

TITLE:
**GENETIC VARIATIONS OF THE Y-CHROMOSOME
AMONG THE MALAY ETHNIC SUB-GROUPS**



RESEARCH CENTER: Human Genome Center, School Of Medical Sciences, Universiti Sains Malaysia

CURRENT STATUS OF PROJECT: Ongoing

RESEARCHERS:

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2. Dr. Zilfalil Alwi (main supervisor)

Introduction:

Population genetics is a study about the frequency of occurrence of alleles within and between populations. Y-chromosome had been chosen as method of study due to its lack of recombination, can trace paternal mode and can be applied in forensic investigation and evolutionary. The markers that will be used is Y-STR marker because its display a high level of polymorphism and had been proven more suitable for recent study than SNP (single nucleotide polymorphism).

Objectives:

1. To determine the genetic diversity of the study population.
2. To estimate the genetic distance between populations studied and construct dendrogram.

Methodology:

6 Y-chromosome STR markers will be used to study Y-chromosome of Malay subgroups to see the variance. Genetic distance will be estimate for genetic diversity and generate for a UPGMA tree using PHYLIP 3.5c software.

Expected outcome:

Identification of the genetic diversity among the study population. From the dendrogram that will be constructed, genetic distance will be better differentiated.