## DNA ANCESTRY

# THE CHILDREN OF NAPOLEON & ATHENA PATRICIOS

## NICK - PETER - MARIANNA

Based on the DNA results of Peter Patricios and used with his permission

## ANCESTRY COMPOSITION

Ancestry Composition tells you what percent of your DNA comes from each of 31 populations worldwide. This analysis includes DNA you received from all of your recent ancestors, on both sides of your family. The results reflect where your ancestors lived before the widespread migrations of the past few hundred years.



## ESSENTIAL CONCEPTS

PATERNAL ANCESTORS \* are traced through the Y chromosome

#### MATERNAL ANCESTORS are traced through mitochondrial DNA



The sex of an individual is determined by a pair of sex chromosomes.

Females have two of the same kind of sex chromosome (XX).

Males have two distinct sex chromosomes (XY).

\* A chromosome (from Greek:  $\chi \varrho \tilde{\omega} \mu \alpha$  color and  $\sigma \tilde{\omega} \mu \alpha$  body) is a packaged and organized structure containing most of the DNA of a living organism.

\* Human cells have 23 pairs of chromosomes, 22 pairs and one pair of sex chromosomes.

\* In addition to these, human cells have many hundreds of copies of the mitochondrial genome.

\* A mitochondrion is an organelle a specialized subunit within a cell that has a specific function. Although most of a cell's DNA is contained in the cell nucleus, the mitochondrion has its own independent genome.

\* The Y-chromosome is passed down only from father to son. A man's Ychromosome would be the same as his father's Y-chromosome, his paternal grandfather's Y-chromosome, and so forth. Women do not have Ychromosomes, so these genetic tests will only provide information about paternal lineage. If a woman was curious about her father's lineage, she would have to look at the genetic patterns from her father or brother in order to get a genetic result about her father's side of the family.

#### CAUTION

*The conclusions should be treated with caution as:* 

1. The database is relatively small with 6,842 DNA samples

- 2. No statistical tests were applied to check probabilities
- 3. The identification of cousins is limited by those that have submitted their DNA

#### HAPLOGROUP

The term scientists use to describe individual branches, or closely related groups of branches, on genetic family trees.

Haplogroups are defined by particular genetic mutations that are shared by all the people who belong to them. All members of a haplogroup trace their ancestry back to the single individual in which that defining mutation arose.

Paternal haplogroups are families of Y chromosomes that all trace back to a single mutation at a specific place and time. By looking at the geographic distribution of these related lineages, we learn how our ancient male ancestors migrated throughout the world.

## PATERNAL HAPLOGROUP I2a2, a subgroup of I2



I1 & I2 divided about 28,000 years ago Haplogroup I2 is most abundant in eastern Europe and on the Mediterranean island of Sardinia, where it is found in 40% of the male population. Like its brother haplogroup, I1, I2 expanded northward at the end of the Ice Age about 12,000 to 14,000 years ago. But unlike I1, which expanded from the Iberian peninsula into northwestern Europe, I2 radiated outward from the Balkans into the eastern half of the continent.

Haplogroup I2a is concentrated in eastern Europe and western Russia, reaching levels of 40% in Bosnia and 30% in Croatia. It arose about 11,000 years ago in the Balkans, prior to the arrival of agriculture.

Soon after I2a arose, farmers from the Near East and Anatolia brought their techniques to the Balkans, where the local men took up the practice.

A branch of I2a, I2a2, is also commonly found in the Balkans. It is a much younger haplogroup, having arisen about 7,800 years ago. Maternal haplogroups are families of mitochondrial DNA types that all trace back to a single mutation at a specific place and time. By looking at the geographic distribution of mtDNA types, we learn how our ancient female ancestors migrated throughout the world.

### MATERNAL HAPLOGROUP H1n, a subgroup of H1



Haplogroup H1 originated about 13,000 years ago, not long after the end of the Ice Age. At that time much of Europe was covered by glacial ice sheets that descended southward from Scandinavia and extended across the alpine regions of the Pyrenees and Italian Alps.

People who had formerly inhabited continental Europe sought refuge in the warmer climates of southern France, the Iberian and Italian peninsulas.

The H1 mutation likely arose in a woman living on the Iberian peninsula. Even today, almost 25% of the Spanish population carries the H1 haplogroup. With the waning of the Ice Age, some populations grew rapidly and expanded northward from the Iberian refuge.

One of the places that was repopulated as the Ice Age waned no longer exists. During the Ice Age and for some time afterward, lower sea levels exposed much of the area that is now covered by the North Sea. Known as "Doggerland," it must have been occupied by men bearing haplogroup I, because today that haplogroup is abundant in all of the countries surrounding the North Sea.

As the meltwaters of the retreating Ice Age glaciers caused sea levels to rise, the lowlying forests and wetlands of Doggerland gradually became inundated. Doggerland's inhabitants retreated to the higher ground that is now the North Sea coast.

## PATERNAL DNA COUSINS (ALL MALE)

1st cousins share a GRANDPARENT 2nd cousins share a GREAT-GRANDPARENT 3rd cousins share a GREAT-GREAT-GRANDPARENT

2nd - 3rd cousins I2a2 & I2a2b: TWO ANONYMOUS

3rd - 5th cousins I2a2a & I2a2b:

NICHOLAS SIKIOTIS; CHRISTOPHER SIKIOTIS; MARKOS SIKIOTIS

TASSOS KOUGIONIS; PANOS GIANNEOTIS; DENYS VASYLYEV; JAMES HOUPIS & NINE ANONYMOUS



