THE Y CHROMOSOME OF OUR MALE MUENCH ANCESTRY

An exciting new departure in genealogy arises from the applications of molecular genetics, DNA sequence data, to familial and historical information. From high school biology we remember that each of us has 46 chromosomes and that male sex is determined by the possession of a Y chromosome. Men have one Y chromosome and one X chromosome, whereas women have two X chromosomes. In every man the source of his Y chromosome is his father, who in turn received his Y from his father, and so on back to the origin of our species more than 100,000 years ago. As we go back in time, we have many ancestors in each generation but only one mother-of-mothers and only one father-of-fathers (for men only) in each generation. For a subset of the male descendants of a male ancestor the surname (in this case “Muench”) is a tracer for the Y chromosome of that ancestor.

Thus the Y chromosome of Friedrich Muench (1799-1881) is identical to that of George Muench (1801-1879) and came from Georg Muench (1753-1825), who received it from Johann Rudolf Muench (1707-1772). It follows that every male descendant named Muench in an unbroken male line from Johann Rudolf Muench has that Y chromosome, and its identity is revealed by its DNA sequence analysis. I have submitted my DNA for such an analysis to deCode, the renowned genetic laboratory in Iceland, and deCode has reported the derivation of our Y chromosome.

Our Y chromosome is in group R1b, the most common of the 22 groups in Europe, with about two-thirds of men in Britain and Spain having R1b Y chromosomes. The original male of the R1b group lived about 35,000 years ago. In our family all living male descendants in an unbroken line of males from Johan Rudolf Muench, have R1b Y chromosomes. Genomic analysis reveals that Czar Nicholas II had an R1b Y and thus is a distant cousin. That is, according to the DNA sequence of our Y chromosome, he and we descend from the same father-of-fathers, that anonymous man who lived about 35,000 years ago in Europe. Here is the explanation as quoted from the deCode website:

*“All members of Y-group R1b can trace their Y-chromosomes back to one man who is thought to have lived about 35,000 years ago. This man may have belonged to a group of hunter-gatherers, who were among the first modern humans to colonize Europe. Such groups likely took refuge in Northwestern Spain during the last Ice-Age, when most other parts of Europe were uninhabitable. When the Ice-Age waned, between 10 and 15 thousand years ago, the descendants of these groups are thought to have expanded into previously uninhabitable regions of Europe.*

*Today, members of Y-group R1b are primarily found in European populations, where it is the most common Y-group. In Europe, the highest concentration of Y-group R1b members is in the west, in the British Isles and the Iberian Peninsula, where it accounts for 60 to 70 percent of all males. The frequency of Y-group R1b members decreases as we move further east within Europe and becomes negligible east of Central and South Asia.*

*A subset of Y-chromosomes found within Y-group R1b show an interesting correlation with surnames purported to have descended from the most powerful and enduring dynasty of early medieval Ireland, the Uí Néill, literally translated as “descendants of Niall”. Gaelic genealogies were important records used to validate claims to prestige and power and linked most ruling families in the northern part of Ireland to the Uí Néill, who claimed high-kingship of Ireland from the 7th to the 11th century AD. The ultimate origin of this dynasty is attributed to the conquering sons of the eponymous and possibly mythological 5th-century warlord, Niall of the Nine Hostages.”*

Parallel studies reveal the mitochondrial DNA inherited from the mother-of-mothers for each one of us, that unique ancestress linked to each one of us in a chain of mothers unbroken by any male ancestor.

Karl H. Muench, M.D.