**Course: Advance Bio Informatics**

**Module Title: Introduction to DD technologies & Strategies**

**Module No: 127**

**Drug Discovery: Technologies and** **Strategies**

Parameters of Drug Discovery

Bioinformatics & Drug Discovery

Genomic, proteomic, HT technologies.

**A touch of History**

Before ***1960s***; Molecules against cell, tissues or complete body

***1970s*** receptors and ion channels discovery

***1980s*** separation mech. Liquid chromatography, GLC, MS

***1980;*** HTS with genomic

**Human Genome Project**

Human Genome Project (HGP) completed in 2001. It is a project to sequencing the entire human genome and provides the data free to the world. HGP goal was the complete mapping and understanding of all the genes of human beings.

**Drug Discovery**

Drug discovery is a decision making process based on a huge amount of scientific data pertaining to the identification and validation of disease-associated targets.

**Challenges in Drug Discovery**

* Compound selection
* Done through HTS
* ADME-Tox exclusion
* Monogenic / polygenic diseases
* In vitro / in vivo data