



NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, ${\tt RAEBARELI}$

A Report on Celebration Activity

Institutional Innovation Day 2023

Date:15 Oct,2023

Program Theme: Promoting Research and Innovation in the Pharmaceutical Sector.

Objective: - Promote research and innovation.

Benefit Learning: Awareness of environment and stress management

Resource Persons:

Prof. Shubhini A. Saraf, Director NIPER Rabeareli









National Institute of Pharmaceutical Education and Research, Raebareli



Institution's Innovation Day



Our humble tribute to the 'Missile Man'

Bharat Ratna
Dr. A.P.J Abdul Kalam

on his birth anniversary

Descriptions:

An article was written by Prof. Shubhini A Saraf, Director, NIPER- Raebareli on the occasion of Institutional Innovation Day and on the birth anniversary of Dr APJ Abdul Kalam.

The article was published by ETHealthWorld on 21 Oct 2023.

She shares her thoughts on how the Promotion of Research & Innovation Program (PRIP) is designed to encourage collaboration among pharmaceutical companies, government research institutions, and start-ups, promoting a dynamic ecosystem for pharmaceutical R&D.



Promoting Research and Innovation in the Pharmaceutical Sector





By Shubhini A Saraf

The last four decades beginning from 1990, have seen India transform from a drug-importing country to a drug-exporting one, having now earned the title of the "Pharmacy of the World". The recent announcement of the PRIP (Promotion of Research & Innovation Program) Scheme with a substantial INR 5,000 Crore fund demonstrates the government's commitment to incentivising funding for innovation.

This program is designed to encourage collaboration among pharmaceutical companies, government research institutions, and start-ups, promoting a dynamic ecosystem for pharmaceutical R&D. The medical technology sector, particularly devices and diagnostics, have suddenly occupied a coveted position with extraordinary requirements for medical aids and a consumption of diagnostics never seen in the past. Several significant trends have emerged both in the global scenario and the local context, which are bound to impact the sector and eventually lead to the massive overhauling of many crucial elements. There is an increase on the side of the demand as we slowly move towards an ageing population, which medical innovation can take care of. Developing countries are making closer global linkages for an affordable and achievable population's health. The Indian pharmaceutical industry is poised for growth, and this must be done by moving towards original

research and innovations, without losing sight of generics.

It has been discussed repeatedly that drug research is a lengthy process and clinical trials have high failure rates, however, the advancements of AI/ML and data analytics hold promise for shortened timelines, and lesser failures, A tectonic shift towards biologics, personalised and precision medicine is visible on the horizon. This necessitates a need for consistent investment in research and development. A constant dialogue between industry and academia is also necessary, where the very workforce that we consider an asset while manufacturing drugs, is being skilled must be made innovative product ready. This skilling must be made focussed towards industry needs and the preliminary research has also to emerge from academic institutions. Funding of research which has preliminary proof of concept will give the industry, more confidence in investing, CSR activities as per Section 135 of the Company Act 2013 permit that an industry can invest in skilling which could be through a specialised lab or contribution to incubators or R&D projects. This could be of mutual advantage to academia as well as the industry.

A stable regulatory environment is important for safeguarding patient health, encouraging innovation, attracting investments, and fostering a competitive and efficient industry. It plays a pivotal role in ensuring patients access, high-quality, and innovative medicines. It being stringent ensures a that a reputation for quality is built and maintained. The role of the Indian government in supporting innovation and R&D in the pharmaceutical sector is amply clear and the recent policies regarding the Medtech and Pharma sectors as well as the PRIP scheme underscores the resolve. Agencies like the Department of Science and Technology and the Biotechnology Industry Research Assistance Council (BIRAC), provide essential financial support and grants to startups and pharmaceutical companies, facilitating the inception of new

projects and encouraging research. The pivotal role of diverse funding mechanisms like budgetary support, venture capital, CSR funding, and fiscal incentives to encourage corporate contributions to pharmaceutical research, and fiscal incentives, motivate both established companies and emerging startups to invest in groundbreaking pharmaceutical endeavours. Healthcare startups have now begun to gather momentum and are said to be growing at 27 per cent CAGR.

The transformation of the pharmaceutical sector's funding landscape promotes innovation and growth. Biologics are coming up in a big way and they are poised to be the drugs of the future. Collaboration between the pharmaceutical industry, government bodies, and academia is essential for propelling groundbreaking discoveries and advancements in healthcare. These newer funding avenues extend beyond capital augmentation, providing invaluable expertise, technology access, and vital support to empower pharmaceutical startups and research projects, enabling them to thrive in a fiercely competitive global landscape. The government plays a significant role in establishing a robust and enabling regulatory framework. Its contributions in this regard can be pivotal in critical domains of research and innovative product pipeline development.

Undoubtedly, the pharmaceutical sector's success hinges on stable policies and regulatory advancements, and these should be integral to a cooperative partnership with the government, facilitating the transition from quantity-driven operations to innovative product portfolios, to emerge as a global entity and make for the world.

Shubhini A Saraf, Director, NIPER, Raebareli

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