

## Boost to biotech education

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Trained manpower is a key to the development of any industry. This is all the more important especially when the industry is at a nascent stage and is evolving. The Department of Biotechnology (DBT) undoubtedly played a humongous role in developing the bioscience human resources in the country, by starting postgraduate teaching programs in biotechnology as early as in the Eighties to not only create a pool of talented students but also provide the platform for mid-career scientists and faculty, to upgrade their skills by enrolling in specialized training in leading national and overseas laboratories.

Over the years, as the demand for bioscience professionals grew along with the new areas of skill requirements, the postgraduate teaching programs were expanded to over 70 universities in medical, agricultural, marine, industrial and pharmaceutical biotechnology. Later DBT also started new programs in food and nutrition, clinical pharmacology and product development, bioinstruments and biomedical standards, and bioenterprise management. In the early 2000s, biotech education through the private schools was also encouraged.

The outcome of some of these initiatives was that the country now has several good institutes and almost about 10,000-12,000 quality biotech professionals are being produced annually. “Despite the presence of quality research institutions and investments in the field, India still does not have a substantial pool of well-trained manpower to realize the biotech industry's full potential. It is important to develop talent that fills this gap,” confirmed Dr Kiran Mazumdar-Shaw, chief mentor of the recently launched Biocon Academy (see page 55-57). This Academy is an initiative by Biocon to bridge the skill deficit. A decade ago, the issue that confronted the industry was trained manpower.

The issue that the industry today is grappling with is industry-ready personnel. And the gap between requisite demand and supply is only widening. The industry, academia, and government are now aware about the situation. However, what is heartening to note is that both the industry and the governments are taking some bold, new, and unique initiatives to try and address this problem, rather hold the plans in abeyance. Some of these initiatives include the setting up of finishing biotech schools in Karnataka, facilitation of industrial training for six months to postgraduate students in leading biotech industries by

DBT, and launch of Star College Scheme by DBT to promote excellence in undergraduate science education. The industry also initiated some innovative training programs.

Bangalore-based pharma services company, Bangalore Biotech Labs Pvt Ltd (BioZeen), for instance, started providing training in biofacility requirements with hands-on practical experience. There are several such initiatives launched by the bioscience suppliers to provide exposure to using different instruments and processes. All of these initiatives are highly interesting. The decision of India's leading biotech group, Biocon, to step into the area of training is a very positive development and could provide the necessary impetus to address this current situation, and step up the momentum in creating industry-ready professionals.