

Hot Start-up: Battling cholesterol with novel probiotics

12 November 2015 | Features | By BioSpectrum Bureau

Hot Start-up: Battling cholesterol with novel probiotics



Cholesterol is one of the leading factors behind all the heart diseases across the globe.

According to a report by World Health Organizations (WHO), cardiovascular diseases (CVDs) are the number one cause of death globally, and more people die annually from CVDs than from any other cause. Over three quarters of CVD deaths take place in low- and middle-income countries.

In 2012 alone, 17.5 million people died from CVDs representing 31% of all global deaths.

Globally, India seems to be leading in two of the major ailments - diabetes and heart diseases.

Aware of this trend, 25-year-old Mr Hrishikesh Mungi is working hard at his lab at NCL (National Chemical Laboratory), Pune, on solving one of India's major health threats.

In 2012, after graduating with an Engineering degree in Biotechnology from KLE Engineering College, Belgaum, Mr Mungi was selected to work on a project on the extraction of bile salts hydrolase enzyme at NCL.

"We soon realized the commercial potential of our research," says Mr Mungi.

His guide, Dr Archana V Pundle, a chief scientist at NCL was the first to point out the research's commercial viability.

Mr Mungi continues, "We then applied for a patent with the help of NCL. We put together a business plan including market survey and future goals for building a commercial enterprise."

The <u>research</u> work was selected by BIRAC (Biotechnology Industry Research Assistance Council) for funding the project further through its BIG (Biotechnology Ignition Grant) scheme.

In June 2014, Abhiruchi Probiotics was incorporated by Mr Mungi, with Dr Pundle serving as a scientific advisor and non-executive director of the start-up.

Abhiruchi is a technologically-driven start-up, involved in developing novel probiotic products having health benefits.

Investments worth Rs 50 lakh has been invested in the company so far.

It is currently focusing on developing, manufacturing and commercializing of a cholesterol-lowering probiotic formulation without any side effects on the body.

The company has now acquired provisional patent for lowering cholesterol by the application of probiotics.

"At the moment we are validating the technology, and it'd take another 5 years for the products to reach the market," adds Mr Mungi, who enjoys playing Cricket.

Mr Mungi's father and grandfather were also <u>entrepreneurs</u> who inspired him to actively pursue entrepreneurship since his early childhood.

He bagged the 'Young Entrepreneur Award' at Eureka 2014, a business model competition conducted by IIT-Bombay.

While developing the technology at NCL, Mr Mungi worked hard for a monthly pay as little as Rs 8000. At times he had to wait patiently for months together to receive his salary.

Talking about the challenges faced, Mr Mungi voices, "Adapting to the mode of operation at the <u>incubator</u> center was challenging initially. Also it was grappling to maintain a balance between <u>research</u> and business documentation processes. Procuring materials and equipments from vendors in terms of quality and price was a huge task."

Abhiruchi now is looking to collaborate with companies, research institutes, academia and the industry to carry out <u>clinical</u> <u>trials</u> on its products. It is also seeking active partnerships to optimize and scale-up its fermentation process, and diversify its R&D.

However, it is not expecting to expand internationally at least for the next 5 years.

He has a couple of recommendations for the Government when it comes to supporting start-ups.

"The Government needs to redesign DSIR (Department of Scientific and Industrial Research) recognition requirement by DST (Department of Science & Technology), DBT (Department of Biotechnology), and ICMR (Indian Council of Medical Research) while acquiring grants for start-ups, which are available for Government-aided labs. The Government should also support start-ups to acquire equipments and temporary manpower through grants provided by DST, DBT, and ICMR. But again, this facility is available for Government-aided labs," Mr Mungi opines, who looks at Mr Warren Buffet as his entrepreneurial model.

He also firmly believes that for a <u>start-up</u>, validating the idea thoroughly by various means especially with respect to market requirements is crucial.

He signs-off by saying, "We need to drop the idea of being born for something. With hard work and patience, everything can become one's life goal."

Essential Entrepreneurial Qualities:

- ï,§ Being flexible
- ï,§ Innovative thinking
- ï,§ Patience
- ï,§ Persistence
- ï,§ Working smart

Entrepreneurial Lessons Learnt Through:

- ï,§ Committing errors
- ï,§ Reading books
- ï,§ Talking to people

Why Pune Is An Emerging Start-up Hub?

- ï,§ Availability of raw materials and equipments
- ï,§ Intellectual support
- ï,§ Presence of fine academic and research institutes
- ï,§ Skilled manpower