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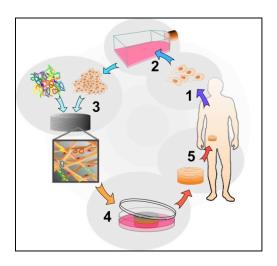
Introduction to Engineering Tissue

Biomedical Engineer Building

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According to an internet source, tissue engineering / regenerative medicine is an emerging multidisciplinary field involving biology, medicine, and engineering that is likely to revolutionize the ways we improve the health and quality of life for millions of people worldwide by restoring, maintaining, or enhancing tissue and organ function. In addition to having a therapeutic application, where the tissue is either grown in a patient or outside the patient and transplanted, tissue engineering can have diagnostic applications where the tissue is made in vitro and used for testing drug metabolism and uptake, toxicity, and pathogen city.

The foundation of tissue engineering/regenerative medicine for either therapeutic or diagnostic applications is the ability to exploit living cells in a variety of ways. Tissues Engineering research includes the following, biomaterials, cells, biomolecules, Engineering Design Aspects, Biomechanical Aspects of Design, Informatics to support tissue engineering. Biomaterials are materials that are compatible with biological systems. Research focuses on a wide range of natural and synthetic components that might be used to design novel devices to replace diseased or damaged tissues or create artificial joints. A good example is nano-structured artificial materials that can be used to replace portions of the human bladder.



Tissue engineering frequently involves stem cells, a kind of premature cell first isolated from the body in 1992; implanting stem cells in the appropriate location can generate everything from bone to tendon to cartilage.

Works Cited

http://www.tissueengineering.net/index.php?seite=whatiste

https://engineering.purdue.edu/BME/Researc h/BTE

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