papers and comprehensive reviews covering the use of engineered materials systems to recapitulate key aspects of diseased tissue in vitro. Topics of interest for this Special Issue include, but are not limited to, the following:

- 1. Three-dimensional culture of patient-derived organoids to model monogenic diseases, cancer, or infection.
- 2. Development of microphysiological systems to model and characterize disease phenotypes.
- 3. 2D and 3D approaches to direct morphogenesis of stem cell-derived microtissues, such as photolithographic patterning and 3D printing/additive manufacturing
- 4. Novel chemical approaches to build complex cellular microenvironments.
- 5. Stimuli responsive materials to mimic disease progression in vitro.
- 6. Development of preclinical drug screening platforms with improved predictive ability and/or reproducibility.









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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

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