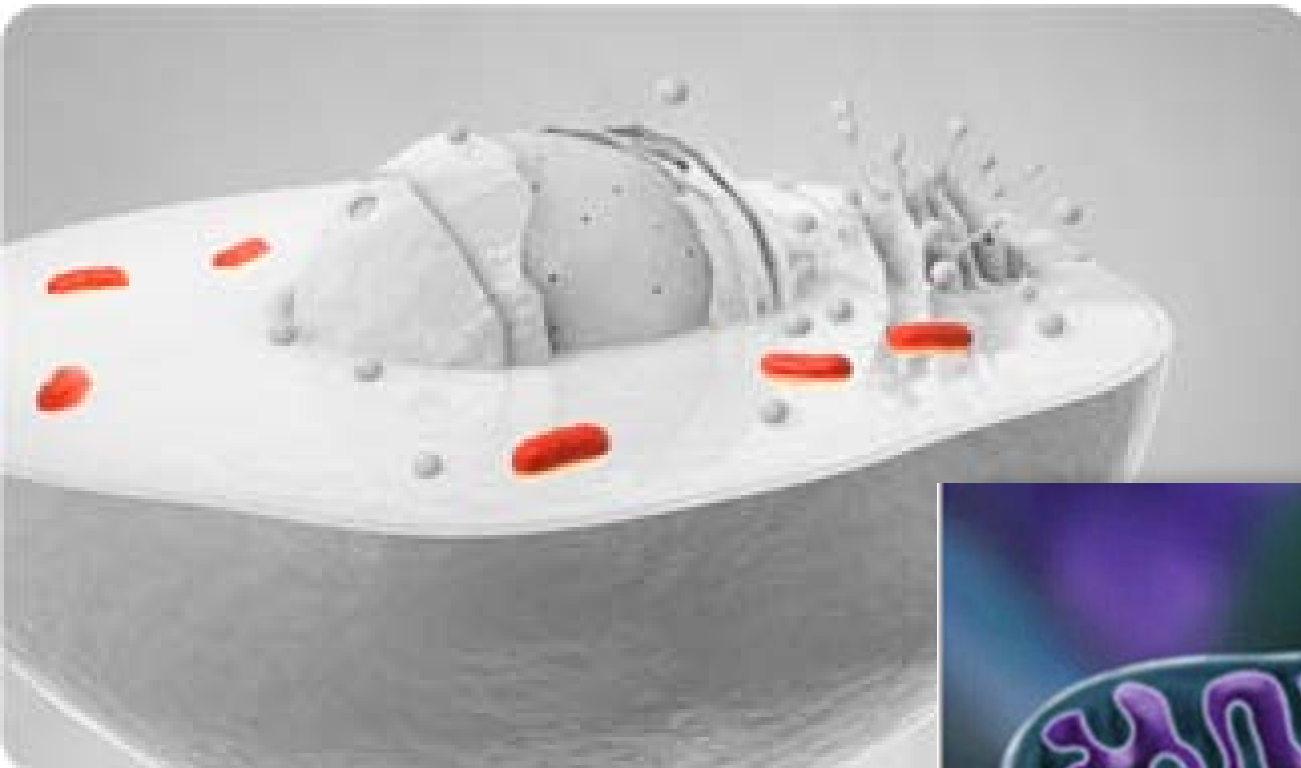
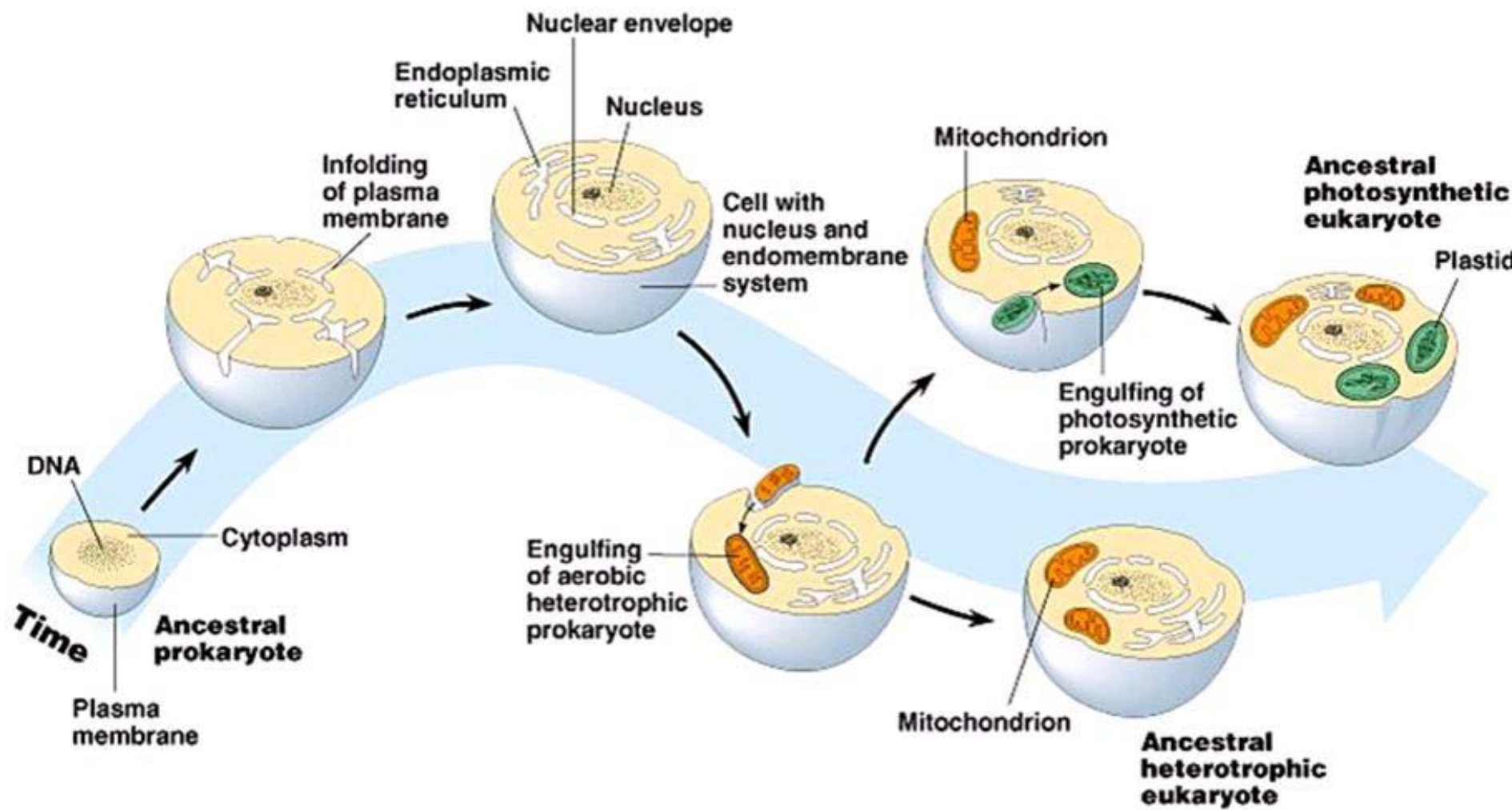


Mitochondriji





Cilvēka mitohondriālā genoma organizācija

Ļoti kompakta mt genoma organizācija. Cirkulāra DNS dubultspirāle

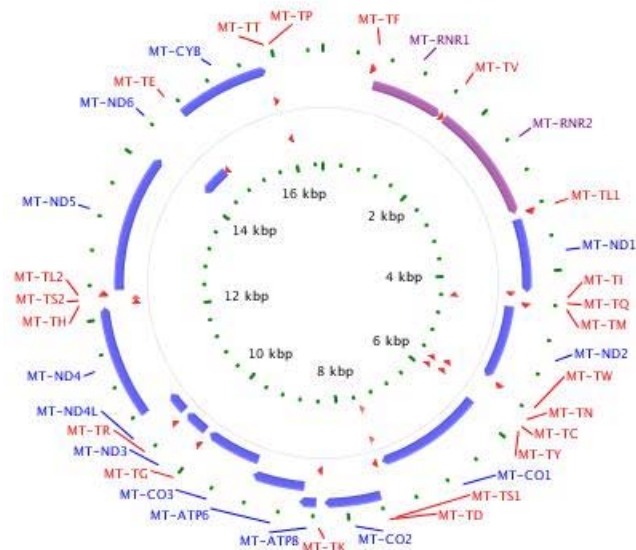
Mt DNS sastāv no 16 569 bp

Maz atkārtotu secību. Nav intronu

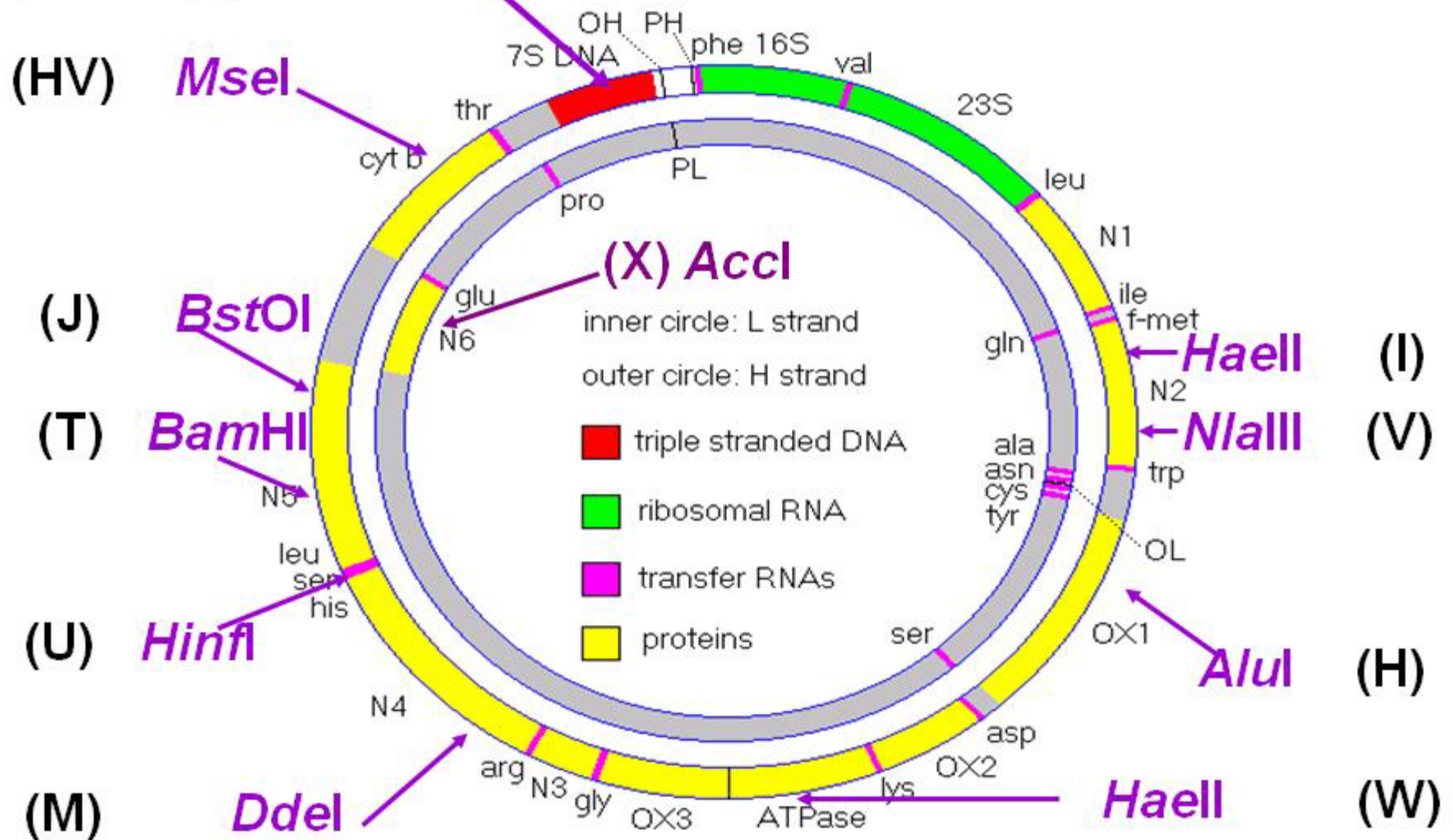
DNS nav saistīta ar olbaltumvielām

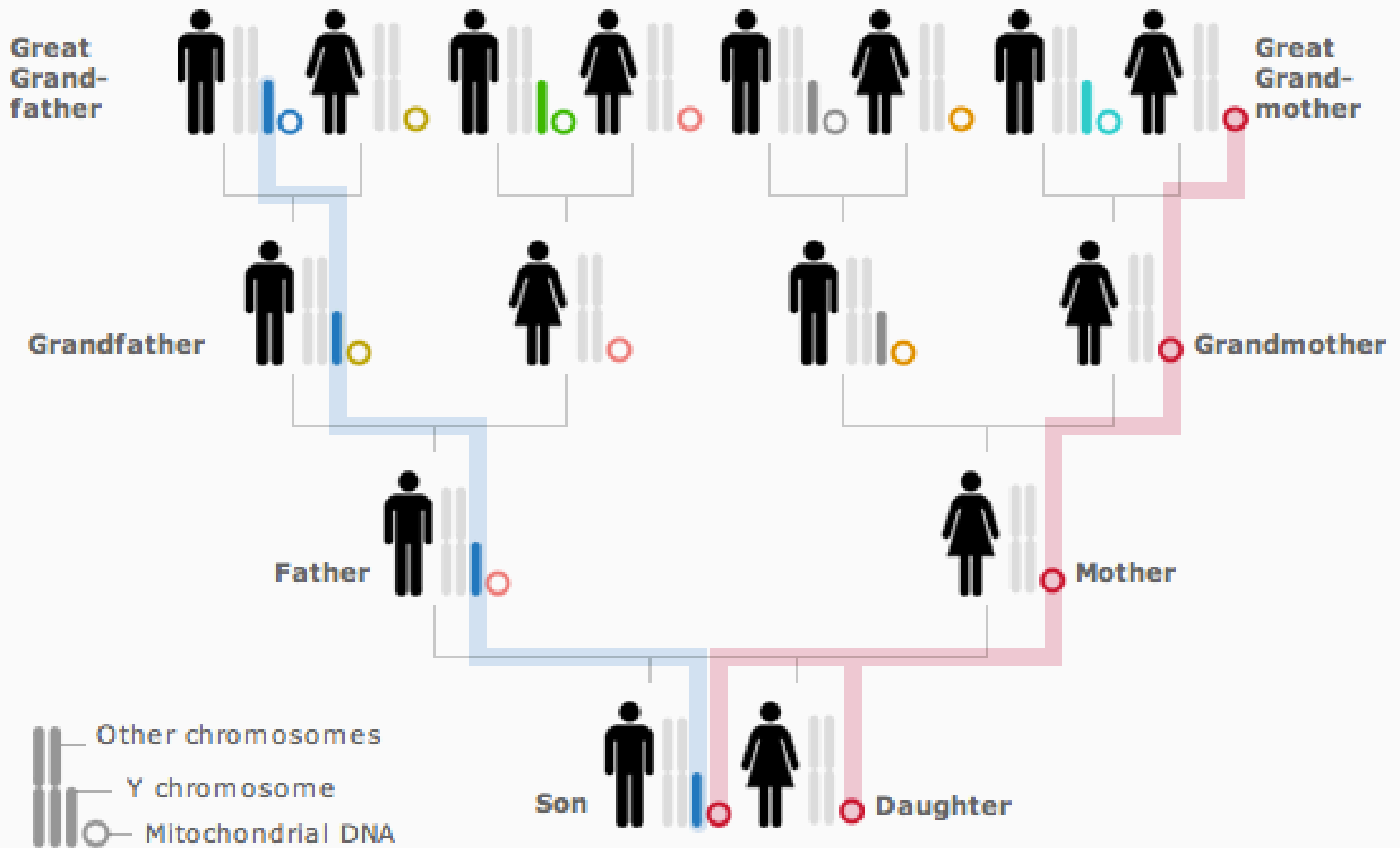
Augsts mutāciju biežums (5-10 x vairāk nekā kodola DNS)

Pārmantojas pa sievietes līniju (ar olšūnas citoplazmu)



HVS I un HVS II (1121 bp)



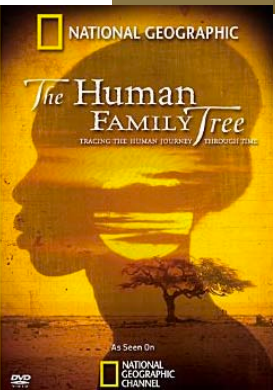
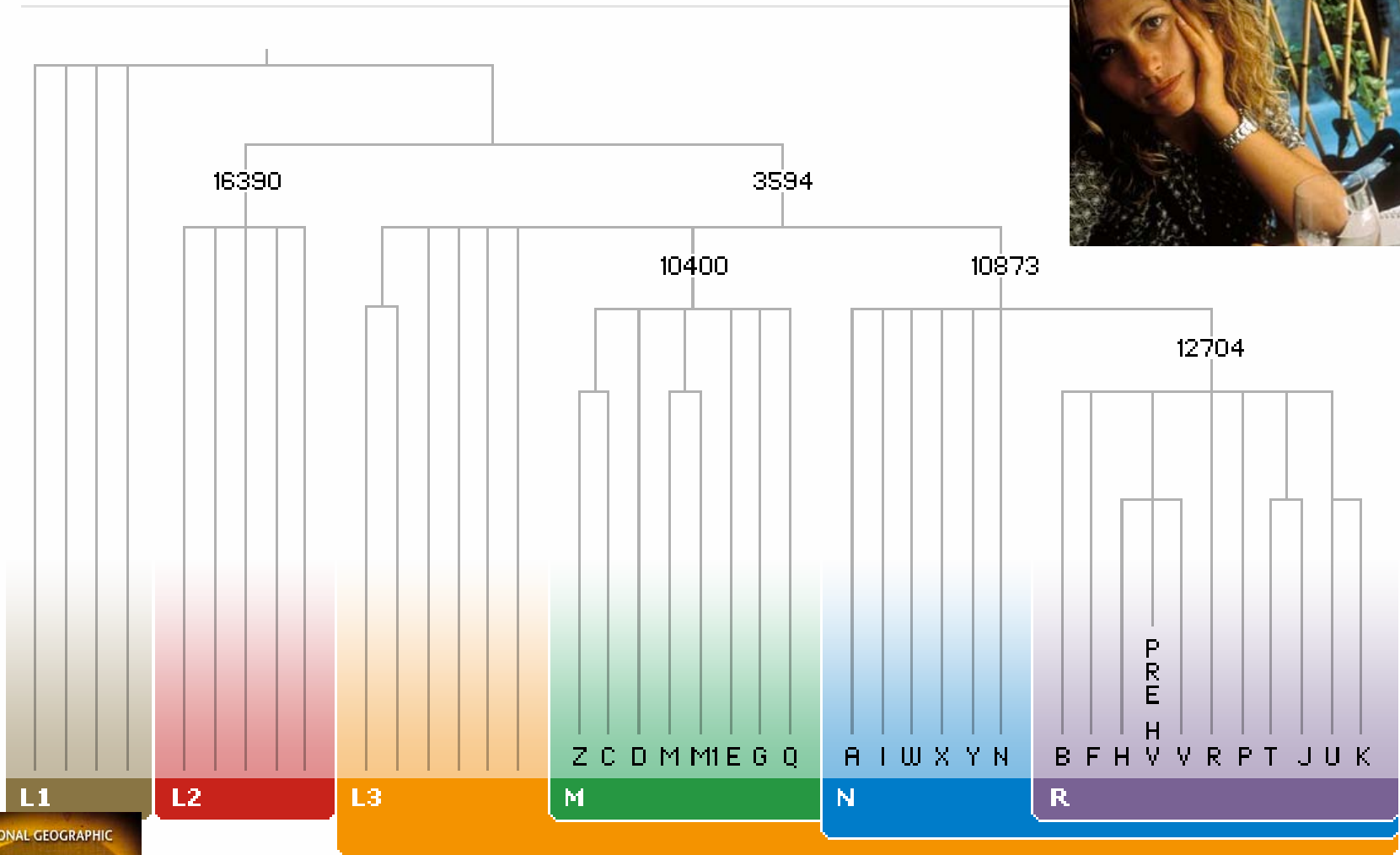


THE GENOGRAPHIC PROJECT

DNA

○ Show recombined DNA

● Show non-recombined DNA



—THE—
GENOGRAPHIC
PROJECT—

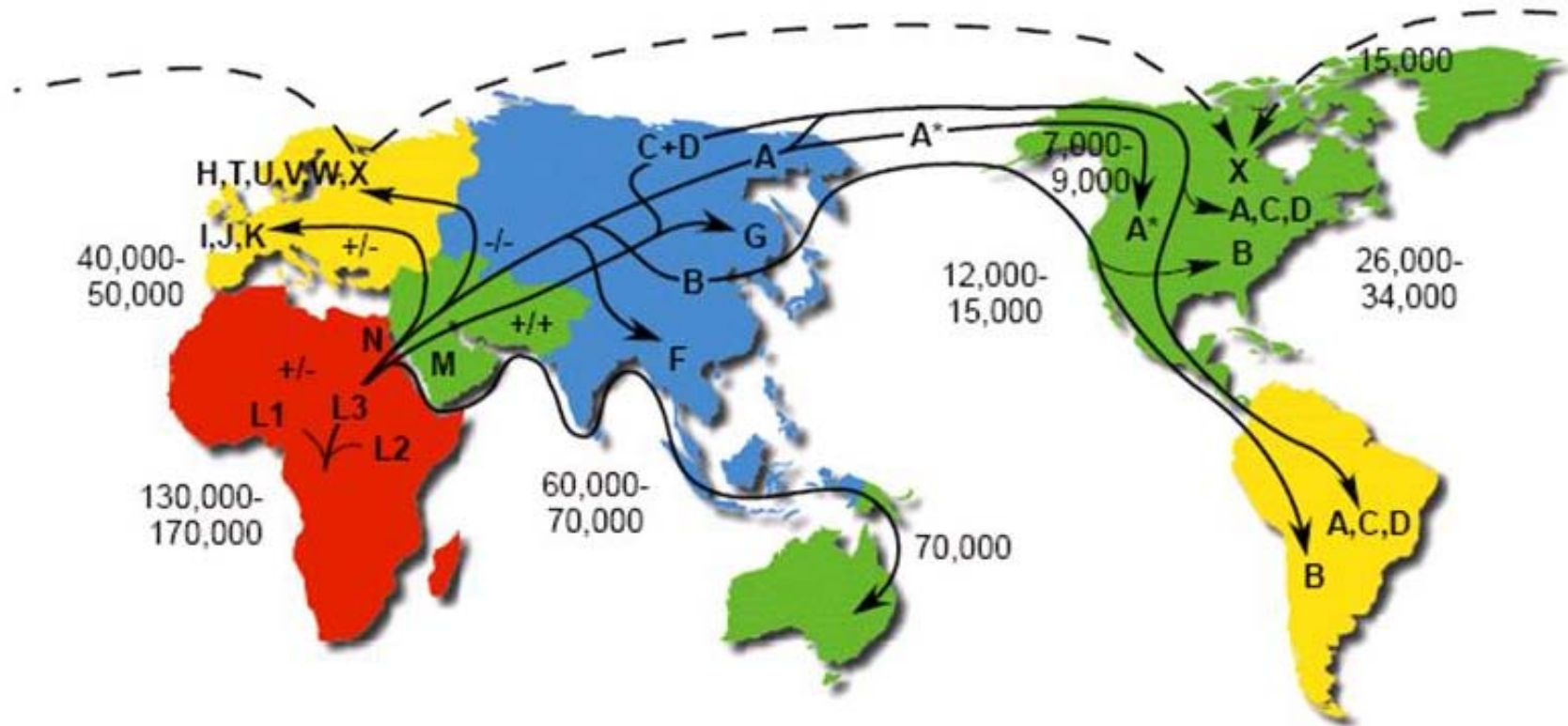


MtDNS migrācijas ceļi

Human mtDNA Migrations

<http://www.mitomap.org/mitomap/WorldMigrations.pdf>

Copyright 2002 © Mitomap.org



+/-, +/+, or -/- = Dde I 10394 / Alu I 10397
* = Rsa I 16329

Mutation rate = 2.2 - 2.9 % / MYR
Time estimates are YBP



200,000 B.C.

Introduction

200,000 B.C.

60,000

50,000

40,000

30,000

20,000

10,000 B.C.



ZOOM OUT -

EUROPE

ASIA

NORTH PACIFIC OCEAN

AFRICA

SOUTH PACIFIC OCEAN

INDIAN OCEAN

MAP TOOLS



THE GENOGRAPHIC PROJECT



Global DNA studies supported by the Waitt Family Foundation



A research partnership of National Geographic and IBM

