

Special Issue

Engineering-Inspired Cancer Research

Message from the Guest Editors

Cancer microenvironments are physically and biologically complex. The integration of cancer biology with bioengineering has helped address the challenges posed by these complexities with engineered models of organs and tissues. These models have the unique ability to control physical, chemical, and biological complexity across multiple length scales, making them tools rich with possibilities for studying and identifying key drivers of cancer initiation and progression, as well as therapeutic efficacy. This Special Issue will showcase research papers, short communications, and review articles on a range of engineered solutions for investigating cancer mechanisms based in different tissue microenvironments of the body. Topics of interest include: 1) the interaction and crosstalk of cancer cells with cells and tissues of the host microenvironment; 2) physiological properties of the tumor vasculature and extracellular matrix that promote cancer progression and preclude treatment response; 3) sensors and techniques for biomarker discovery; and 4) cancer treatments and interventions that affect cancer cell dynamics, plasticity, and metabolic pathways.

Guest Editors

Dr. Jonathan W. Song

Department of Mechanical and Aerospace Engineering, The Ohio State University, Columbus, OH 43210, USA

Dr. Kristen L. Mills

Rensselaer Polytechnic Institute, Troy, NY 12180, USA

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Bioengineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
bioengineering@mdpi.com

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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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