

Extramural research funding by institutions that undertake intramural research

J. Gowrishankar

A concept that has gained worldwide acceptance today, and is also being attempted for implementation on a large scale in India, is the need to combine research activities with those of higher education at both undergraduate and postgraduate levels, especially in the natural sciences. Thus, in India, the lament has been that the poor quality of science graduates being churned out is largely because of the fact that a majority are products of affiliated colleges, where the standards of teaching are at best mediocre and research efforts by faculty non-existent. The move in recent years to set up institutions such as the Indian Institutes of Science Education and Research is indeed meant to mark a beginning in correcting this major anomaly in undergraduate science education.

In a related context, it has been the experience of several public institutions in India that the successful provision of high-technology services by the institutions is greatly benefitted by the fact that they also undertake basic research. For example, the Centre for DNA Fingerprinting and Diagnostics was initially conceived as a laboratory to offer services in DNA profiling for medicolegal cases and in diagnostic tests for children with genetic disorders; subsequently, a conscious decision was taken to include in its ambit basic research in all areas of modern biology, and our experience is that the two activities of services and research under a single roof are mutually beneficial with each enriching the other. The case is similar with respect to several other institutions in the country including the National Centre for Cell Science (Pune), the Institute of Microbial Tech-

nology (Chandigarh), and the Institute of Genomics and Integrative Biology (Delhi). Furthermore, the tradition of combining basic research with clinical services or with manufacturing is well established abroad in academic medical centres and companies such as IBM, Genetech and so on.

The purpose of this note is to bring up for discussion two other aspects of this theme, namely that the activities of research funding (extramural), and of statutory approvals/certifications (of drugs and pharmaceuticals, vaccines, technical standards, pollution clearance, etc.), be undertaken by or entrusted to public institutions that also perform basic research. In the USA, different scientists in the Food and Drug Administration are involved in either research or certification activities; similarly, the various institutes of the National Institutes of Health (NIH) are charged with the dual tasks of intramural research and extramural biomedical research funding, with the ratio of finances for the two activities being around 1 : 10. The rest of this note will touch upon issues related to research institutions in India taking on the task of funding extramural research, although the same issues would also apply in the case of research institutions performing certification tasks as well.

At present, research funding activities in the country are centrally managed by officials (who are the equivalent of grants officers, with qualifications in science or engineering) in various government agencies such as the DST, DBT, CSIR (extramural division), ICMR, DAE, DRDO, etc. The newly created National Science and Engineering Re-

search Board is also envisaged to be similarly centrally managed for funding of extramural research.

What is being proposed here is whether the task of evaluating and funding extramural research proposals can be delegated to the research institutions, with the government agencies to these institutions providing both earmarked funds as well as grants officers on deputation for the purpose. The procedures for peer review of, and obtaining expert committee recommendations on, the proposals will more or less be the same as that being followed at present. Each institution could be involved in overseeing the extramural activities related to its area of expertise, as is the case with the NIH in USA. The advantages of such an arrangement would include decentralization in the processes of decision-making and disbursement of grants, as well as creation of an ambience of grants officers working as faculty members in the midst of bench-level scientists in an organization. The disadvantages are the potential for lack of uniformity in policies and practices across the different institutions, and more importantly that for conflicts of interest within the institutions in the decisions on award of grants.

It may perhaps be appropriate to invite the various stakeholders in universities, research institutions and the government to discuss these issues in the pages of this journal.

*J. Gowrishankar is the Centre for DNA Fingerprinting and Diagnostics, Tuljaguda, Hyderabad 500 001, India.
e-mail: director@cdfd.org.in*
