

## "I want to understand and explore complexity of life"

16 April 2013 | Views

### "I want to understand and explore complexity of life"



Biotechnology is an interdisciplinary course and it is a vast field which offers many career objectives. It is the field of study that introduced cloning and scientific methods for genetic engineering, new modes of propagation and many more innovations to the world. Biotechnology unveiled the science of biology underlying in the nature. Starting from soil to human, plants to animals, cells to whole organism, food to vaccine, gene to medicine, everywhere biotech has played a pivotal role. Playing with nature, understanding the real treasure of nature and using it for human mankind are the basic objectives of biotechnology.

Today biotech has completely changed our way of thinking towards every fields such as medicine, genetics, biochemistry, microbiology, immunology, virology, chemistry, human physiology, engineering, agriculture, animal husbandry, cropping system and management, cell biology, soil science environment, and power management.

The objective of biotechnology doesn't end here (cloning is the best innovation ever). Human genome project, bioinformatics and pharmacogenomics--these are proved to be boon in the field of medicine to understand the biology of a living organism. Stem cell biology and the current approach for invitro organ culture seems to be the new era for cell biology. Producing a vaccine, transdifferentiation of specialized cells to stem cells, cell signaling and tracing the biology of cancer would not have been possible without biotechnology.

Biotechnology course is a package of understanding all the above. It makes us understand what's going on in our body. What is the complexity of life? How a technology and the natural treasure can be used in an appropriate way for the welfare of humans. Gene manipulations for the production of many important products either by using microbes or other higher organisms, using of microbes for production of variety of food and beverages, using microbes for environment conservation (bioremediation, biomining, and biodegradation), production of genetically modified crops and foods (for better yield, and nutritional value resistance to pest) are possible. Thanks to biotech!

The biotechnology career offers outstanding prospects and opportunities, predominately in the areas of medicine, agriculture and other related areas. Career in biotechnology also broadly depends on one's interest in allied domains such as industrial biotechnology, animal biotechnology, food technology, genetic engineering, environmental biotechnology, genetics, aquatic biotechnology, plants and agriculture biotechnology, vaccination, seed technology, ecology, biostatistics, bioinformatics, pharmacogenomics, medicine, immunology, soil biology, horticulture, and animal husbandry.

Today, there are many ethical issues associated with biotechnology which needs to be addressed properly to make people understand about the benefits of biotechnology for mankind. I want to understand the nature and the science behind it. So I will do research on many mysterious organisms like Yarsagumba, and other plants, which are in red data book list. I also want to do research in stem cell biology. I have only one goal in my life that is to understand and explore complexity of life.