## **EDITORIAL**

## Promoting Young Scientists

Encouraging young scientists is a big business these days. One of the most popular methods is the institution of awards. The Golden Jubilee of India's independence provided a wonderful opportunity for the science departments of the government to emphasize their commitment to the cause of promoting science. The Department of Science and Technology announced the Swarnajayanti Fellowships, a scheme that would provide a few chosen individuals under 40, with a handsome research grant and an even handsomer personal fellowship, which was guaranteed to make them the objects of envy, even to the heads of their institutions. The Department of Biotechnology (DBT) also instituted, somewhat less well endowed, fellowships to mark the jubilee. The first round of Swarnajayanti Fellowships was important (?) enough to merit a Prime Ministerial presence at a function. The publicity ensured that the DBT would follow suit; a new set of 10 National Bioscience Awards for scientists below 45 has just been announced, each of which carries a personal award of Rs 1 lakh. This, in fact, is of the same value as the much older Shanti Swarup Bhatnagar (SSB) Prize of the Council of Scientific and Industrial Research (CSIR), where each year one or two scientists are chosen in each area of science. DBT's 'new initiative' will overlap to a considerable extent with the SSB award in the Biological Sciences. While CSIR's award numbers are limited. the DBT is far more optimistic in its ability to locate scientists worthy of such recognition. Undoubtedly, as numbers increase, credibility of the selection process (which has never been high) will diminish even further. Ironically, some years ago 45 was considered as a respectably advanced age and the Bhatnagar award served to dispell 'middle aged blucs'; today at 45 many awards celebrate the 'youth' of their recipients. There are also real 'young scientist' awards given away by CSIR, ICAR and INSA (which invented the process), with upper age limits of between 32 and 35 years. Some of these awards are intended to provide encouragement to promising 'young scientists'. Others, like the Bhatnagar

award are intended to be a recognition of relatively early achievement. Over the years, the proliferation of awards – with differing age restrictions – have ensured that the dividing line between promise and performance has become extremely blurred.

The Academies have not been far behind in the general desire to promote the young. Confronted with an ever-increasing 'average age' of their fellowships (largely a consequence of a general and desirable increase in longevity), the Academies have often frowned gently on attempts to elect those beyond 50 to their club. This preoccupation with 'young scientists' has left many accomplished and scholarly middle aged and even 'old' scientists completely in the cold. Age in itself cannot be an over-riding consideration in determining scientific recognition. The bottom line must be performance and achievement; hard comparisons cannot be avoided.

While the new spate of awards are meant to encourage those who are already committed to a career in science, there are new inducements provided to the young to join science. The announcement of the Kishore Vaigyanik Protsahan Yojana (KYPY) initiative by the DST is an end of the millennium revival of an old and almost forgotten scheme, the National Science Talent Search (NSTS), administered for a long time by the National Council for Educational Research and Training. The KYPY will now provide up to 60 fellowships of Rs 2000 per month for Class XI and XII students (Rs 3000 after Class XII), opting for science. In the Engineering and Medicine streams the fellowships are higher (Rs 3000 pm), while the number of fellowships (25) are smaller. The hope is that these financial inducements will prove attractive enough to entice 'bright young students' to research careers. The experiences of the earlier NSTS scheme were mixed. It remains to be seen if money alone, whether in the form of the Swarnajayanti Fellowship or the KYPY scheme is a sensible solution to enhancing the quality of science in India. An interesting feature of these schemes is that they appear to emanate with a ministerial pronouncement; apparently little

thought having been given to the mechanics of administration or the consequences.

The proliferation of special awards coincides with an increase in the difficulty of getting normal research grants, because of administrative and financial constraints. Curiously, the agencies charged with promoting science do not find this situation incongruous. The prestige and credibility of most awards is determined by the accomplishment of the awardees. The danger that indiscriminate multiplication of awards will erode their significance appears to have gone unnoticed. Even more

importantly, awards given to the undeserving send out a completely wrong signal to the community of 'young scientists', whom the agencies are trying to woo. The government's science departments would be better off addressing their primary responsibility; the fostering of cutting edge research in our many scientific laboratories by providing meaningful support for the institutions themselves. Maybe it is time for yet another 'millennium initiative'.

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