

THE Y-DNA PROJECT

October 2009

Quarterly report from Elizabeth O'Donoghue, the Society's Group Administrator

We have a number of new participants this quarter, in addition to several upgrades. There are two new participants in the Glens tribe and three upgrades, one of them kindly funded by another member of the group. There is a new participant and an upgrade in the Mór tribe and the same in our tentative Ruis Airgit tribe. There is a new participant in both the Breifne Group A and B, and there is a new unaffiliated participant in haplogroup I.

Rod will advise when all the spreadsheets are updated and posted online. I've changed the format of the spreadsheets somewhat this time. In the past I highlighted in light blue any off-modal alleles if more than one member of the tribe shared them. As the size of the project increases, there are more varying off-modal values within the tribe, and it's easier to see the similar off-modal values by comparing the actual colours to identify the genetic distance, be it 1, 2, or 3 off the modal, either up or down.

I've amended slightly how I arrive at an ancestral modal haplotype and no longer merely use the most common value within the group. In a case where there is a cluster within a tribe who are relatively closely related, the modal within their smaller group can overbalance the average and not necessarily be indicative of the overall modal of the tribe as a whole. Rod's own cluster in the Mór tribe is an example, where their 32 at DYS 449 is the highest frequency in the group, but unusually high compared to the tribe as a whole and probably not indicative of the ancestral value.

Now that I am using the Dean McGee Y-Utility to calculate the TMRCA, I can also request a chart showing genetic distance between each individual. It is highlighted to indicate whether they are related, probably related or possibly related. This relatedness refers to the likelihood of having a common ancestor. I understand that if two participants are 'Related', the common ancestor is probably within 9 generations; if 'Probably Related' it would be between 10 to 19 generations, and if 'Possibly Related', it would be between 20 to 29 generations. I have now added that chart to those three spreadsheets, at least for this quarter. I would appreciate feedback from the viewers to let me know if it is a feature worth retaining.

Our newest participant in Haplogroup I2b1 is a Dunphy. Interestingly, his haplotype has a null value at DYS 425, which is shared by one of our other Dunphys and Eóin Ó Donnchadha, both in the Hg R1b1b2. This illustrates my comment in the 'Interpretations' link that though rare enough, since this null value crosses haplogroups, it reduces the likelihood, in my estimation, of there being a common ancestor for those sharing it.

Having said that, there is a curious correlation between the haplotype of a group of Carroll's with null 425s and Kurtis Dunphy and Eóin Ó Donnchadha. We have tentatively made a tribal assignment of Kurtis and Eóin as Osraighe, with a fuller

explanation available at the 'Interpretations' link. In the April Journal, Eóin wrote a brief article as an introduction to the Ua Donnchadha sept of Osraighe, with the intention of writing further articles in future.

Eóin's further research, which he shared with Rod and me, uncovered the group of Carroll's who matched him and Kurtis with the null 425. Initially, that made a great deal of sense, since there is a connection between the Ósraighe Ua Donnchadha and the O'Carrolls of Ely. I may be preempting Eóin's future articles, but I will just say that there are stanzas in the *The Topographical Poems of John 'Dubhagain and Giolla Na Naomh O'Huidhrin* (which Eóin also quotes from in his article) which clarify that association. The poem discusses the lords of the Osraighe territory thus:

O'Cearbhaill for whom the trees are ruddy,
O'Donnchadha of honest aspect,
Whose rocklike hosts possess the fruitful land,
Are two kings of the same territory.

With this close affiliation, the prospect of there being a genetic connection between the O'Donnchadha and the O'Carrolls would not be a surprise. However, Joe Donohoe's annual report for the Breifne Clans project contains a well researched, thorough discussion of Oriel surnames and the Airghialla clans of the Oriel territories, including parts of counties Armagh, Monaghan and Louth, abutting Cavan. There are a number of these Oriel families who contain members with null 425s, and there are a tribe of Oriel Carrolls in this territory. Hence, we have a quandary.

Eóin has also researched the Teallach Modharain Ó Donnchadha, of which, as indicated in Rod's book, little is known. Their territory appears to abut Airghialla tribes, but so far there has not been found any sources which include them in the Airghialla. Joe points out in his BCP Report 5, Part 7 that there are no obvious associations between the Dunphy/Ó Donnchadha names and the Airghialla.

Eóin and Rod are pursuing further research to try to uncover more material which would clarify if the Teallach Modharain Ó Donnchadha may have Airghialla connections. I am attempting to contact the Carroll project group administrator to see if I can find out any additional information about the Carroll's that may help us. We will let you know if we discover anything useful.

Since the last report, we have had several offers to donate funds toward the project, and they have been most appreciatively accepted. Further additional donations would be most welcome. There are a variety of different types of testing going on at the moment, through Family Tree and other DNA labs, which test different aspects of the genome (autosomal, X chromosome, etc.); and Family Tree has initiated a 'Walk The Y' project in search of more SNP's to differentiate the subclades of the haplogroups. There are a number of Irish modal haplotypes – the Northwest Irish, Leinster modal, Irish Type III, the South Irish, etc. We have participants in most of them, and most of them have a targeted individual being tested for the 'WTY' at the moment, though there is none I am aware of from the South Irish, of which the Glens tribe is part. The results are coming in, and there is a mix of success and lack thereof in finding any new SNP's, so it may be that in the end, the odds of gaining new helpful information may not justify the cost of the test (\$750). Some men have paid for their tests

themselves, and others have pooled resources within their projects and nominated one individual to be the subject of the test for their haplotype. If it seems worthwhile to pursue, we might consider trying to underwrite a test. Family Tree is screening potential candidates who have a solid lineage indicating their origins, and The O'Donoghue of the Glens would seem an ideal candidate, since his pedigree is undoubted for centuries back. I will keep you informed if anything is discovered relevant to our participants.

There is an interesting article at the New York Times discussing DNA - **I.B.M. Joins Pursuit of \$1,000 Personal Genome**. It said 'DNA sequencing began at academic research centers in the 1970s, and the original Human Genome Project successfully sequenced the first genome in 2001 and cost roughly \$1 billion.' Quite a price tag. Technology is continuing to improve, and as the title of the article implies, the time will probably come when it might be feasible for someone to be able to afford a full genome sequencing of their complete DNA, even if they aren't independently wealthy. You should find the full article is currently still available at the NY Times website - http://www.nytimes.com/2009/10/06/science/06dna.html?_r=1.

If any of you have any questions about the various aspects of DNA testing, I'll try to help.