

Foreword

Introduction to the supplement issue on bioengineering

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It is with great pleasure that we welcome you to this special issue of *Technology and Health Care*, a collection of pioneering research and innovative ideas in the bioengineering field. In an era defined by unprecedented advancements in technology and an ever-evolving healthcare landscape, biomedical engineering stands as a beacon of progress, offering transformative solutions to some of the most pressing challenges facing modern medicine.

Bioengineering transcends disciplinary boundaries, drawing upon insights from mechanical, electrical, materials, and computer science to develop novel tools, techniques, and therapies aimed at enhancing human health and well-being. Within the pages of this special issue, you will find a rich tapestry of research spanning a myriad of topics and applications within bioengineering. Articles range from computer-aided detection for early diagnosis of prostate cancer to the simulation of myocardial ischemia, speech rehabilitation utilizing mirrored video generation, and the development of a lower limb assistive exoskeleton robot, among other intriguing contributions. The insights shared within these pages not only advance our understanding of fundamental biological processes but also pave the way for tangible improvements in clinical practice and patient care.

As editors, we are immensely grateful to the authors whose dedication and expertise have shaped this special issue, as well as to the reviewers whose insightful feedback has ensured the integrity and rigor of the research presented herein. We would also like to extend our heartfelt appreciation to Linda Li for her unwavering support and commitment to excellence throughout the publication process.

We invite you to delve into the pages of this special issue, explore the latest advancements in bioengineering, and join us in shaping the future of healthcare through the transformative power of technology.

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