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Hottest Indian Start-ups: One-stop solution for protein and antibody

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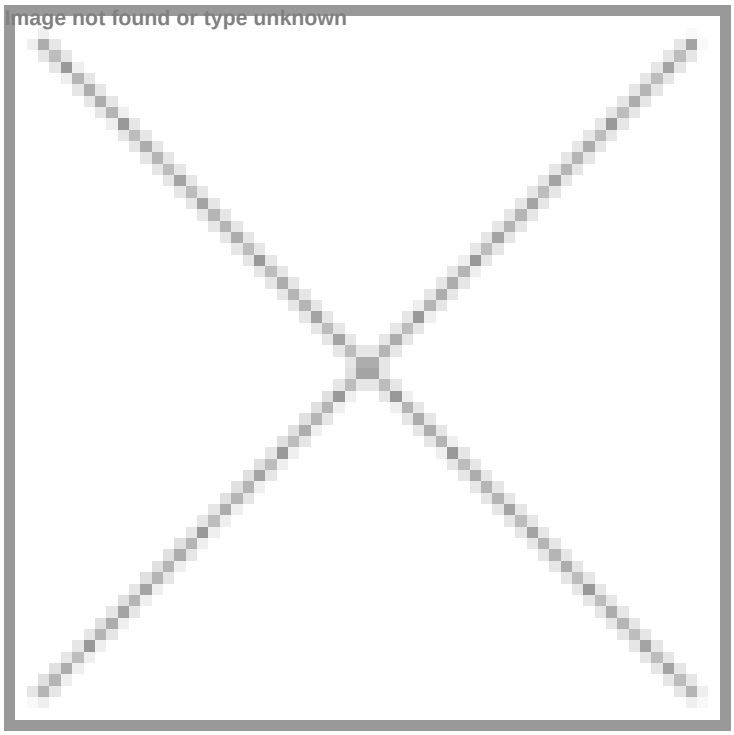

However, their unwavering self-belief, hard work and patience has started paying off.

GNG was founded in 2011, with a focus in the areas of diagnostic and therapeutic proteins development, cellular and molecular assay development and contract research services.

The company has expertise in protein and antibody engineering, expression and production.

"We have developed a platform whereby we can deliver antibody quickly without the need of immunization," says Ms Supriya, a Biologist.

Its research focus is in developing antibody for research, diagnostics and therapeutics.

With this goal, GNG has developed a therapeutic candidate molecule for MTB (Mycobacterium Tuberculosis), and TNF (Tumor Necrosis Factor) alpha.

She adds that the main focus is to reduce the cost of antibody resources, and maintaining its specificity and consistency.

Comments Ms Supriya, "Our idea of starting a new company was to deliver cost-effective scientific resources to the Indian scientific fraternity. Our constant effort is to use our intellect to identify the bottleneck areas in Life Sciences, and develop technologies right here in our own country and help the society."

"Our platform will deliver the smallest antibody with high specificity in a lesser time frame," she points.

The start-up has a strong team of 9 scientists with extensive experience in proteins, molecular biology and immunology, headed by a very experienced Structural Biologist, Dr Vinod Agarkar.

She says that Mr Ravi Kashikar, the chairman of Ankur Seeds, influenced her to step into the entrepreneurial journey.

Analyzing a niche area, the team found that there is huge need for TB research for new drug development.

"We worked along with Prof Harinath in MGIMS (Mahatma Gandhi Institute of Medical Sciences), who has given his whole life researching TB, and identified a novel target. Our company is developing a lead molecule against the target, and consequently a new biological entity as a therapeutic," Ms Supriya states.

Painful Policies

So far the journey has been tough for the founders. Finding the right kind of facility for GNG's work was very hard as there were no incubators around Nagpur.

"We had to collaborate with several labs in and outside the country to facilitate our research. The Government should bring in more incubators to other towns to foster more innovation. Right from inception, we have faced very tough system in the Indian Government's policies for companies that are research-based," opines Ms Supriya.

"For high-quality research," she continues, "we need quality capital assets, and analytical instruments which incurs huge cost and requires to be imported from abroad. There are so many rules for custom clearance and the cost incurred is huge. The Government does give accreditation/DSIR when there are sales returns. This gives benefits for the R&D, but for start-ups with no initial ROIs, they have to face tough times."

Finding the right manpower has also been a great challenge. "Being in B-Town, there was difficulties in getting skilled people with analytical minds," she adds.

High-Risk Investments

Initially, the founders invested their own hard-earned money into GNG.

Later the start-up was selected for BIG (Biotechnology Ignition Grant) from the Department of Biotechnology (DBT) and Biotechnology Industry Research Assistance Council (BIRAC), which boosted its innovations further.

"The BIG-BIRAC has been a very nice initiative taken by DBT for biotech start-ups. From the proof-of-concept (PoC) to the product, biotech industry involves huge-risk. Investor in India are still scary to fund high-risk projects. But BIG has given a lot of boost and credibility to innovations in India. To date, many of the start-ups are benefitted and lot many await," she explains.

She points that in the West, investors are ready to fund high-risk ideas.

"In India, most of the VCs want to see instant returns which does not work with high-risk and high-benefit ideas. Academic support to start-ups and spin-offs are best in the West. They work more in collaboration, which yields good innovation and translational product. In India, right at the conceptualization stage, we need to clearly explain to investors that it is a highrisk investment with long gestation periods," she states.

"To add to this, I must say people always want grey hair and look for degrees behind your name when you are presenting the business idea to a funding agency. But only passion and will power will enable success. This is our personal experience," she notes.

About Rs 20 million worth investments have gone into GNG.

The company has bagged Indo-French project from Indo-French Center for the Promotion of Advanced Research

(CEFIPRA), along with The Center for Bioseparation Technology (CBST) at Vellore Institute of Technology (VIT), thereby boosting its credibility.

Big Pharmas

Right now, the start-up has designed MTB candidates which are in lead characterization stage.

"We would want to work with bigger pharma companies who can take this molecule to the next stage to develop a therapeutic solution for TB, which is a major killer in developing countries. We have also developed a platform to deliver smaller antibody with high specificity which can be cost-effective, and it caters to huge client list such as pharma, biotech and agriculture industry," expresses Ms Supriya.

GNG now has the capability to deliver engineered smaller antibody working against any targets.

Its collaborations at the moment is with Jamnalal Bajaj Tropical Disease Research Centre (JBTDRC), at MGIMS and CBST, at VIT.

Generics To Innovation

Ms Supriya says that initially Indian companies were more inclined towards generics which was need of the hour.

"But now," she observes, "the trend is changing towards innovation and need-based solutions. Start-ups like us and many others have innovative ideas and bring it to PoC stage which is taken up by companies. Such trend has started, and in the coming days this will grow."

She feels that there is a lot of scope for Indian start-ups for antibody reagent and assay development for diagnostics and research.

"This will be an effort which can even be taken up by the 'Make in India' initiative. As said by Dr Kiran Mazumdar in one of her inter-views, innovation does not just mean making new things but also making older things in an innovative way to reduce costs," she mentions.

Ms Surpriya's loves reading, traveling, blogging, and draws her inspiration from Biocon's CMD Dr Kiran Mazumdar herself.

Entrepreneurial Lessons Learnt:

ï‚§ Right Team
ï‚§ Right Finance Management
ï‚§ Right strategy

Dealing With Start-up Stress:

ï‚§ Focus and focusing right
ï‚§ Surrounding with good mentors and encouragers
ï‚§ Embracing family support

Elements For Starting Up:

ï‚§ Good idea with practical approach
ï‚§ Exceptional team
ï‚§ Strategic planning
ï‚§ Pitching in fast at the right time

Essential Entrepreneurial Qualities:

ï‚§ Consistency
ï‚§ Patience
ï‚§ Taking risks
ï‚§ Being technically sound
ï‚§ Understanding start-ups' financial dynamics