

## Rapid Grant For Young Investigators Scheme Grooming New Talent



K. Dharmalingam



T.S. Rao

The entry level difficulties are acute, especially in institutions such as the State Universities, where there is often no provision for start up grants. Newly recruited faculty members practically run from pillar to post to get support for their research ideas. Either they have to piggy back on senior investigators, or practically work along with the senior faculty member in their projects since the cost of consumables are not provided for by the institutions. Under these conditions establishing one's own program of research becomes extremely difficult and a process of complex manipulation. Institutions by and large are insensitive to this dire need of mentoring the young in their early years of independent research. Many capable investigators are not able to realise their full potential because of the myopic attitude of the educational institutions.

Realizing some of these difficulties faced by young scientists and to facilitate pursuit of innovative research ideas, the Rapid Grant for Young Investigators (RGYI) scheme of the DBT is a welcome initiative that is helping the needy in a big way.

RGYI seeks to reduce the age at which scientists get their first Principal Investigator grant and expand opportunities for young scientists by inviting proposals in all branches of biotechnology. Post-Doctoral students can be Co-PI, or Co-I, together with young faculty/scientists holding permanent positions. To maintain the intellectual momentum, it is the endeavour of DBT to release funds within eight weeks of the last date of submission of the proposal.

Under implementation since 2005-2006, the RGYI scheme is open to applicants under forty years of age. A rapid review and approval for suitable proposals for early funding has been put in place. In three calls for proposals more than 750 proposals were received, and 243 projects have been recommended and implemented so far. In the fourth call more than 700 proposals which are being processed.

It is indeed encouraging to note the number as well as quality of applications that the scheme has attracted from young scientific professionals who were, hitherto, either shy of competing with the established

investigators and/or afraid of competing with their peers who work in well-endowed institutions.

RGYI scheme has a liberal travel policy that helps investigators from remote places to access research infrastructure, often available only in bigger cities, to pursue their research ideas. To top it all, monitoring mechanism of RGYI, which is essentially a mentoring exercise, has been put in place to help PIs to get necessary guidance for resolving the problems faced during implementation of their projects funded under RGYI.

What differentiates RGYI from other such schemes is the fact that it gives that critical "first recognition" that goes a long way in boosting the morale of young scientists giving them confidence to pursue bigger objectives in the years that follow. It will be interesting indeed to follow the career path of young PIs identified under RGYI as that will give the feedback that is critical to identify the modifications that can be made in RGYI scheme to make it work even better. ■

**K. Dharmalingam**<sub>Ph.D.</sub> is DBT Distinguished Biotechnology Research Professor, School of Biotechnology, Madurai Kamaraj University, Madurai  
**T.S. Rao**<sub>Ph.D.</sub> is with DBT, Govt. of India, E-mail: [kdharmalingam@vsnl.com](mailto:kdharmalingam@vsnl.com) | [tsrao@dbt.nic.in](mailto:tsrao@dbt.nic.in)



**Manjari Tripathi**  
Department of Neurology  
AIIMS, New Delhi

Having spent some time in the US pursuing a fellowship on epilepsy and its investigations at the UCLA (funded by NIH, USA), I returned to India quite impressed with dedication and perseverance of researchers in that country. Once back home, funding appeared to be the most important constraint that needed to be resolved prior to a sincere effort. The RGYI scheme grant is a boon for young investigator like me.

The grant enabled me to formulate research strategies in difficult to treat epilepsy. It was the first step that helped me to move towards my professional goals. It also convinced me that proactive facilitation of research by government agencies does not happen only in developed nations, but is now a reality in India as well.

Having joined NCCS as an independent investigator in 2005 I realized that establishment of a new lab is always a great challenge to a young investigator. Although NCCS does provide an initial package for setting up a lab, an independent grant always re-instills the self-confidence not only in terms of attracting funding, but also provides a self-assessment of one's ability to get grants in the future. RGYI scheme provided the much needed independent start up money for exploring a novel research idea. It is an innovative step and I am sure the new generation of young scientists would reap benefits from this scheme in the times to come.



**Jomon Joseph**  
National Centre for Cell  
Sciences, Pune



**Krishnaveni Mishra**  
Dept. of Biochemistry  
University of Hyderabad  
Hyderabad

Having joined as a faculty at the University of Hyderabad, I wanted to initiate research towards understanding the molecular principles that govern nuclear organization. University support was not adequate to set up a laboratory to initiate the work I had in mind and that's when I heard about RGYI scheme. I submitted a proposal (Molecular basis of the functional organization of the Nucleus) and the grant was announced in a matter of eight weeks. The funding was very useful in procuring the basic necessities to initiate this project like laboratory equipment and chemicals. Thanks to RGYI scheme we have successfully initiated the project and have made good progress in two years that have since gone by.

Having spent over a decade abroad on higher education and further training, I had always wanted to set up my own research group contributing to both basic and applied research in India. An invitation by Bharat Biotech Foundation, a private, not-for-profit research foundation, provided me the opportunity to return to motherland. The fact that foot-and-mouth disease vaccine technology needed new direction, and that I had previous experience with adenovirus vector systems, prompted me to explore the possibility of working on 'adenovirus vectored vaccines for foot-and-mouth disease.' RGYI scheme provided the much needed push for me to work in an area with which I had some experience, and on a problem important to our society. Not being confined to any thrust area, the scheme is well suited to nurturing young Indian scientists to conduct research in India.



**Nagendra Hegde**  
Bharat Biotech Foundation  
Hyderabad



**Veena Jain**  
Dept. Of Prosthodontics  
AIIMS, New Delhi

As a prosthodontist working at AIIMS, New Delhi, I was concerned that there were no reliable and easy to use appliances for bite force measurement. My friends in engineering gave me an idea that, which suitable modifications, it may be possible to use pizzo electric sensors for bite force measurements. Support from RGYI helped finalise the design of the appliance and after various trials we now have a tool that can find out the relation between bite force and dental attrition. I am presently working on refining the appliance further and develop software that can make it more user friendly. In fact, several dental researchers from other institutions have approached us for finding out the details of the appliance we are working on.