

# Centre for DNA Fingerprinting and Diagnostics (CDFD)

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## In news

Vice President inaugurated first of its kind Pediatric Rare Genetic Disorders laboratory at CDFD

## About Pediatric Rare Genetic Disorders laboratory

- The newly inaugurated lab will be multifaceted as the services provided will include
  - genome sequencing, identifying of causal genetic variations
  - generation of animal models
  - telemedicine and creation of a database on the disease-associated genetic variants in the Indian population
- This lab will tie up with medical colleges having paediatric departments, from where blood samples of children suffering from rare genetic disorders will be collected.
- Scientists at the CDFD will conduct genomic sequencing to understand which mutations in the genes cause disorders.
- The lab will also provide counselling to parents regarding the mutation.
- Once the genetic mutation is identified among such children, the scientists at CDFD will also conduct research to find out if the mutation is the only cause behind the rare genetic disorder
- The CDFD will also make a database of such diseases for further research, which will even help in development of therapeutics

## About the Centre for DNA Fingerprinting and Diagnostics (CDFD)

- CDFD is an autonomous organization funded by the Department of Biotechnology (DBT), Ministry of Science and Technology
- It is located in Hyderabad
- It also receives funding from other agencies on specific collaborative projects.
- In addition, DNA Fingerprinting and Diagnostics services provided by the Centre support some of its activities.
- CDFD is Sun Microsystems Centre of Excellence in Medical Bioinformatics, supported with a strong bioinformatics facility, and is the India node of the EMBnet
- The Centre is equipped with world class state-of-the-art instrumentation and computing infrastructure to facilitate research and development in frontier areas of modern biology.

### **Do you know?**

**An estimated 350 million people were suffering from “Rare diseases” worldwide and about 70 million (1 in 20) in India**

### **What is a Rare Disease?**

A rare disease is any disease that affects a small percentage of the population. In some parts of the world, an orphan disease is a rare disease whose rarity means there is a lack of a market large enough to gain support and resources for discovering treatments for it, except by the government granting economically advantageous conditions to creating and selling such treatments.

Most rare diseases are genetic and thus are present throughout the person's entire life, even if symptoms do not immediately appear.