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â??GIMS will play a pivotal role in providing solutions for validation and trials for medtech startups in Uttar Pradeshâ?•

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On June 1, Uttar Pradesh got its first public hospital-based medical incubation centre, established by the Government Institute of Medical Sciences (GIMS) of Greater Noida. This centre has been set up with a purpose to revolutionise healthcare innovation by providing a platform for medical startups and researchers to develop groundbreaking solutions. Its mission is to foster collaboration and drive advancements that will transform patient care and the global healthcare ecosystem. In an interaction with BioSpectrum India Dr Rahul Singh, Head of Incubation, Centre for Medical Innovation at GIMS shared the USP of the Centre, its offerings to the healthcare startups and long-term road map of the Centre.



GIMS Startup Centre for Medical Innovation is a public hospital-based incubator and the first-of-its-kind in UP. What was the objective of setting up this Centre?

The GIMS Startup Centre for Medical Innovation was established with the primary goal of addressing a significant challenge in India's healthcare sector: the heavy reliance on imported medical devices and the validation hurdles faced by domestically manufactured devices.

As the first public hospital-based incubator of its kind in Uttar Pradesh, our centre leverages the expertise and resources of a 630-bed hospital that serves over 50,000 patients every month. This unique setup allows us to bridge a crucial gap in the medical device development ecosystem.

Prior to the establishment of our centre, there was a noticeable disconnect between the end users of medical devices, primarily doctors and the innovators developing these technologies. Our incubator addresses this by enabling doctors to initially validate problem statements, ensuring that the solutions developed are practical and effective.

The GIMS Incubation Centre offers comprehensive clinical mentoring for startups through our Startup Clinic, which is accessible to anyone by appointment. Our focus is on fostering innovation in healthcare technology, particularly in rapidly advancing fields such as artificial intelligence and machine learning. By developing affordable and cutting-edge technologies, we aim to bring all stakeholders to the table, creating a collaborative environment for innovation.

We are currently in discussions with several IITs across the country to establish MoUs for clinical support, reinforcing our strength in clinical trials and efficacy testing. Our ultimate vision is to create medical technologies in India that can serve the world, with doctors incubating their research ideas into market-ready products.

Inaugurated by the Director General of Health Services, Government of India, our centre also holds the distinction of being a Stanford University Biodesign Centre in India.

We currently support 30 startups, primarily focused on medical devices. One of our standout startups, MATRI, which is developing a menstrual pain management device, has even progressed to the current season of Shark Tank, showcasing the potential and impact of our incubation efforts.

What are the unique features of this incubation centre and how will it foster research and medical innovations in the state of UP?

Our mission is to address the significant challenge of India's reliance on imported medical devices and the difficulties faced by domestically manufactured devices in the validation process. By providing a platform where doctors and innovators can work together, we aim to develop solutions that are both innovative and practically applicable, ultimately enhancing healthcare delivery in Uttar Pradesh and beyond.

What kind of infrastructure currently the incubation centre is having?

GIMS has allocated 15,000 square feet of space on the 4th floor of the hospital exclusively for the incubation centre. This comprehensive setup ensures that startups have access to all necessary resources in one location. An entire floor is dedicated to mentoring, with our expert faculty available during working hours to provide guidance and support. This ensures that startups have continuous access to clinical and technical expertise.

A fully equipped clinical trial unit is available, enabling startups to conduct essential clinical trials and validate their products under real-world conditions. The facility includes two meeting rooms and a conference room, providing spaces for collaborative discussions, presentations, and strategy sessions.

Also, there are co-working setups available for 30 startups, fostering a collaborative and dynamic environment. We support both physical and virtual incubation, with a physical capacity for 30 startups and the ability to mentor 100 startups virtually.

Our research wing is a standout feature, equipped with advanced facilities such as genome sequencing, BSL-2 and BSL-3 VRDL (Viral Research and Diagnostic Laboratories), and a molecular research lab. These state-of-the-art resources enable high-level biomedical research and development.

We have a world-class skill lab that provides practical training and development opportunities, ensuring that startups can build and refine their technologies with hands-on experience.

Our hospital and laboratories are accredited by the National Accreditation Board for Hospitals & Healthcare Providers (NABH) and the National Accreditation Board for Testing and Calibration Laboratories (NABL). This ensures that startups have access to facilities that meet the highest standards of quality and reliability.

Startups require funding at every stage. How does GIMS plans to financially support its incubatees?

GIMS has developed a comprehensive plan to financially support its incubatees, ensuring they have access to necessary resources at various stages of their development. Here’s how GIMS facilitates funding and support for its startups:

GIMS has several venture capitalists (VCs) on its panel who act as mentors at the incubation centre. These VCs assist in screening startups and provide funding at different stages based on the startups’ portfolios. Their involvement ensures that startups receive not only financial support but also strategic guidance tailored to their growth needs.

Startups at GIMS have access to several grants aimed at different aspects of their development. These include grants for sustenance, prototype development, marketing, conferences, and more. This broad spectrum of funding opportunities helps startups navigate the financial challenges of early-stage development.

Most importantly, startups with a registered address in Uttar Pradesh are eligible for specific grants. However, GIMS also accommodates startups from other regions, ensuring they receive necessary support through the incubation programme.

GIMS is a member of various associations such as ISBA (Indian Science and Technology Entrepreneurs Parks and Business Incubators Association), which helps in networking and provides access to funding platforms. This membership broadens the funding and support network available to GIMS startups.

Out of 15 startups, 9 have been selected for the Stanford University Biodesign programme, which offers mentoring and prepares them for funding opportunities.

GIMS startups are part of a funding programme run by Delhi Ecosystem, ISBA, KPMG, and SIDBI. Currently, 10 GIMS startups are participating in this programme, with 3 reaching the final round. This programme provides critical financial support and enhances the visibility of startups to potential investors.

GIMS employs a co-incubation model where other institutions provide additional funds to GIMS startups. For instance, IIT Mandi funded a GIMS startup through the NIDHI PRAYAS programme. This approach has resulted in 30 per cent of GIMS startups receiving funding or grants through collaborative efforts.

Also, GIMS assists other incubation centres in validating their startups' devices, reinforcing its role in the broader medical innovation ecosystem. This cross-incubation support helps in building a robust network of validated and market-ready medical devices.

GIMS has submitted a proposal for the BioNEST fund from BIRAC, which includes plans for a cleanroom facility, a bio-bank, and a prototype facility for startups. This proposal aims to further enhance the infrastructure and resources available to GIMS startups.

Many private institutions are joining hands with GIMS, contributing to the funding and support ecosystem. These partnerships expand the financial and developmental resources available to startups.

By leveraging these diverse funding sources and collaborative models, GIMS ensures that its startups receive comprehensive financial support and mentoring, enabling them to thrive and innovate in the competitive healthcare sector.

Has the centre planned to focus on a particular disease for R&D and innovation?

Yes, the GIMS Startup Centre for Medical Innovation has strategically planned to focus on specific diseases for R&D and innovation, with a particular emphasis on disease prevention.

We are actively inviting applications from across India to leverage technology for the prevention of various diseases. This initiative aligns with our broader vision of utilising advanced technology to improve public health outcomes and reduce the incidence of preventable diseases.

We partnered with the Netherlands-based foundation NLR (No Leprosy Remains) on June 11, to launch a dedicated startup cohort focused on early detection and management of leprosy. This collaboration aims to develop and implement technologies that can significantly improve the early diagnosis and effective treatment of leprosy, ultimately striving towards the eradication of this disease.

We are initiating a dedicated cohort to address menstrual hygiene, recognising the critical need for innovation in this area to improve women's health and well-being.

Another focus area is non-communicable diseases (NCDs). By developing point-of-care (PoC) diagnostics and other innovative solutions, we aim to enhance the management and prevention of NCDs, which are a major health challenge globally.

Our vision also includes the development of advanced PoC diagnostic tools. These tools are crucial for early disease detection, timely intervention, and effective disease management, particularly in resource-limited settings.

The disease prevention cohort is already live, and we have received 25 applications to date. This enthusiastic response indicates a strong interest and need for innovative solutions in disease prevention.

Mentorship is key to the development of successful startups. How is GIMS planning to leverage its in-house medical fraternity to mentor the incubatees? Will there be external mentorship collaborations?

GIMS Centre for Medical Innovation has developed a robust mentorship framework to ensure the successful development of its incubated startups.

Our clinical mentors include experienced clinicians from GIMS, encompassing both academic and hospital settings. These mentors provide invaluable insights into the practical and clinical aspects of healthcare innovation.

GIMS has also collaborated with clinicians from other institutions, both public and private. This diverse pool includes clinical researchers who offer expertise in various medical fields, ensuring that startups receive well-rounded guidance on medical and clinical validation.

Industry mentors include venture capitalists who provide financial insights and support, helping startups navigate the complexities of fundraising and financial management.

We have experts in management and technology who mentor startups on business strategy, technological development, and market positioning, ensuring that they are well-prepared to succeed in the competitive healthcare market.

Our Incubation Heads and CEOs bring a wealth of experience in startup incubation and ecosystem development. They offer strategic advice and help startups integrate into the broader innovation ecosystem.

Global mentors from Stanford University Biodesign team provide world-class guidance, helping startups achieve international standards and preparing them for global markets.

A major advantage comes from the in-house medical fraternity at GIMS who offer readily accessible expertise, enabling continuous and immediate support for the startups. This close proximity ensures that startups can rapidly iterate on their ideas with direct input from practicing medical professionals.

GIMS serves as a validation and trial hub, leveraging its clinical mentors to facilitate rigorous testing and validation of medical devices and technologies. This capability is crucial for startups to prove the efficacy and safety of their innovations.

What is the long-term road map of GIMS incubation centre?

Adjacent to the Yamuna Expressway, UP government is establishing one of the largest medical device parks. GIMS will play a pivotal role in providing solutions for validation and trials to many companies located in this park, further enhancing the ecosystem for medical technology startups in Uttar Pradesh.

The main focus is to develop low-cost, high-quality healthcare technologies that can be adopted globally. Our goal is to create solutions that are affordable yet meet international standards, addressing both local and global healthcare needs.

Our initiative, "Make in UP for the World," underscores our commitment to regional development while contributing to global healthcare advancements.

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