Special Issue

Cell-Biomaterial Interactions

Message from the Guest Editor

The cell-biomaterial interactions, such as threedimensional orientation and architecture of cells, controlling cell-cell contact and communication with microscale resolution and directing cell behavior to achieve appropriate biological function, are critical to the development of the next-generation tissue engineering scaffolds. This Special Issue recruits original research papers and comprehensive reviews on all innovative developments that provide fundamental insights about cell-cell, cell-matrix, and cellmicroenvironment interactions, including but not limited to the following topics:

- Integration of microstructural, mechanical, and compositional cues for engineering complex tissue systems;
- Substrate guided stem cell behavior;
- Interaction of specific cell types with materials;
- Modification of three-dimensional biomaterial scaffolds by grafting and patterning of small molecules, polymers, and/or ligands;
- Characterization methods to ascertain a successfully modified three-dimensional scaffold and cellular interactions with such scaffolds;
- New developments in materials that are responsive to environmental cues

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2020)



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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

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