BT/DBT-BUILDER/01/2019
DEPARTMENT OF BIOTECHNOLOGY
MINISTRY OF SCIENCE AND TECHNOLOGY
GOVERNMENT OF INDIA

SUB: Guidelines for DBT-Boost to University Interdisciplinary Life science Departments for Education and Research programme (DBT-BUILDER)

1. PURPOSE

Department of Biotechnology (DBT) provides support to establish interdisciplinary School of Life Sciences for advanced research and education in universities known as "DBT-Boost to University Interdisciplinary Life science Departments for Education and Research (BUILDER)" Programme for advanced research and education. The overall aim of this programme is to foster interaction of existing departments of universities invigorating interdisciplinary modern bioscience research through creation of new research agenda aiming to develop world-class school of life science in universities doing both advanced research and education.

2. OBJECTIVES

The specific objective is to upgrade the post-graduate teaching and training laboratories in terms of optimal infrastructure such as, renovation of existing laboratory space (no fresh constructions) and cold room, modernization of laboratories involved in PG teaching, acquisition of essential equipment, up- gradation of existing facilities, networking & computational facilities including software & databases, scientific & technical books (no journals), maintenance & refurbishing of existing and new facilities, appoint new faculty, provide fellowships for students, introduce training programmes regroup research activities along the biotechnology innovation chain (from discovery to market), promote academia-industry interaction depending upon the strengths and weaknesses of specific universities. The facilities provided under the Program are intended to support the efforts of the Department as a whole or a number of faculty members in the Department. Proposal towards individual R&D support would not be accepted under this Scheme.

3. THEMATIC FOCUS

The thematic focus for the scheme is to provide enabling interdisciplinary advanced research and teaching capacity emphasizing discovery and innovation in proposed research areas of each university. Addressing emerging technologies with inter-disciplinary cross talk to realize their full potential would be a priority. Increasing number of postgraduate students at M.Sc. , Ph. D, and postdoctoral levels with quality education, skills and research temperament is envisaged. Openness to collaborate and invoke industry through public-private partnership in advanced research and education would be viewing very positively.

4. WHO IS ELIGIBLE TO APPLY?

(a) UGC recognized Central, State and Private universities / PG colleges registered under Central Universities Act 2009 and section 2(f) and 12B (for PG colleges only) of the UGC Act, 1956(http://www.ugc.ac.in/) with proven track record in life sciences research and education are ONLY eligible to apply.

(b) The university should have proven track record of performance in the following:

- Current status of Ph.D. students;
- Size of faculty;
- Infrastructure available;
- Working culture and atmosphere;
- Readiness for administrative reforms;
- Areas of expertise;
- Ideas of innovation from discovery to market;
- Teaching activities;
- Linkages with industry;
- Team spirit in collaborative research;
- Publications in high impact journals;
- Patents, technologies developed/transferred etc.

5. NATURE OF SUPPORT

The grant would be provided for

i. Renovation /Refurbishment of existing and new facilities consisting of the following:

State-of-art labs for teaching & demonstration: Each postgraduate laboratory that may accommodate 24 students may consist the following (listed below for guidance):

(A) Civil Works (only for Renovation & Refurbishment) and Interior Infrastructure (No fresh Construction): Proposals involving the Renovation & Refurbishment must possess all the necessary clearances/approvals from the concerned authorities such as environment, state Govt. clearances, if applicable. Budget proposed on CPWD or State PWD rates (including the budget for interiors e.g. cooling etc.), which may be certified by a registered architect.

(B) Equipments suggested for up gradation, AMC/ CMC, refurbishment, for teaching purpose (only be provided if not existing). A list of existing facilities and equipments needs to be provided by the Institution.

(C) Sophisticated common facilities (Only those which are related to the area of research and if not available are to be asked): e.g. Animal House Facility, Proteomics facility (TOF-TOF & Q-TOF), 2-D electrophoresis systems and protein image analysis system, Genomics (RNA/DNA Work station, PCR machines, Hybridization, RT-PCR system), Microarray Facility (Spotter, Scanner and Image Analysis), High Speed Centrifuge and Ultracentrifuge & Rotors, Biological Containment (P3) lab, Green House Facility, Large scale protein purification system (Octa-explorer), Cell Culture (Animal, Plant and Microbial) Facility,

including scale-up bioreactors. The list is indicative, while the proposal may propose the actual requirement as per the need and utilization.

(D) Operational cost like consumables and contingencies for different thematic research groups.

(E) Salaries of the manpower: The manpower would be regular/contract appointments made by the university and they would devote 100% time to the DBT-BUILDER. The university must give a written commitment to this effect. A letter of undertaking stating that the financial liability for the manpower involved would be borne by the university at the end of the project support is essential provided the manpower has been involved in the project for not less than 3 years in continuation. Such commitment would be given by the Vice-chancellor of the university.

6. Criteria for Short-listing the proposals under Builder Program as approved by DBT

The Program of Builder support would be at three levels: Level – I, Level - II & Level – III. The criteria for short-listing for these three levels are as follows:

Level – I:

- Type of Institution: PG College with teaching and active research
- Funding at this level is up to Rs. 3.00 Crores (Teaching & up gradation of existing laboratory) for 5 Years.
- PG College should be accredited by respective Accreditation Agency, with minimum of 'A' rating.
- Minimum number of students in each department shall be 10 in PG Programs.
- Minimum number of Faculty at PG level shall be 4 per Department.
- At least 1 Extra-mural Research Grant to each Department,
- Evidence of research in the PG Department (s) of the College.

Level – II:

- Type of Institution: University/Institute departments with teaching and active research.
- At this level funding up to Rs 5.0 Crores for 5 Years
- Nature and Type of Institution: Teaching & Academic Research
- Post-graduate teaching & Active Research department
- Evidence of Extra-mural Research grants received in last 5 years
- Performance in last 5 years: Publications, Patents, Awards received by the Faculty Members of the Department/ Centre
- Department should have existed at least for 3 years.
- Number of core faculty members having Ph D degree should be five (5) or more.
- In case of Self-financed Private University/ Institute/ department may have more than 50% students at PG level with national level test e.g. NET, GATE, qualifications

Level - III:

- Type of Institution: Established Department/ Research Institutes
- At this level funding level up to Rs 10.0 Crores for 5 Years Nature
- Well established Department/ Centre and should be Internationally competitive
- Each faculty should have received at least 1 of extramural Research grants in last 5 years
- Performance in last 5 years: Publications in SCI Journals, Patents, Awards received by the Faculty Members of the Department/ Centre
- Number of core faculty members having Ph D degree should be eight (8) or more.
- In case of Self-financed Private University/ Institute/ Department may have more than 50% students at PG level with national level test e.g. NET, GATE, qualifications
- Department should have existed at least for 5 years.

7. DURATION OF SUPPORT

Project will be supported for a maximum period of five years and subsequent year grants will be released only after submission of the necessary documents. In General, NO extension will be provided beyond five years though project duration may be extended as follows:

a. Maximum of one year with in the approved budget of the project
b. Maximum of two years for projects shown exceptionally outstanding performance with additional budget. During extension period, ONLY the manpower and consumables will be provided.

8. Budget Requirement

(In Crore)

S.No.	Head	Level I	Level II	Level III
1.	Non-recurring (for upgrataion of existing lab) (Only in 1st Year)	1.8	3.0	6.0
2.	Recurring for 5 years (Manpower, Consumables, Contingency, Travel, Workshop & Training, Books & Journals, Overhead, AMC/CMC.	1.2	2.0	4.0
	TOTAL	3.0	5.0	10.0

9. CRITERIA FOR ELIGIBILITY AS PROGRAMME COORDINATOR

The Programme coordinator could be Vice-chancellor or Dean, Life Sciences/Biological Sciences or senior most Professor with proven track record in life science research and education as evidenced by publications, patents, technology developed/transferred, research projects implemented, awards and fellowships etc.

10. SUGGESTED PROPOSAL CONTENT

Proposals may have the following:

- Name of the university with address
- Status of the university (Central or state and whether UGC recognized)
- Title of the proposed centre: DBT-BUILDER-University of ……School of the Life Sciences for advanced research and education.
- Curriculum/ syllabus of the Departments/Course.
- Details of existing departments related to life sciences.
  i. Name of the existing department(s)
  ii. Existing facilities/infrastructure/equipments
  iii. Number and level of faculty and students. Details of extra-mural research of faculty.
- Financial requirements for achieving the objectives:
  i. Equipment and infrastructure support for state-of-art postgraduate laboratories along with numbers of M. Sc./Ph.D. to be accommodated (space to be provided by the university for each laboratory).
  ii. Requirement of new faculty and fellowships (position and number to be specified).
  iii. Sophisticated instruments proposed for use as centralized facility.
  iv. Consumables, contingencies, books and periodicals
  v. Workshops and training programmes for technicians and college teachers of the locality.
  vi. Contribution of university in terms of infrastructure and equipments.
  vii. Details of public-private partnerships envisaged.

5 copies of the complete proposal along with enclosures duly signed and forwarded by the institute may be submitted.

11. PROCESSING OF A PROPOSAL

Upon receipt of the detailed proposal, the same will be reviewed for completeness by the Internal Screening Committee. Incomplete applications and those which do not fulfill eligibility criteria will not be considered. Applications that are complete and responsive will be evaluated for scientific and technical merit by a high-powered committee. The programme coordinator may be invited to make a detailed presentation before the committee. The decision of the committee on a proposal will be final and communicated to the coordinator.

The revised guidelines for DBT-BUILDER Programme will be effective from 14th October,2019.

This issue with the approval of competent authority