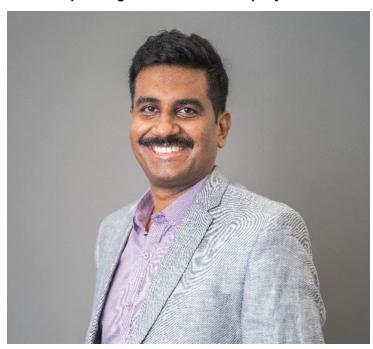


"It is important that academic institutions have access to bare minimum instruments for their research"

06 June 2024 | Views | By Dr Manbeena Chawla

Manoj Panicker has taken on the new role of General Manager (GM), India at Cytiva, previously held by Rajan Sankaran. He is responsible for shaping the vision and growth path of Cytiva's business and overseeing commercial operations in India and neighbouring countries including Bangladesh, Sri Lanka, and Nepal across Bioprocess, Discovery & Medical, and Genomic Medicine businesses. BioSpectrum had a chat with the new GM on how he is planning to enhance the company's business further in India.



What new strategies are you bringing on the table as the new commercial GM of India, at Cytiva?

I embark on this new role to take on more responsibility and expand my potential as a leader, just as the 'new Cytiva' turns 4 years old. I also take on this role as India is on the cusp of tremendous growth in the biosimilar economy, where we have a very good pipeline locally, second only to China. The wave of biosimilar patent cliff provides significant opportunities for our customers. So, one of my priorities will be to ensure that we have the right strategy can help our customers be more competitive.

As the new GM in India, I'll continue to do my part to build strong connections and elevate the biopharma ecosystem in India – bridging Cytiva with other industry players, institutions and the Indian government so we can collectively position India as major biologics manufacturing hub of the world.

I will also ensure that at Cytiva, we continue to develop the talent necessary in India to achieve that goal. As a multinational company with a strong legacy and expertise in bioprocessing, we bring the best practices and trainings globally to our

customers here.

What major plans are in store for the Indian market in FY 24-25?

In region for region manufacturing has been and will continue to be Cytiva's strategy in India. The new manufacturing facility and experience center we launched in Pune last year will help facilitate India's ambitions to be biomanufacturing hub.

India is a conducive environment for Cytiva to fortify its Asia-Pacific manufacturing footprint for two reasons. Firstly, Indiahas ambitions to become a global biomanufacturing hub by 2025. This was laid out in the National Biotechnology Development Strategy by the Department of Biotechnology (DBT) in India.

Secondly, there's an opportunity for Cytiva to make a positive impact by responding to the needs of the industry in India. According to Cytiva's 2023 Global Biopharma Resilience Index, 65% of biopharma executives in India say that the manufacturing of biologics in their country is likely to significantly increase until 2026. This is 15% higher than the global average, and in line with India's mission to become a hub for the development of novel vaccines, biologics and biosimilars.

Are you planning new investments, collaborations, or new product launches this year in India? Please share details.

You're familiar with the advances that are happening in the mRNA, the cell therapy and the gene therapy space. Cytiva is strongly equipped to help accelerate the development of these new generation of medicine, so I'm happy to share our latest developments and product launches globally and in India.

In April, Precision Nanosystems was fully integrated into Cytiva's business, forming the nanomedicine business unit within the Genomic Medicine OpCo.

May is a big month for us with 2 product launches to support the development of genomic medicines.

SefiaTM cell therapy manufacturing platform was launched last week. Cytiva also introduced new cell lines called ELEVECTA to meet the challenges and increasing demand of viral vector manufacturing. This enhanced offering contains three cell lines (transient, packaging and producer) to comprehensively meet different objectives and provide the ability to transition between cell lines as needs evolve.

What are the current challenges facing the bioprocessing market in India?

Cytiva released the results of its <u>2023 Global Biopharma Resilience Index</u> and the survey found developing and retaining talent is one of the biggest challenges facing the biopharma industry in India. The GBRI findings show that there's a significant challenge in talent acquisition and retention in R&D with 54% of executives saying it is a moderate to substantial challenge to attract and retain R&D talent. In addition, 52% of executives consider acquiring manufacturing talent capable of working in GMP-certified or equivalent facilities, a moderate to very substantial challenge.

The new Cytiva Experience Centre in Pune helps address these pain points by providing trainings and demonstrations on the latest bioprocessing technologies including ?KTA, Allegro, iCELLis and Sepax, to strengthen the skills of India's biotechnology talent.

Our Fast Trak Centre in Bangalore also provides immersive upstream and downstream training programs including:

- **Downstream**: Operator trainings on Chromatography purification systems, filtration systems, large scale column packing for efficient purification, UNICORN software training, downstream process development and scale-up.
- Upstream: Operator trainings on SU bioreactors, Process development and scale-up technology using SU Bioreactors

How is Cytiva strengthening its presence in the Indian bioprocessing market?

Cytiva continues to see strong potential in India and just October last year we inaugurated our manufacturing facility and customer experience centre in Pune.

Before we added these capabilities, Cytiva already has a strong presence in India with facilities in Mumbai, Delhi, Ahmedabad, Hyderabad, Chennai, Bangalore, and Kolkata.

Our Bangalore site includes a Fast Trak Center that offers training as well as validation and bioprocessing services, and a well-established center for research and development across bioprocess, discovery, medical, and genomic medicine businesses.

We will continue to explore opportunities to strengthen our presence in India in the coming years, and I'll be happy to share with you the details when the time comes.

How is Cytiva contributing towards biotech R&D in India? Are you partnering more with the academia or industry to enhance R&D in the biotech space?

Cytiva continues to foster close ties and collaborate with incubation centres sponsored by BIRAC/DBT.

Another partnership we have with the translational centres, like the one we had with C-CAMP (Centre for Cellular and Molecular Platforms). With C-CAMP, we are involved in mentoring new startups and even providing some support for these new startups that are coming into the biotech world.

With regard to academic institutions, we have a Series of Advancements in Cell Therapy events to promote Cell Therapy process among Academic & industry customers in collaboration with CAR-T & Cell Therapy Centre (CTCTC), Tata Memorial Centre, Mumbai and ACTREC (Advanced Centre for Treatment, Research and Education in Cancer).

We also are well-connected with IIT Madras on some of the biotech, mostly on the agricultural space through our CSR initiatives on shaping and providing them support to equip the labs, the right equipment to enable the right research, etc.

I am also part of the Life Sciences Council of CII (Confederation of Indian Industry), through which play a part on this particular skill development. This week, I was in a conversation with DBT on this particular area. A lot of good work is being done by the government in the skill development area.

We will continue to explore collaborations with academic institutions and industry associations to train R&D talent in the biotech space on the latest bioprocessing techniques.

How to enhance the R&D, the biotech, the pharma R&D in India? What are your thoughts of lack of funding that researchers face?

The biotech R&D industry in India is important to develop novel biologics, as our local molecule pipeline is not that robust. Pharma companies with small molecules in India already have a strong foothold. How do we take the novel biologics R&D into that space?

It boils down to two things. One is, we have to prepare students to be industry-ready talent. The biotech ecosystem is quite different from an IT ecosystem, we need more than computers and software. We need actual bioprocessing equipment, consumables, media, resins for example, to train somebody in that particular area so that they are industry-ready, and can go forth and innovate.

In the absence of the right ecosystem or some of the instruments, it is quite tough today for academia to do that and to do enough translational activities. We can address it in two ways.

It is important that academic institutions have access to bare minimum instruments - scaled down versions of the process instruments or lab instruments, which will give real exposure to the students on how to operate such kind of instruments. That is important and wouldn't require a big cost outlay.

But when it comes to the scale up in a translational setting, investment costs increase and once installed, it is important that

they are utilised productively, because these are very big investments.

Closer academia and industry collaborations can really change our ecosystem. I've seen globally successful models, for example, in Sweden called the Testa Centre, where any innovators could come and use this complete lab setup. So why not something similar to that in India so that we can solve some of this academia interaction and scale-up related problems?

So hands-on and the process development trainings are crucial. Enabling such kind of an ecosystem is resource-intensive, but it remains top in our agenda. Alignment and support from DBT and other government agencies, who are committed to making progress in this area will propel our industry towards our goal to be a global biomanufacturing hub.

Any major expectations from the government?

As mentioned earlier, the government, through the Department of Biotechnology (DBT) in India has set the north star in the National Biotechnology Development Strategy. This sends a strong signal to industry players to respond to the needs of the industry.

At Cytiva, we're ready to play a bigger role in India's biopharma and biotech growth story and align with the Department of Biotechnology's strategies.

Sustainability is also a key priority for Cytiva and we're excited to see that this has emerged as a focus area for India's biopharma industry in this year's budget announcement. During her 2024-2025 Budget address, Finance Minister of India Nirmala Sitharaman discussed the introduction of a fresh initiative focused on bio-manufacturing and bio-foundry. This initiative aims to offer eco-friendly substitutes like biodegradable polymers, bio-plastics, bio-pharmaceuticals, and bio-agricultural inputs. The announcement aims to boost the bio-economy's contribution to India's economy, reaching \$300 billion by 2030 and \$1 trillion by 2047. Bio-products are vital for India's sustainability and green economy goals.

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