

Department of Biotechnology Ministry of Science and Technology Government of India

Call for Proposals for DBT Centres of Excellence in Areas of Biotechnology

Request for Applications

The Department of Biotechnology (DBT) invites applications for support to centres, known as 'DBT Centres of Excellence in Biotechnology'. The grants will provide funding to augment and strengthen institutional research capacity in specific areas of biotechnology. They are intended for institutions with a substantial investment in and, commitment to, biotechnology research. The overall aim of this programme is to facilitate pursuit of novel ideas and technologies. The specific goal is to enhance the innovative ability of the institutions with well-developed research programmes in specific areas of biotechnology through flexible support to: (i) expand scientist density and develop faculty research capability, and (ii) enhance research infrastructure and (iii) pursue ambitious goals by facilitating longer term funding. Thus, this request for applications (RFA) is intended to enhance the quality of research and development, facilitate planning and coordination of selected activities, and provide support and a suitable environment for investigators to acquire new research skills and experience towards innovation in a planned and predictable manner, and pursue development of research leads that could be converted into marketable products, processes or services.

THEMATIC FOCUS

The thematic focus for the centres should be sharp with emphasis on discovery and innovation in the proposed research area. Addressing emerging technologies with inter-disciplinary crosstalk to realize their full potential would be a priority. Openness to collaborate with industry would be viewed very positively. The Centres of Excellence will be one of the following three types:

(a) Basic biology emphasizing new opportunities and emerging fields

These will be centres pursuing excellence on basic biology/life science and biotechnology in emerging fields.

(b) Centres for Science, Engineering and Technology

These centres would address the interphase between engineering, physical sciences, biology, medicine, agriculture or forestry. These will be industry oriented, involving direct linkages with industry and whose long term agenda would be expressly addressing industry needs. Examples include bioprocessing, biosensors, biocatalysts, cell and tissue engineering or other areas requiring interdisciplinary collaboration.

(c) Translation Centres directed towards innovation

Such centres will be in the areas of medicine, agriculture, environment, animal and food biotechnology sectors whose efforts will be to pursue any potential idea to translational goals to obtain proof-of-principle or scale-up by developing inter-disciplinary, inter-departmental and/or inter-institutional linkages.

Some of the priority areas for setting up new centres are:

- Synthetic biology/metabolic engineering for health, energy and plant sciences
- · Protein science and enzymology
- Biomaterial, bioplastics, biopolymers
- Research to create basis for novel medical implants and devices
- Nanobiology in cancer diagnosis and drug delivery
- Cancer vaccinology, immunology and diagnostics
- Biomedical research in neuromedicine and neurosciences
- · Designer crop breeding
- Green manufacturing processes
- · Dengue, influenza: problems inspired basic research to improve vaccines and point-of-care diagnostics
- Improved point-of-care diagnostics for chlamydiasis, tuberculosis, acute respiratory infections and novel diagnostics platforms
- Stem cell research: Cancer stem cell biology, Mesenchymal stem cell therapy, Human-induced pluripotent stem (iPS) cells.

Examples above are suggestive and DBT would welcome any new or novel ideas for creation of new Centres.

RFA No: DBT/01/COE/2008

Last date for receipt of letter of intent: 31 May 2008

For details on the scheme and the proforma for letter of intent, please visit our website: www.dbtindia.nic.in or www.dbtindia.gov.in