Y-DNA PROJECT

The first interim report on the Flannery Clan Y-DNA Project was published in the Winter 2004 newsletter and gave a detailed account of how the test results are processed. We shall now look specifically at the results of the Munster Flannerys and examine how closely the results of the Appalachian Flannerys fit into this group.

At the time of writing, there are fifty-five test results available for comparison. All but two results fall within the R1b Haplogroup (which is the scientific name for a Western European Tribe); the other two results appear to be Viking / Norman and Eastern European in origin.

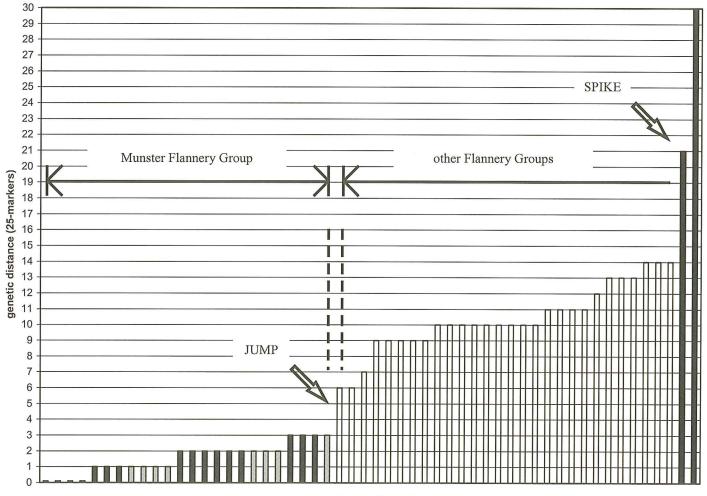
The fifty-three R1b results contain apparent groupings based on similarity. One such group of twenty-five closely

matching results is called the Munster Flannery Group because all of the members with documented Irish origins have traced their roots to various parishes in the province of Munster.

The Modal Haplotype is simply the statistical mode of the group, and comprises the test results that are most commonly scored by the group members. The Genetic Distance between participants is simply the sum of the differences between their respective scores, and it is most useful to compare Genetic Distance to the Modal Haplotype using 25 markers to assess conformance to the group result.

The Genetic Distances to the Munster Flannery Modal Haplotype are graphed below and show the "Jump" that defines the group, and the "Spike" of the results that belong to different races.

Genetic Distance from Munster Flannery modal haplotype



various participants

Eight of the Munster Flannery group claim descent from various sons (Daniel, John, Silas and William) of Thomas Flanary (1722-1782) and are thus termed the Appalachian Flanarys for ease of reference. Their results are shown striped in the graph, whereas the other group members' results are shown solid black.

COMPARISON OF 25 MARKERS

The Modal Haplotype for the Munster Group using the first 25 markers is:

13-24-14-10-11-<u>14</u>-12-12-12-14-13-30 16-9-10-11-11-26-16-19-29-15-15-17-17

The Genetic Distance of all group members from the Modal Haplotype for the Munster Group varies from 0 to 3 with a mean value of 1.54

The Modal Haplotype for the Appalachian Sub-Group using the first 25 markers is:

13-24-14-10-11-<u>15</u>-12-12-12-14-13-30 16-9-10-11-11-26-16-19-29-15-15-17-17 The only difference is marker #6 (known as "DYS 385b") which is 15 instead of 14.

The Genetic Distance of all sub-group members from the Modal Haplotype for the Appalachian Sub-Group varies from 0 to 2 with a mean value of 0.71

The Genetic Distance of all sub-group members from the Modal Haplotype for the Munster Group varies from 1 to 3 with a mean value of 1.63 so they are, on average, as "close to home" as the typical group member.

By comparison, the Genetic Distance of the Modal Haplotype of the Connaught Flannerys from the Munster Flannerys is 11, and from the Flannellys is 10.

The inter-relationship of the various results within the Munster Flannery Group are charted below, and display the common ancestry from the Flannerys with documented ancestry in Abington, Ballynakill and Fethard.

