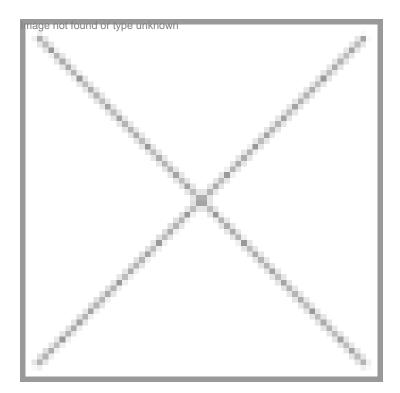


Trends - Private Institutes

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"There is always a question of Equity Vs Excellence and Quality Vs Quantity"

Dr Sunil Saran of Amity Institute of Biotechnonlogy explains about the initiatives that the institute has taken to foster better biotech education in the country.

Private universities have come in for a lot of criticism from the academicians. Why?

Private universities are primarily criticized for the fact that they charge huge fees from the students. Whenever this issue is raised, there is always a question of Equity Vs Excellence and Quality Vs Quantity. What many do not realize is that we provide excellent laboratory and library facilities to the students without any infrastructure or teaching support from the government. We, at Amity have eight former VCs as part of the faculty. And we have opened branches in Jaipur and Lucknow, which we are running on our own. This speaks about the quality of our education. People who criticize private universities should come out with concrete reasons. I know of universities under the UGC, where 180 days of teaching is mandated, but hardly 60 days of teaching takes place or universities which have not revised their course syllabus since the past 30 years. At the same time there may be private institutes, which are fleecing students and not providing quality education.

What are the strengths of Amity in the area of biotechnology?

Amity was amongst the first to introduce a BSc honors program in Biotechnology in the country. We have included modern areas like genomics, proteomics and bioinformatics in the course syllabus, the idea being to catch students young in any thrust area. In 2002, two of Amity schools, one each in Delhi and Noida were chosen to introduce biotechnology at the 10+2

level. We have a four-year B Tech biotechnology and a B Tech Bioinformatics course. This year we are introducing a 4-year BSc honors course program in medical biotechnology. At the master's level, we are the only university after Pune University to introduce a course in MBA biotechnology. This course has a special thrust on industrial training and will focus on laws related to biotech, finance, HR development and marketing.

Every year our results have been 100 percent. And four of our BSc students have been admitted directly to MS biotechnology course in the University of Abertay, Dundee in Scotland. Two students have been admitted to the Madurai Kamaraj University, while two have been selected by AIIMS and about 20-25 students have gone abroad for higher studies. Our infrastructure and lab skills are well developed and we subscribe to many international journals for the library. Today the shelflife of any knowledge is just three years and we keep on upgrading our courses.

Recently, the government of Kerala has given us a mandate for setting up an Amity Biotech industrial park in the state, institutions of excellence in biotechnology, nanotechnology and nanobiotechnology and centers for R&D in biotechnology, marine biotechnology, and health tourism. There are also plans for setting up a center for genetics and genomics on an area of 200 acres in the state. A task force has been constituted with seven members each from the Kerala government and Amity.

"Excellent industry interaction gets applied research projects."

DA Prasanna, executive chairman, Manipal Education & Medical group

• Excellent industry interaction gets applied research projects. In a big company if 4-5 PhDs work on a project then it generates a talent pool in that area. And excellent peer interaction between national and international universities creates a "basic research scientific network". In the clinical area, we should network with medical school for patient and clinicians.

 $\hat{a} \in \phi$ Apply faculty, scientists, investigators to an industry project and then look for funding. At Manipal we have created a research community and networked extensively. We have access to ICMR, DBT DST and NIH grants. The Manipal University provides a pipeline of bright innovative health sciences talent.

 $\hat{a} \in \varphi$ We have tie-ups with the national labs like NCBS and CDFD for PhDs. For international research we have tie ups with universities like the Purdue and Harvard. In association with Harvard, research is being carried out on stem cells and therapeutics. We have established a CoE in Pharmacogenomics with the help of a DST grant of Rs 6.5 crore. In a year, we produce seven global patents and 20 PhDs.

• We should provide industry relevant training. Today 61 plants take up contract manufacturing for the US market. Manipal in association with the Purdue University offers a one year diploma in cGMP training.

• The industry on its part should fund research in universities so that academics can make progress by building networks with medical schools and national labs.

"Private universities are tech driven and have a very vigorous interaction with the industry"

Dr PK Paul, Associate Dean, Bioengineering and research center, Rai University speaks about the need and relevance of the private universities in the country.

It is not that the biotech education in the country in now a domain of the government-aided schools. Several private educational institutes have stepped up their efforts in imparting biotech education. There may be the argument that everybody (both private and public institutions) today is offering biotech courses; that these courses are becoming a fad; that institutions are not having the necessary infrastructure to deliver the biotech programmes; that the syllabi is not in sync with the industry's requirement, etc.

True and several private institutes have chosen the path to fill in some of the gaps that exist. They have chosen the path of increasingly being closer to the industry. Their preference has been to align closely with the requirements of the industry and tune the courses in that direction. Besides they have also chosen to focus on the placements. According to DA Prasanna, executive chairman, Manipal Education & Medical group, close industry interaction gets applied research projects. He believes if in a big company 4-5 PhDs work on a project, it then generates a talent pool in that area. And excellent peer interaction between national and international universities creates a "basic research scientific network". This has worked at Manipal.

Our survey shows that out of the total Top 20 institutes ranked on placement records, 12 are from the private domain. Only

eight are public institutes. The private institutions are stepping up their activities.

Do you think that private universities are here to stay?

Private universities offering biotech courses are a growing trend because, after all, how many students can the government institutes accommodate? Especially now, when a very high number of students after 10+2 want to pursue biotechnology. Here, private universities provide an alternate avenue.

Private universities are very competitive and serious in their focus. The private universities are tech driven and have a very vigorous interaction with the society and the industry. I think that everything will go well if the quality of teaching is maintained in an

institute.

What are your strengths vis a vis a traditional university?

Our success over a traditional university is in the library, laboratory infrastructure and an industry driven course curriculum. Biotechnology requires heavy infrastructure and investment both in terms of laboratory and library. The initial investment goes upto Rs 90 lakh to Rs 1 crore. And we are in a position to invest that kind of money.

Also, private universities are very flexible in terms of their course curriculum. The university-industry interaction is very high. In consultation with the industry, we modify the course content taught. We have an ongoing process of curriculum development and in a way our curriculum is ahead of that in many institutes. In a traditional university a syllabus change requires more than 2 years and by then it becomes irrelevant to the industry.

Third we have a placement cell and are committed to place our students in the industry. Right from the third semester onwards, we start the exercise of CV preparation. We are also interacting with the Biotech Consortium of Indian Limited (BCIL) as they too run a training and placement program for biotechnology students.