MedGenome: Leveraging Genetic Diversity of Indian Population

It was 2003. Sam Santosh was deeply inspired by the completion of the human genome by the International Human Genome Project. He was intrigued by the opportunity produced through understanding and leveraging the genomic source code. He spent a few years in reading and learning about the subject during which the DNA sequencing technology went through a revolution by exponentially reducing sequencing cost while increasing processing speed. With the advent of new technologies like Next Generation Sequencing (NGS), he saw the opportunity of creating a company for genome sequencing and data analysis.

To tap this opportunity, he incepted SciGenome in 2009 to provide genomics services with offerings across human, plants, microbial, and animal domains. Soon, he realized that the growing demand in genomic services for human samples required a dedicated approach and as a result, SciGenome spun off its human genomics division into an independent entity called MedGenome in 2013.

MedGenome got Series A funding of US$4 million from investors led by Emerge Ventures, with Mahesh Pratapneni of Emerge Ventures joining the board. With the first round of funding in 2013, MedGenome shifted its headquarters to Bangalore, where it has set up a Next Generation Sequencing lab and also entered the field of genomics based diagnostic testing. Since then, the company has been growing constantly and today proudly boasts of a 350 member team, over 400 genetic tests across all key disease areas and having a network of more than 500 hospitals for diagnostics and 50 plus research collaborations across the country. The company raised the series B round of $20M from Sequoia in 2015.

Improve Global Health by Developing Deep Insights into Diseases

As India's premier genomics based research and Diagnostics Company, MedGenome has set the precedent for upcoming genomics companies, The company's comprehensive range of genetic testing across various disease areas provides useful insights to clinicians for better diagnosis, treatment and management of diseases. "We offer Next-Generation Sequencing based genomic solutions in cancer immunotherapy. Our unique access to genomics data with clinical and phenotypic data provides insights into complex diseases at the genetic & molecular level, facilitates research in personalized health care," he speaks.

MedGenome is also the only genomics firm to conduct a very accurate non-invasive prenatal test in a facility in India to predict the risk of chromosomal disorders in foetus. Additionally, they are known to tender genetic testing across various disease areas like neurology, oncology, cardiology, autoimmune, rare inherited diseases, endocrinology, hematology, ENT, Metabolic disorders, pre-natal and population genomics, to provide useful insights to clinicians for better diagnosis, treatment and management of diseases.

> MedGenome is able to leverage Indian genetic data to provide deep insights into complex diseases at a molecular and genetic level

In addition, MedGenomeClaria has a dedicated expert genetic counseling unit, which offers free genetic counseling to help couples understand key genetic information while planning for a baby. Apart from these MedGenome also offer PGS (Pre-implantation Genetic Screening) to check for chromosomal disorders in an IVF embryo and help to choose the best embryo, thus reducing the number of cycles needed for a successful pregnancy.

Large Scale Genomics Data Network

MedGenome provides over 400 tests in areas of Pre-Natal, Oncology, Neurology, Nephrology, Endocrinology and other therapeutic areas, and customized research solutions to researchers working in universities, research institutes companies and hospitals, joint research working with companies focused on finding precision medicine solutions to companies working in these areas.


Sam Santosh, Founder

After achieving the initial success, team MedGenome is now on the path of moving towards handling bigger and more complex problems like role of genetics in response to drugs and predicting adverse events. "We intend to explore collaborations as well as develop AI/ML technologies in-house specially for analyzing such multi-modal data and create products/tools for improving overall human health," he concludes. SC