## THE Y-DNA PROJECT

## April 2015

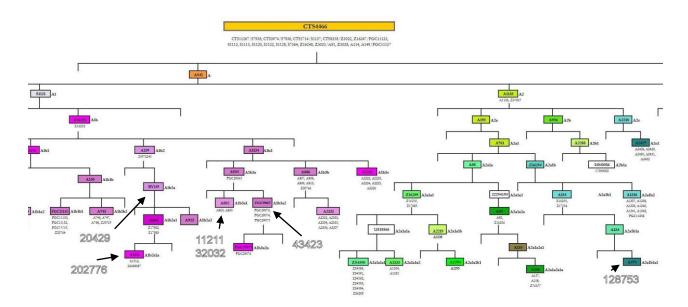
Quarterly report from Elizabeth O'Donoghue/Ross, the Society's Group Administrator

We have a number of new results in this quarter, including three STR upgrades or additional results arrived and two new SNP results posted in the Glens group, an upgrade and two SNP results in the Cavan Group A, an upgrade and an SNP result in the Uí Dhonnchadha of the Déisi Mhumhan?? Group, a new member in the Group II cluster, another in the Group IV cluster and a new Unaffiliated R1b1a2 member.

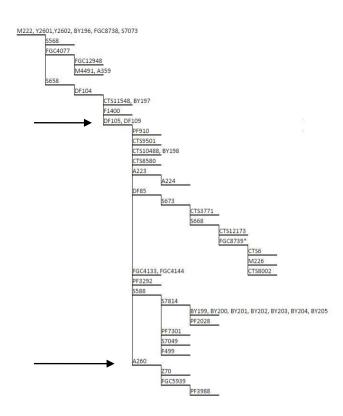
Upgrades are always quite useful to help identify and better determine how close a participant may be to their matches. However, it is becoming more apparent as more BIG Y tests and SNP panels are taken that STR matches can be a bit deceptive insofar as someone who ostensibly seems relatively close in matching STRs may actually be in another branch of the subclade.

We saw this reported last quarter when not all those who tested the BIG Y in the Glens group were found to be at the same level on the branch of The Glens himself. Kit 32032 matched The Glens/kit 11211, and kit 43423 is on a parallel branch. A fourth BIG Y result for kit 20429 has arrived and he is on a different branch than the other three. Even though McCartney/202776 is a relatively close STR match with our Glens O'Donoghues, his BIG Y test shows him to be in yet another branch of CTS4466 downstream of kit 20429.

I've cropped the CTS4466 tree a bit (which can be seen in its entirety at <u>https://www.dropbox.com/s/ezefeqrv9doybwz/CTS4466%20tree%2027-3-15.jpg?dl=0</u>) to show you the relative positions of the four O'Donoghues. For comparison purposes, I've included the other BIG Y testers who are in the project - kits 202776/McCartney and 128753/Griffin. These participants joined due to having relatively close STR matches to O'Donoghues and not necessarily matches to their own surname.



For comparison, two participants in the Cavan Group availed of the M222 SNP Pack mentioned last quarter and their results are in. They too, though both M222+, are at different levels of the M222 tree. I copied the Haplotree for M222 displayed on the R-M222 Haplogroup project (https://www.familytreedna.com/public/R1b1c7) to give you a visual idea of what their tree looks like. Kit 13885 is DF105+, near the top of the tree. Kit 82395 is A260+, near the bottom of that branch. This would necessarily separate them by many hundreds of years, if not more. Even using SNPs to date a subclade/branch is a very imprecise challenge and there is no general agreement amongst the citizen scientists or the academic researchers of what guidelines to use.



Similarly, prior to SNP testing, we thought all the members of the Mór tribe were related to one degree or another, but subsequent SNP testing has clarified that the different clusters are actually in different subclades.

Another example of the variety of subclades present in our participants are the results for a new member, kit 365045, in the Unaffiliated R1b1a2 group, who is the first participant in the project who is positive for the SNP L362. This is an SNP found mainly in McCarthys whose origins are in Cork. However, our participant's top three matches each have a different surname, so this genetic signature was probably found throughout the Cork area in ancient times, and as people travelled, married into neighbouring tribes, etc. the gentlemen of this genetic signature spread out a bit and assumed different surnames when they were adopted, most likely based on the territory in which they lived at the time and the name chosen by the chieftain of that territory.

There are O'Donoghues who come from Cork as well, so what this could mean is that kit 365045's ancestor was living in the same neighbourhood and took the O'Donoghue surname like the others to whom he was probably related in some way through a female line. This is the kind of thing that we are very unlikely to ever know for sure. According to a cousin of the participant, it's even remotely possible that the surname O'Donoghue may have been changed and is not the birth name of the family.

Our other new members are in the Group II cluster and Group IV, the latter of which is particularly interesting, insofar as they are close family. The three are the father and son (new member) and, if I have my relationships correct, the father's first cousin once removed. The interesting thing is that the father has a different value at DYS439 than his son and cousin, which means that his haplotype mutated away from the family value and his son mutated back again. DYS439 is considered a fast mutating marker, but assuming the results are accurately displayed, this instance is really fast!

DNA results can certainly be fascinating, and not always what we'd expect. But we're all still a big O'Donoghue family.

Rod should have the website spreadsheet updated shortly and will let you all know when it is on the Society website.