

# Medical Genetics Programme

Definitions of Key Terms and Basic Genetics.

Blood groups Genetics

Mendel researchs and their meaning

Monogenic Inheritance Models

Genetic Risk calculation and pedigrees

Genomic Imprinting

X chromosome inactivation

Chromosomal anomalies and diseases

The genetic inter-individual variability and the concepts of polymorphism and mutation. Principal types of genetic polymorphisms. Haplotypes.

Methodological Approaches to study inter-individual genetic variability

The genetics of complex diseases

The role of genetic variability in the response to drugs, both in terms of efficacy and toxicity

The concept of genomic biomarker

Different types of genomic tests

Main genetic syndromes that involves dental anomalies