Institute of Bioinformatics and Applied Biotechnology: Bioinformatics training with a difference

Balaram¹ has highlighted a deplorable situation: the crass commercialization of bioinformatics 'training' in teaching shops in the last one year or so. Lest all such programmes be tarred with the same brush, we would like to place certain facts before the reader.

The present Karnataka Government, widely acknowledged to be a proactive one, has appointed a Vision Group to lead the state in its biotechnology efforts. As part of these efforts, it proposed the setting up of a new institution, the Institute of Bioinformatics and Applied Biotechnology (IBAB) on the premises of the International Tech Park near Whitefield, a suburb of Bangalore.

In a short span of three months, IBAB conducted an all-India admission procedure for which there were almost 2000 applicants. A written test was followed by an interview and 31 students were selected, having varied educational backgrounds: life sciences (8), agricultural science (8), chemistry (2), physics (1), mathematics (1), medicine/dentistry/veterinary science (6), engineering (5). We were pleasantly surprised both at the total number who had applied and at the quality of those who were selected, despite the newness of both institute and type of course, the short notice, the odd time of the year (course starting in February) and the steep admission fee (Rs 90,000) for the 14-month programme.

In order to better understand why the students had joined a new institute offering a new course for which even the faculty had not been announced, we circulated a questionnaire to the students, with the freedom to mark as many answers as they wished.

From the responses to that question 'Why I applied to IBAB (primary reason)' it is clear that getting a job was *not* uppermost in the students' mind. We

have met the families of several students; most are from the middle class, willing to undergo hardships to provide a good education (in general, families are liquidating savings in order to give their children a good education)². Perhaps this is unavoidable if the governments decide that 'higher education' need no longer be 'highly subsidised', and divert scarce resources to basic education and health.

IBAB is guilty of one sin as pointed out by Balaram: we have relied heavily on guest faculty, and in an attempt to give the students the best education, not just in letter but also in spirit, have asked freely of the time of researchers at prestigious institutions such as IISc, NCBS, SINP, Monsanto, Astra, Biocon, etc. Possibly, the students will prove worthy of this investment of time, and the faculty will welcome them in their laboratories! It will take a batch or two to find out. Meanwhile, we attempt to attract quality faculty inhouse, not an easy task.

It is a common lament in these pages that engineering, medicine and information technology have drawn away the best students before they can reach institutions offering Ph D degrees in the basic sciences. Another element of our admission procedure which surprised us was the large number of engineers who had applied: nearly half the number of candidates who appeared for the interviews were engineers. It is another matter that most were found inadequate, and the fraction selected was much less. In the public mind, then, bioinformatics has acquired the image of some sort of biology-flavoured IT.

Balaram has, in the past, expressed gratitude to institution-builders in these columns. All (brick-and-mortar) institution-builders know the value of a certain amount of hype as an instrument of survival in the initial rocky times. Appar-

ently this is not a new phenomenon: Lawrence W. Bragg's 'promise-ridden letters' to the Rockefeller Foundation have been recalled recently³. While deploring the unintended consequences of teaching shops in bioinformatics, we appreciate the efforts of the Vision Group and the Government of Karnataka in raising the profile of IBAB. The hype about biotech and the new ventures therein will help us bootstrap ourselves into public visibility, which in turn will help attract good faculty and good funding, vital for creating a successful institution.

The said editorial also refers to the annual biotechnology fair, BangaloreBio. For the many start-ups in Bangalore (and elsewhere), BangaloreBio has become an event to look forward to, where acquaintanceships are renewed and new efforts are heard about. There is now a loose community of those in start-up phase, each struggling to achieve its goals, scientifically and commercially. Both the 'can do' speeches on the dias, and the hand-wringing discussions off it, serve to bond. I am sure the community would welcome any move by this journal, or the Indian Academy of Sciences, to reach out to them.

- 1. Balaram, P., Curr. Sci., 2002, **82**, 1189–1190.
- 2. Education World, March 2002, p. 3.
- 3. Nature Rev.: Mol. Cell Biol., 2002, 3, 68.

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