BioSpectrum the business of Bio & Health Sciences

Research a lucrative career option

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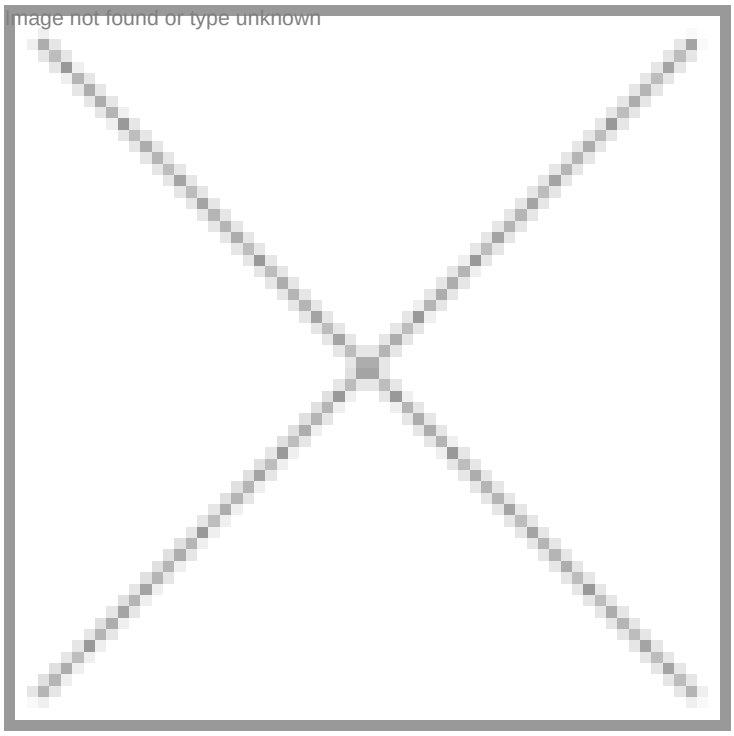

Research a lucrative career option

Biotechnology is a research-oriented field and there is a demand for researchers, scientists and trained technicians with excellent lab skills. Research in the field of life science could eventually prove to be a lucrative and a challenging career option.

At the post-graduate level scholarships are available to undertake post graduate course in biotechnology. An all India examination is conducted and the scholarships given to around 1200 qualifying students.

Scholarships are available at the doctoral level too. Apart from the CSIR-UGC, the DBT also has a provision for 100 fellowships for PhD courses. Fellowships are also available at post-doctoral level by all the funding agencies.

The working scientist can write research proposals and submit them to various agencies for funding. With the government budget on science and technology development increasing every year, the probability of getting a project funded through a central funding agency has increased. Younger scientists are encouraged to write research proposal.

Researchers/scientists can then apply for associateship to undergo advanced training in the best research organization anywhere in the world. Under the Biotechnology Overseas Associateship Award sponsored by the Department of Biotechnology (details available on website dbtindia.nic.in), all expenses are paid by the government including the travel, stipend and a preparatory allowance The number of associateships are 100. Another possible avenue of getting

associateship is under the specialized training in niche area program of the Department (details available on website dbtindia.nic.in)

A scientist with innovative idea which could be taken forward and developed into a technology, can now collaborate with an industry and apply for loan/grants-in-aid from the Department of Biotechnology under its Small Business Innovative Research Initiative scheme (SBIRI) and under the CSIR New Millenium Indian Technology Leadership Initiative scheme (NMITLI) and other such schemes like Pharmaceutical Research and Development Support Fund (PRDSF) of DST, TDB and TIFAC.

Under the Centre of Excellence scheme funded by the Department of Biotechnology, a scientist with a record of scientific excellence can build a team around himself and pursue his area of scientific focus towards excellence under this scheme.

R&D within private companies

As already mentioned, the biotech companies have an increasing demand for researchers in biotechnology. With the implementation of TRIPS, out sourcing of research or contract research to India is going to be the call of the day. The Indian industry and MNCs would increasingly be seeking the skilled scientific expertise of the country.

Research in biotechnology and all related fields would be the career of the future and options are available with mutinationals, large public and private sector corporations, pharma majors, research institutions, laboratories and organizations both government and private in the country.

Biotechnology business managers: The biotechnology industry is a complex industry requiring a strong scientific R&D base. It is time and money intensive. Even so the biotech industry has been a major success story. There are career possibilities to be tapped. Pune University and Amity Institute have introduced MBA in biotechnology.

Technology transfer personnel: In the coming years, technology transfer expertise would be much sought after by the public institutions as well as the private industry. Not available within the country but a course abroad would make one most sought after within the country.

Patent attorney: In a country where the number of patents filed are amongst the lowest in the world, the disposal time taken is the highest. The country needs biologists with knowledge of Intellectual Property Right (IPR) and patent laws for streamlining the patent process.

Clinical researchers: Conducting clinical research in India costs 1/7th the cost in western countries and India is going to be the destination for carrying out clinical trials. Consequently expert clinical researchers would be a requirement.

Bioinformatics: Bioinformatics would be able to take off only when we have skilled human resource in information technology with a sound knowledge of biological sciences.

Social scientists: A major challenge of biotechnology is creating social awareness, be it for genetically modified organisms, transgenics, vaccine development, clinical research, bioethical issues or biosafety concerns. Social scientists would be required to fill this gap.

Teaching opportunities: With private education aggressively entering market, especially in all areas of biotechnology, teaching would most likely emerge as the most well paid job in the near future.

To meet the challenges of a growing industry, scientific research and development opportunities, it is crucial to provide impetus to education and training in science and technology. IT is essential to evolve an educational system, which is moulded to meet the challenges, allowing the pursuit of research and monitoring the esteem and position of science in society. There is a need for teaching organizations to diversify by introducing options, which allow students to choose and exploit the potential of a relatively new but fast expanding industry.

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