BioSpectrum the business of Bio & Health Sciences

“We plan to introduce 25 new therapies by 2025 globally, with focus on oncology & hospital products”

01 September 2022 | Interviews | By Dr Manbeena Chawla

In a significant move to bring critical research and development (R&D) capabilities under one roof, American firm Pfizer has set up a global drug development centre at the Indian Institute of Technology (IIT) Madras Research Park in Chennai. With an investment of more than Rs 150 crore, this 61,000 sq ft research and technology centre will be a part of a network of 12 global centers set up worldwide, and it is the first and only one at present being set up by Pfizer in Asia. To find out more about this new development, BioSpectrum interacted with Sai Sethuraman, India Head for Global Product Development, Pfizer. Edited excerpts-

How do you plan to enhance pharma innovation in India with this new centre?

Pfizer is the largest pharma anchored tenant in IIT Madras Research Park – amongst India’s top university-based research parks and with proximity to a leading academic research institute. At the centre, we have product innovation for global markets, sterile injectables finished dosage development, Active Pharmaceutical Ingredient (API) development and analytical method development. The centre drives data generation and analytical studies to help improve our quality, efficiency and safety on both clinical and environmental fronts. Product development at the centre is integrated, which makes logistics and collaborative working easier. By bringing the development of APIs and formulations under one roof, we will be able to speed up the journey from drug development to drug delivery, for the world and for India, from India. In fact, the APIs and

formulations developed are used across the US, Western Europe, Japan, Latin America, and Australia. In addition to driving innovation, the centre can also help make our innovations available to patients who need them by ensuring continuity of supply of medicines globally. It will provide technical guidance and process support to several of Pfizer's manufacturing sites by troubleshooting manufacturing issues, investigating technical or product quality issues, resolving raw material supply disruptions by identifying and qualifying new vendors and contributing to continuous improvement.

What new launches are in the pipeline for the Indian pharma market in 2022 & beyond, through this centre?

Globally, we plan to introduce 25 new therapies by 2025, with a particular focus on hospital products and oncology. The work at this centre can serve several of these therapy areas. The centre will develop small molecules including solid doses and sterile injectables. It would cater to products across Pfizer's portfolio with a strong emphasis on Pfizer's global hospitals business, which develops injectable products (parenteral) for patients admitted in hospitals. Product development is integrated at this centre, which makes logistics and collaborative working easier. The combined capabilities of this centre will include - General Chemistry, Process Safety & Engineering, Oncology (API & Drug Product), Advanced Analytical Characterisation, Stability Chambers, Material Characterisation Forensic & Particulate, and Microbiology.

How many new job opportunities are being provided at this centre, and under what expertise?

Pfizer's Chennai centre employs 250 scientists and professionals from a range of scientific disciplines including formulation scientists and pharmacists, analytical scientists with expertise in process, analytical and formulation medicinal sciences, life science specialists such as microbiologists and biotechnologists, chemical engineers, data scientists, and programme managers.

What are the challenges facing the technology workforce in India for the life sciences/pharma sector in India? How can those be addressed?

The pandemic has helped to drive digital transformation and technological advancement more forcefully in the healthcare and pharma industries. Digital skill sets have become a 'must have' and there is a huge demand for tech-savvy candidates, who have the required skills. As the gap between demand and supply for the tech-savvy workforce grows, companies across industries are now competing for the same talent pool. Furthermore, these skillsets are transferable across industries further compounding the problem of talent scarcity and not just for the pharma and healthcare sector.

We believe India offers a rich and deep talent pool, and an attractive mix of resources, knowledge, and capabilities that we are leveraging across our businesses, especially at our global R&D centre in Chennai.

We foresee a few challenges in finding talent to manage emerging technological advancements such as the increasing role of artificial intelligence (AI), and Big Data analytics. These can position the pharma and healthcare sector in direct competition with the technology industry. Tech savvy talent also has high aspirations and catering to them may require big pharma to collaborate with other industries to meet their requirements. There is growing competition now between big pharma and the tech industry for high quality tech talent where a mindset shift has made them more conscious of compensation. Therefore, there is a greater need for industry-academia collaborations to identify and groom talent in this space, something that Pfizer has been spearheading through its various efforts in the country.

What are the new opportunities in store for the startups via this centre?

Pfizer's Chennai centre is located close to a multidisciplinary research cluster and incubation centre, as well as IIT Madras – one of the country's leading academic research institutes enabling advanced research. The centre will have close access to the tech corridor which supports our ambitions for digital acceleration. IIT Madras Research Park offers the best of space, infrastructure and a talent pool to help us expand in the future. Moreover, our presence offers students from the IIT Madras campus the opportunity to potentially collaborate on several research projects or make use of our facilities for their experiments.

In addition to the possibilities of the centre, and in line with our strengths in innovation and our purpose which is 'Breakthroughs that Change Patients' Lives, we have a programme to strengthen the startup ecosystem in India. In 2015, we launched the Pfizer-IIT Delhi Innovation and IP Programme. It was a unique incubation accelerator program with the

Foundation for Innovation and Technology Transfer (FITT) at IIT Delhi, to support, promote and reward healthcare innovations made in India. This program has been very successful. In 8 years, we incubated 9 startups, and supported 25 IP filings in areas such as diagnostic innovations, drug delivery platforms, medical devices, medical simulation, and training of healthcare workers. Two of these startups are in the stage of final testing and validation and will soon be launched commercially.

What are your expectations from the government to support pharma innovation in India?

We believe that we need more emphasis on Industry-Academia-Government partnerships to support pharma innovation. The Pfizer-IIT Delhi Innovation and IP Programme that we launched in 2015, was an example of this. We had support from a strong coalition of partners, who brought deep knowledge and expertise to support breakthrough healthcare innovations by startups in India. Atal Innovation Mission (AIM), NITI Aayog came forward to provide the startups with access to their entire network of incubators, facilities and technical and strategic advisory. IIT Delhi is the principal incubation partner. Social Alpha is the implementation partner and accelerates the lab-to-market journey. And, Pfizer is the funding partner for this program. The programme is also being supported by Agnii, PATH, AHPI, St John's Research Institute, HCG Hospitals, Cytecare Hospitals, FICCI, UNHIEX, Google for Startups, Design Alpha, HIMSS, Marico Innovation Foundation, and TenX2. The overarching objective of this programme is in line with the Government's mission for Made in India and Startup India and underscores our commitment to innovation and R&D in India.

Dr Manbeena Chawla

(manbeena.chawla@mmactiv.com)