

## **FERGUS(S)ON DNA Project**

by Colin R. Ferguson, PhD

(First Published in *The Bee Line*, Clan Fergusson Society of North America, Issue No. 94, Spring 2006 and perpetually revised since then)

The FERGUS(S)ON DNA project was organized in August of 2003. Currently there are about 450 participants whose y-chromosome has been analyzed.

Our goals remain the same:

- Foremost is to provide a means to use yDNA as a tool to supplement conventional genealogy.
- Create a database of yDNA corresponding to different Scottish and Irish subdivisions such as those discussed in *Records of the Clan and Name of Fergusson, Ferguson and Fergus*, by James Ferguson and Robert Menzies Fergusson, Edinburgh, 1895.
- See if a linkage can be established between the Irish and Scots Ferguson.

### **A Genealogical Tool**

The use of yDNA does not replace genealogical research, it is best used to validate it or provide clues. As a validator it does not prove your genealogy is correct, instead if your research leads you to believe that you and someone else share a common ancestor then your yDNA should match close enough to show that is probably true. That probability is not high enough to call it a proof.

On the other hand, comparison of yDNA is particularly strong at showing that two people do not have a common ancestor. If your genealogy indicates that you should match to one group of Fergus(s)on but instead you find that you match a different group of Fergus(s)on then the probability is high that you have made an error in your genealogy. The most common error made is accepting public family trees as fact.

Clues are generated when you closely match some other person who knows more about their line than you do yours. By comparing notes you hope to discover your common ancestor or at the very least have a new lead as to a locale to research that you have not yet considered.

### **The Science**

Analysis of the y chromosome handed down from father to son is offered by a variety of vendors as a genealogical tool. Databases exist wherein if you know your yDNA characteristics then you can compare them with other persons in the database to discover a heretofore unknown relationship. This can reveal information on very distant ancestors beyond the genealogical time frame into the archeological time frame.

The definition of match seems straightforward enough but in reality it is quite technical. If it were not for mutations all men would have the same yDNA as their genetic patriarch, e.g. Eve's husband Adam. The code in the yDNA contains millions of parameters and it is probable that a

father's son will differ in some small respect. Over the ages those small differences have evolved to large differences between groups of men and it is those differences that allow us to distinguish a FERGUSON from say a CAMPBELL or even another FERGUSON with different ancestry.

A photographer can take a good picture without knowing how a camera. Likewise a genealogist can use yDNA without knowing the science used to analyze the differences between two persons yDNA. The vendor provides a project participant with a personal webpage that shows a match list with others in the project. On our project site the Fergus(s)on are organized into groups of related Fergus(s)on. If two people claim a common ancestor and they are found in the same group then they are probably correct. If they are found in different groups that is a problem to be solved. Persons in a common group can look to each other for clues. The project maintains a mailing list (FERGUSON-DNA-L) wherein participants and interested parties interact with each other via EMAIL.

Nevertheless it is true that a photographer who understands their camera, lighting and film can take a better picture. A genealogist who understands the analysis and especially its limitations can make better use of yDNA as a tool. Any of the more recent books should help the person who wants to better understand the science behind use of yDNA as a genealogical tool:

1. *DNA and Social Networking: A Guide to Genealogy in the Twenty-First Century* by Debbie Kennett, 2012
2. *NextGen Genealogy: The DNA Connection*, by David R. Dowell, 2014
3. *Genetic Genealogy: The Basics and Beyond*, by Emily D. Aulicino, 2013

## Some Results

About 75% of all Ferguson have a yDNA type called “R1b” which is the most common type in European populations. Most Celtic persons are of this type. One of the more interesting results of the yDNA project has been the discovery that about 20% of all Ferguson have yDNA type “I” and they may be of Viking origin. A small number of Ferguson are an “R1a” type that are definitely Viking in origin. Highland Ferguson are most likely one of the “R” types and whereas lowland Ferguson are typically “I”.

The yDNA signatures of many different families have been established. These include:

- Colonial families:
  - John Ferguson/Ann Stubbleton of Virginia
  - Robert Ferguson/Martha Baugh of Virginia
  - William Ferguson/Judah Wood of Virginia
  - The Ferguson Settlers of the Beekman Patent in Dutchess County, NY
  - Daniel Ferguson an early settler in Maine who fought in the battle of Dunbar and was exiled by Cromwell.
- Notable families
  - Samuel Wragg Ferguson - confederate general during the war. His family was among the earliest settlers of South Carolina.

- Joshua Fergusson - emigrated in his own ship the Jupiter from Calcutta to Van Diemen's land in 1816.
- Scottish Families
  - Fergusson of Kilkerran – the chief of this family has been recognized by the Lord Lyon of Scotland since the early 18<sup>th</sup> century as the Chief of all the Fergus(s)ons.
  - Adam Ferguson – born in Logierait, Perthshire. He became professor first of natural philosophy (1759) then of moral philosophy (1764) at Edinburgh, and was a member of the Scottish ‘common sense’ school of philosophy. He traveled to Philadelphia as secretary to the commission sent out by Lord North to negotiate with the American colonists in 1778–9
  - Alexander Ferries of Crathienaird, born 1596, progenitor of the Fergusson of Ballyoukan in Perthshire
- Irish Families
  - John Ferguson of Fourmileburn, co. Antrim, who died c. 1750 and is the great grandfather of Sir Samuel Ferguson generally recognized as Ireland’s greatest poet of the 19<sup>th</sup> century
  - Ferguson of Growell, co. Down the ancestor of Harry Ferguson who developed a better plow and later hooked up with Henry Ford to create the forerunner of the modern tractor, the “Ford Ferguson 9N”.
- African American
  - Seymour Savage was born about 1867 in South Carolina to Lotty Savage a former slave. A paternal descendant who tested has the yDNA signature indicative of descent from John Ferguson and Ann Stubbleson. In the 1870 census just three houses away is one Gideon Ferguson a known descendant of John Ferguson and Ann Stubbleson. Additional testing using autosomal DNA of a descendant of Gideon’s brother matched the present day Savage as a 2nd to 3rd Cousin as would be the case if Gideon was Seymour’s father.

## **Risks**

The risks are similar to what you might learn via conventional genealogy, e.g. you might uncover an adoption or other non-paternal event which could cause emotional distress. We have a few people in the project who know they were adopted and are trying to find their biological father.

## **Privacy**

Participants are required to provide information on their earliest known Fergus(s)on ancestors for inclusion in the participant listings and to allow their results to be included in the results pages. These two requirements serve the project's main purpose as a genealogical tool. They also act as a recruitment tool since internet search engines will index the information allowing people searching for an included lineage to find our site. Participants are not publically identified by name and privately only to persons to whom they match close enough to be related.

The primary vendor we use for yDNA testing is Family Tree DNA and they too maintain a customer database. Results are published to their public site, here again customers are not

identified by name but by kit number. They offer a number of privacy options and you can elect to opt out of public display if you wish.

## **General Fund**

The project has a small general fund contributed to by project participants and interested parties. The fund is used to recruit yDNA donors from persons who would not otherwise participate and who are of interest to the project as a whole. For example, Adam Ferguson, of Woodhill, Scotland and later Canada, was a founder of the town of Fergus, Ontario. His ancestor settled West Haugh, Perthshire in 1329 and is the progenitor of the ancient Fergusson of Dunfallandy. Your author researched his genealogy forward was able to discover and recruit a descendant. He has no interest in genealogy but recognized his lineage and was pleased to assist.

## **How to Participate**

Collection of yDNA must be from a living male whose surname is Ferguson, Fergusson, Fergus or some variant thereof. Unfortunately females cannot provide a sample because they do not have a y chromosome which is the basis of the test. Likewise the son of a woman whose maiden name is Ferguson cannot provide a sample because she does not pass a y chromosome to her son. Several people in the project have researched branches in their family to find a distant cousin to serve as a yDNA donor.

It is recommended that one purchase at least a 37 marker yDNA kit. This is adequate resolution to say that two people have a common ancestor and thus begin exploration of each other's genealogies. The current cost of a 37 marker kit is \$169.00 plus shipping and handling. The higher resolution 67 marker kit allows one to make a better estimate of how many generations ago two people share a common ancestor. The higher resolution is necessary when one must examine conflicting genealogies or provide corroborating evidence to support a hypothesis or theory. The current cost of a 67 marker kit is \$268.00 plus shipping and handling.

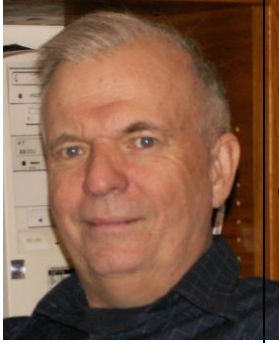
In either case collection of the yDNA sample is simple, painless and done at home. One simply rubs a sterile swab on the inside of their cheek for 60 seconds and then puts it in a sterile mailing tube. Eight hours later the process is repeated thereby collecting two samples in case problems arise with the first. The vendor which does the analysis provides the swabs and mailing tubes in the form of a kit which is mailed upon receipt of application to the project.

## **Finally**

The FERGUS(S)ON DNA project has a website at <http://dna.cfsna.net/>

Therein you will find more detail on the project's goals, a description of the participants, results obtained to date, instructions on how to join, research on target lineages, frequently asked questions, links to other sites and instructions on how to subscribe to the mailing list.

If you do not have EMAIL you can still participate. In this case, call Family Tree DNA at (713) 868-1438 and tell the person who answers that you would like to join the FERGUSON DNA Project. Our success depends in part on recruiting a large number of participants and we hope that you will join us.



Colin Ferguson, born in Oakland, is the first generation American in his family. His father was from Brisbane, Australia and his ancient ancestors are from county Cavan, Ireland. He is a graduate of the University of California at Davis and holds a PhD from MIT. He retired as a fire captain for the state's CAL FIRE. He and his wife Kassy reside in Auburn, California which is about an hour east of Sacramento. Their son Sean is an editor for a video gaming company and daughter Zara is a teacher.