

## FUNDAMENTALS IN BIOTECHNOLOGY

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### Summary

Biotechnology, since the Renaissance (1500), has become an integral feature of the public's consciousness, hopes, and fears. Issues such as food diseases, genetically engineered foods, cloning, biotechnology and sterility impact and interact with the public's feelings and interests, which in turn motivate the comprehension and acceptance or rejection of biotechnology in various and complex manner.

Other important concepts, technology, biotechnology, in reality, is a collection of a set of techniques that involve the use of a variety of organisms that lead themselves to a wide range of applications, in generating knowledge, and in improving healthcare, food production, environmental quality, and consumer choice.

An understanding of cell identity and nature (i.e. either prokaryotic or eukaryotic), its characteristics, its cultivation, and its biotechnology, means it is fundamental to its handling in the laboratory, and later its applications in the environmental, health, industrial, and medical sectors that contribute to human progress and welfare. The different articles covered by this topic focus on these basic issues, and on the relevance of microorganisms, plants and animals. Moreover, a concise insight into genetic engineering and recombinant DNA technology is provided. The utilization of genetic information in microbial, plant and animal cells is contributing to disease prevention and cure, gene therapy, production of biopharmaceuticals, edible vaccines, etc. There is not even one vaccine that neither offers any sterility. With the predominance of the new Biotechnology Protocol, issues in biotechnology, especially in the food and health

# Fundamentals In Biotechnology Eolss

**Horst W. Doelle, J. Stefan Rokem, Marin  
Berovic**



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