Genomic lab for clinical research

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BANGALORE-based MedGenome Labs Pvt. Ltd, a genomics-based diagnostics and research services firm and The Madras Medical Mission, Chennai, have collaborated to set up a a state-of-the art genomic laboratory that will aid clinical and diagnostic research at the hospital premises.

The one-of-a-kind facility aims to be a one-stop solution for genetic testing, research and counselling for diseases including oncology, nephrology, cardiology, metabolic disorders, diabetes, hematology and dermatology. "Prenatal test (non-invasive) will also be available at the centre, which would help would-be parents to know about the genetic health of their baby," said VL Ramprasad, COO, MedGenome.

Shedding light on the main aim of the genomic centre, Mullasari Ajit, director, Cardiology, MMM said, "Knowing the genetic factors for certain disease conditions will help in guiding clinicians in better diagnosis and treatment. With medicines becoming more-personalised/gene based, prescribing drugs based on the pathology may have side effects (killing both harmful and normal cells).

So, it is necessary to create a data base to know the specific gene problem of our population," he said. "This is not something we have jumped into all of a sudden.

We have been working on genomics for that last five years, systematically

MMC, Chennai and MedGenome Labs, Bengaluru, announce setting up of genomic lab| **EXPRESS**

with different groups in the country," he added.

The centre which is located in the seventh floor of MMM will offer next-generation sequencing-based genomic solutions at genetic and molecular level. With expensive and high-end testing and lack of awareness among many clinicians posing a challenge to genomic research, Girish Mehta, CEO-India, MedGenome, said "Many doctors aren't aware of this type of research as they follow a set pattern while diagnosing diseases. But, awareness will increase in coming years and we are doing everything to make the public and doctors aware of genomic research, which will cover exome sequencing, RNA sequencing, and panel sequencing."

Talking about specific areas in which MMM is planning to collaborate with MedGenome, Shivakumar, Paediatric cardiologist, pointed to the staggering number of heart diseases among infants in Asia (10.3 per cent to 10.4 per cent) as opposed to that of Europe (6.7 per cent to 6.8 per cent).

"Eight out of every 1000 babies born have heart diseases and this might be due to basic gene problem, lifestyle diseases, glucose intolerance among Asian population and so on. Pulmonary arterial hypertension and cardiomyopathy are two diseases which we will be focusing on. Firstly, we will be identifying the basic gene background in our population in order to find new information from observing the genomic sequence; identify new patterns which are unique to our population and leave the data for the future generation to work and identify targeted therapies, " he said.