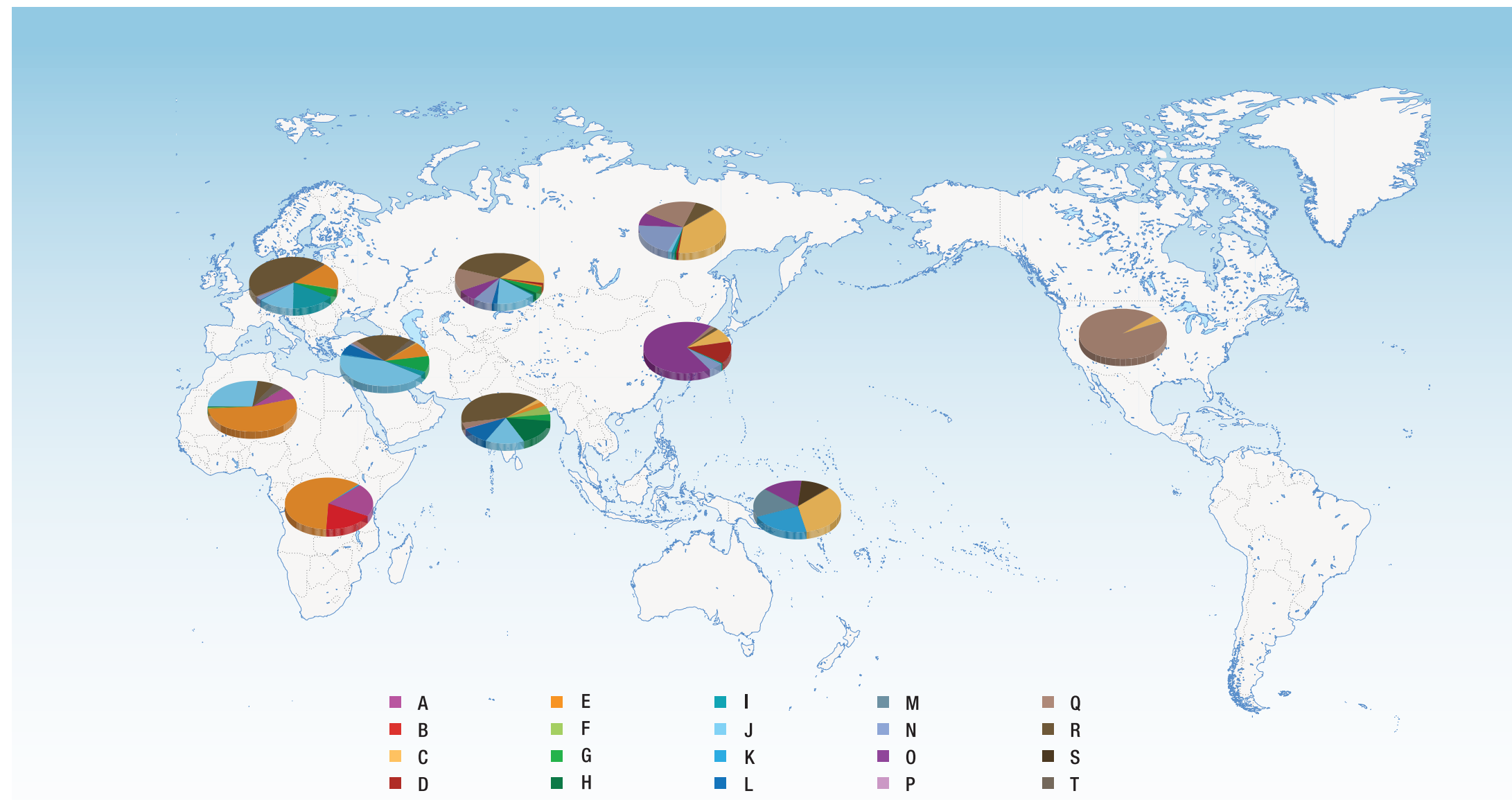
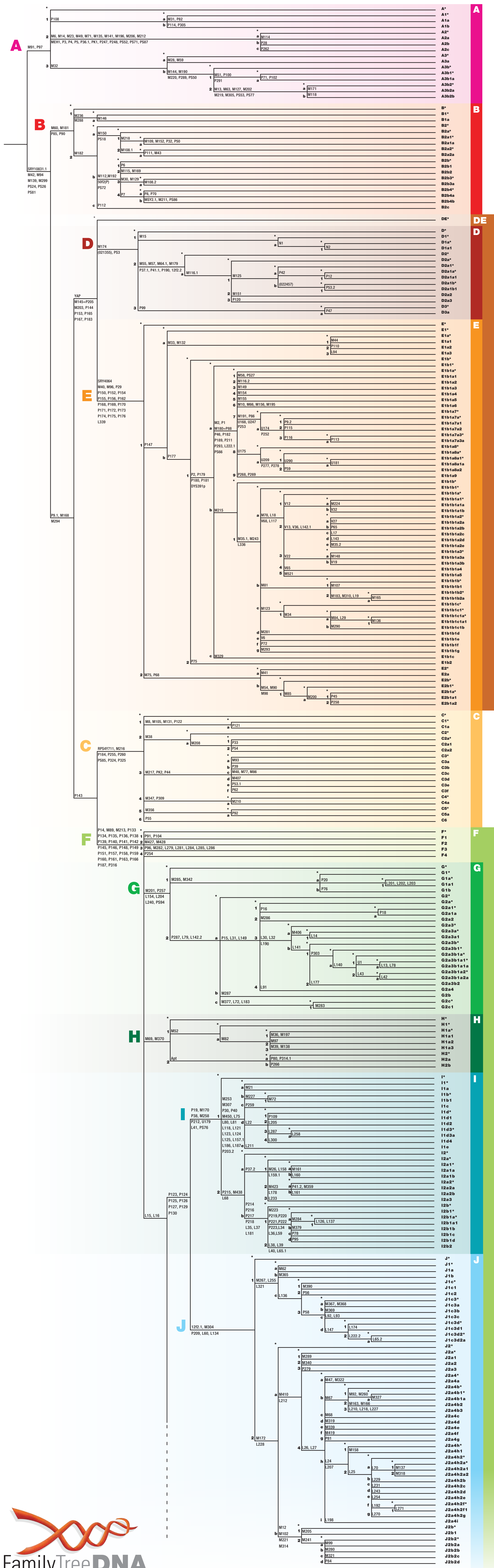


2010 Y-Chromosome Phylogenetic Tree



What are Haplogroups?

Haplogroups are the major branches on the Y chromosome tree, defined by single nucleotide polymorphisms (SNPs), which have accumulated along different lineages as Y chromosomes are passed from father to son over many generations. All haplogroups ultimately descend from a single Y chromosome carried by a male that lived in the distant past. The topology of the Y chromosome tree can be reconstructed by typing mutations in different human populations. As more SNPs are discovered (e.g., M254), the structure of the tree changes. Originally, the Y Chromosome Consortium (YCC) arbitrarily defined 18 haplogroups (A-R), which represent the major divisions of human diversity based on Y chromosome SNPs. Currently, there are 20 haplogroups (A-T). In turn, each of these major haplogroups has numerous subgroups, or subclades, that are named with alternating letters and numbers.

Due to limited space, IMS-JST SNPs have been abbreviated in parentheses. Example: IMS-JST021355 is abbreviated (021355)
 Due to limited space, PAGE S SNPs are abbreviated with PS followed by the SNP number. Example: PAGE500002 is abbreviated PS2
 The following SNPs are known to have mutated multiple times in human history, but currently appear only once on the Y-DNA tree: M157, M228, M365, L147, L174, L192, L207

