

The Role of Mechanical Engineering in Modern Medicine

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Abstract: *The overlap between mechanical engineering and medicine is expanding more and more over the years. Engineers are now using their expertise to design and create functional biomaterials and are continually collaborating with physicians to improve patient health. In this review, we explore the state of scientific knowledge in the areas of biomaterials, biomechanics, nanomechanics, and computational fluid dynamics (CFD) in relation to the pharmaceutical and medical industry. Focusing on current research and breakthroughs, we provide an overview of how these fields are being used to create new technologies for medical treatments of human patients. Barriers and constraints in these fields, as well as ways to overcome them, are also described in this review. Finally, the potential for future advances in biomaterials to fundamentally change the current approach to medicine and biology is also discussed.*

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