

CAOA DNA Study Underway

The CAO Board is sponsoring the DNA study and it is up and running. Buck Custer, Gary Custer, Philip Castor, Jack Castor and Drew Caster have all contributed their DNA in hopes that we will be able to prove or disprove a relationship between Benjamin Castor 1741, John Castor Sr. and William Custard. At this time we do not have any direct male descendants of Noah Castor. Circumstantial evidence suggests that these ancestors descend from the Paulus line.

Who can participate?

At this time we will be concentrating on the Castor and variations of Custer surnames. You may participate in the CAO DNA Study regardless of your line. However you must be a direct descendant of the Castor . . . surname to help prove the Castor-Custer links. Since the Y Chromosome is passed from father to son only males can provide the information we need for this project.

The CAO Board has chosen Relative Genetics (RG) to do the DNA testing. This organization has a good reputation. You will be able to get a discount on the test if you choose Option 2 below.

The test we are using is the "Y DNA 26--Family Line Verifier™" from Relative Genetics. The 26 markers examined by this test can prove/disprove family descendant relationships. This test will not give any information about Native American heritage. This test will not give any medical information. The reason is that information is located in a different section of the DNA helix (string) and requires different tests.

To participate in the CAO DNA Study, you can choose one of the following options:

Option 1 —Take the 26 marker test with Relative Genetics. The cost is \$155.

Option 2 —Take a DNA test with Sorenson Molecular Genealogy Foundation. They will provide you with a coupon that lets you take the Relative Genetics 26 marker test for \$95. This option will save you \$60.

Option 3 —For members of the Castor Association of America only. You really would like to participate but \$95 is still a bit out of range for you. Please contact the Project Coordinator. Because of the generosity of some of our members, the CAO has a small amount of money available to assist those CAO members who need help with the cost of the DNA testing. The Board has authorized a DNA fund and thanks to the members we have \$225 which has been donated by them.

What a DNA test will do for us.

DNA markers passed from father to son through the Y Chromosome are identical the markers. The markers are used to identify the relationship between fathers and sons and common ancestors. By comparing the markers of each male descendant, we can determine the biological relationship between them. It takes a minimum of three DNA tests to determine a family group.

DNA Markers are named with designated alpha characters.

The marker DYS385 represents

- ✓ D for DNA
- ✓ Y for found on the Y Chromosome
- ✓ S for a unique DNA segment of the DNA Helix
- ✓ 385 for a unique identifier

If 23 out of 25 markers match there is a 50% probability that they all have a common ancestor within the last 11 generations, and there is a 90% probability the most common ancestor is within the last 23 generations and there is a 95% probability the most common ancestor is within the last 27 generations.

If 24 out of 25 markers match there is a 50% probability that they all have a common ancestor within the last 7 generations, and there is a 90% probability the most common ancestor is within the last 16 generations and there is a 95% probability the most common ancestor is within the last 20 generations.

If 25 out of 25 markers match there is a 50% probability that they all have a common ancestor within the last 3 generations, and there is a 90% probability the most common ancestor is within the last 10 generations and there is a 95% probability the most common ancestor is within the last 13 generations.

(The RG test we are using identifies one more marker than what was used to calculate the probabilities for most recent common ancestor)

There is a lot to learn about DNA and if you would like more in depth information you can start at <http://www.relativegenetics.com/> and <http://smgf.org/home.html>.

Keep an eye on our web page at www.rootsweb.com/~caoa/ for more information.

If you wish to participate or would like more information please send me an email at caoa-dna@caogen.org.

Patricia