

'Nurturing the seeds of innovation'

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Nurturing the seeds of innovation



The idea behind the setting up of BIRAC was of promoting the innovation in research development through entrepreneurship and public private partnerships. This government of India enterprise, is a new industry-academia interface and implements its mandate through a wide range of impact initiatives, be it providing access to risk capital through targeted funding, technology transfer, intellectual property management and handholding schemes that help bring innovation excellence to the biotech firms and make them globally competitive.

During its first year of existence after being incorporated on March 20, 2012 as a section 25, not for profit company, BIRAC has initiated several schemes, networks and platforms that help to bridge the existing gaps in the industry-academia innovation research and facilitate novel, high quality affordable products development through cutting edge technologies. The unique government enterprise has initiated partnerships with several national and global partners to collaborate and deliver the salient features of its mandate. The existing schemes that are being driven by BIRAC include Biotechnology Industry Partnership Programme (BIPP) and Small Business Innovation Research Initiative (SBIRI).

Apart from the existing schemes, the launch of new scheme, signing of more than 100 public private partnership research agreements, supporting nearly 50 industry-academia partnership collaborations and technology acquisition for nutritional crop improvement.

The Biotechnology Ignition Grant (BIG) scheme was announced in June 2012 in partnership with 3 partners IKP Knowledge Park, Hyderabad; for Cellular and Molecular Platforms (C-CAMP), Bangalore and Foundation for Innovation and Technology Transfer (FIIT), New Delhi Provides support of `50 lakh (US \$100,000) for high risk innovation discovery and proof of concept by first generation entrepreneurs and early start ups. The Contract Research Scheme (CRS) was announced to promote academia - industry interface; 3 calls were launched; 84 proposals were received; 88 academic and 83 industry partners are

involved; 7 proposals were approved; 9 academic and 7 industry partners are involved.

BIRAC and Centre of Entrepreneurial Learning (CfEL) of Judge Business School, University of Cambridge have initiated a partnership that enables 5 BIRAC supported applicants to take part in CfEL's flagship intensive entrepreneurial boot-camp programme called "IGNITE", which is aimed at providing scientists and early start ups to explore entrepreneurial opportunities of their innovative ideas and transform them into a business project. In the year 2013, BIRAC selected 5 candidates from BIG grantees and Stanford India Biodesign (SIB) fellows, for the programme.

Dr K Vijay Raghavan, secretary, DBT while speaking at an event in New Delhi called the BIRAC as a stimulating partner for innovation. He also emphasized on the role of BIRAC as an organization to promote entrepreneurship across almost all the life science verticals. "BIRAC is a stimulating new avenue of entrepreneurship, both in partnership with industry as well as the academia. It has a much bigger role to play ensure the affordability of healthcare and it is now also gearing up on the manufacturing sector as well," remarked Dr Raghavan who is also the chairman of BIRAC.

In alignment with its long term plan of entering into international partnerships, BIRAC has recently entered into collaboration with the CEFIPRA (Indo French Centre for the Promotion of Advanced Research) to support Indian and French biotech start-ups and SMEs for promoting the innovation ecosystem in both the countries. The partnership aims to improve the competitiveness of both Indian and French biotech industries. In this collaboration, BIRAC will support Indian industries, whereas CEFIPRA will mobilise support for French industries. The initial focus of the collaboration will be on interventions in red and green biotechnology.

Apart from that it has already forged international linkages such as the DBT-BIRAC-GATES Foundation partnership which is for affordable product development in healthcare and agriculture. BIRAC has set up a project management unit (PMU) to take this partnership forward and implement the agreed action plan. Another is BIRAC-DBT-WHO-PATH multi-stakeholder consortium on affordable technologies for women and child is also underway. The discussion was organized and 8 priority technologies identified for future activities. The details are being worked out.

Not remaining behind in its social responsibilities, the BIRAC also has launched the Social Innovation Programme for Products Affordable and Relevant to Societal Health (SPARSH). The idea is to promote the innovative biotechnology tools to bring in solutions for maternal and child health issues. The first call for it was launched in September 2013 and it was intended to bring the like-minded private and public sector companies together to implement World Health Organizations's (WHO) millennium goals. Apart from that BIRAC has also launched the unique 'Reinvent the toilet challenge' in partnership with the Bill and Melinda Gates Foundation to bring in new technologies to improve sanitation.

The BIRAC is also leveraging existing strengths by building partnerships. It has tied up with the Association of Biotechnology Led Enterprises (ABLE) as a knowledge partner and Clinical Development Services Agency (CDSA) for clinical trial related activities. These efforts are in tune with the long term goal of a US \$100 billion biotech Industry by 2025 and create a true Indian bio-economy.

Special emphasis on empowerment of researchers, start ups and SME's :

- Foster innovation and entrepreneurship in all places of research
- Promote affordable innovation in key social sectors
- Higher focus on start ups, small and medium enterprises
- Contribute through partners for capability enhancement
- Encourage diffusion of innovation through partners
- Enable commercialization of discovery
- Ensure global competitiveness of Indian enterprises.

Few initiatives that BIRAC is planning to launch in the future:

• BIRAC Social Innovation in biotechnology To address the increasing public interest in biotechnology, this initiative will focus on the deliverables as a sector to find solutions and addressing the problem of society at large. Cutting edge technology, novel process and products need more focussed attention in the context of affordable product development for societal benefit. BIRAC is envisaging a Social Innovation scheme that is focused on finding solutions to multitude of issues in this arena.

• BIRAC Industry Sponsored Research (BISR) BISR is an initiative that hopes to bring industry and academia together in a manner that academia (or a consortia of academic partners) helps in delivering products (that have an economic and

environmental benefit) through R&D conducted in academia that is sponsored jointly by the industry and BIRAC.

â– BIRAC Grand Challenges in Healthcare and Agriculture, Food & Nutrition Mission mode approaches in several sectors including biotechnology have been one of the preferred means for creating impact as exemplified by "grand challenges" schemes that are implemented by Bill & Melinda Gates Foundation and Grand Challenges Canada. It is BIRAC's intention to launch the "Grand Challenges programme" especially relating to "Securing Family Health" and "Agriculture, Food & Nutrition"- in partnership with BMGF, and other like-minded philanthropies organization.

â– BIRAC Translation Facilities BIRAC would considering setting up of Facilities for Translational Research in partnership and co-governance models of operation. Based on earlier discussion and suggestion received from Experts and researchers, a discussion note has been prepared for consideration.