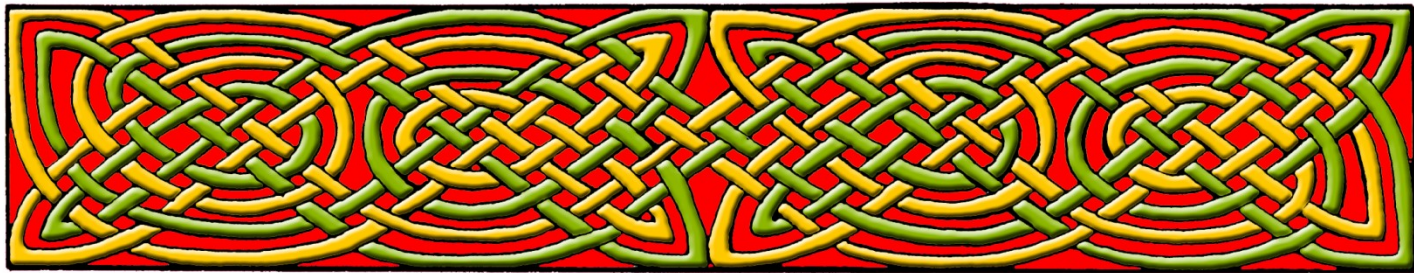


Clan Colla 425 Null Project

FTDNA Genetic Genealogy Conference
Sheraton North Houston
November 4-7, 2011





Clan Colla 425 Null Project



Project launched June 22, 2009

Project Administrators



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Clan Colla 425 Null Project



Two project websites:

1. DNA of The Three Collas – database study

www.peterspioneers.com/colla.htm

259 people gathered from many FTDNA projects, including #2 below

2. Clan Colla 425 null – FTDNA project

www.familytreedna.com/public/clancolla425null

170 participants with Colla DNA



Who were The Three Collas?

Three brothers who lived in 4th century Ireland.

They conquered Ulster in 331 AD.

Their names were:

- Colla Uais
- Colla da Crioich
- Colla Menn

Many of the Colla descendants were styled Kings of Airghialla (anglicized Oriel) and lords, chiefs, and saints down through the ages.



Clan Colla 425 Null Project



PROJECT BACKGROUND

- FTDNA members researched their surnames and found that they might be descended from The Three Collas.
- The research indicated that other Colla surnames also were supposed to be descended from The Three Collas.
- Some found these other surnames showing up as DNA matches (some did not).
- It became apparent that they had identified the DNA of The Three Collas.



Clan Colla 425 Null Project



PROJECT BACKGROUND

- The traditional and legendary story about The Three Collas led us to wonder if DNA analysis of these various Colla surnames might lead to a better understanding of who The Three Collas were and where they may have originated.
- By using DNA testing, historians and genealogists can work in both directions to put together plausible pedigrees back to a common ancient ancestor.



Clan Colla 425 Null Project



PROJECT GOALS

- Create a project at FTDNA that would attract people with the DNA of The Three Collas.
- Seek out people with Colla DNA and invite them to join.
- Learn more about the history of The Three Collas
- Determine the validity of ancient Colla pedigrees.
- Test theories about the origins of The Three Collas.



Clan Colla 425 Null Project



PROJECT METHODS

- Gather people with similar Y-chromosome DNA and various historical Colla surnames who had tested 67 markers at FTDNA.
- Compute Colla modal DNA.
- Identify unique markers.
- Expand the database with people who match the modal and have the unique markers.
- Compute genetic distance from the modal and among participants.
- Use Fluxus network software to analyze ancestral trees.



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KEY FINDINGS

- BC 2000 - L21 SNP occurs in a Celt with an R1b haplotype
- BC 1000 - DF21 SNP occurs in a man with the L21 SNP
- 0-AD 300 - Marker 425 becomes null for a man with the DF21 SNP
- AD 300-400 - Three brothers named Colla with the null 425 become known for their prowess in warfare in northern Ireland
- AD 500-600 - A descendant of one of the brothers, Colla Uais, migrates to the Scottish Highlands



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ANCESTRAL ORIGINS AND MIGRATIONS

- Movement of Bronze-age Celts through Europe to Britain and Ireland.
- R-L21+, the heaviest concentrations are found in Ireland and the Celtic fringes of Britain.
- Celtic tribes given names (by the Romans) such as Trinovantes, Cornovii, Silures.
- DNA evidence suggests unique stable mutation (425=0) occurred in the early part of first millennium.
- So far, all Collas who have tested have proved to be DF21+ with no downstream SNPs
- Dispersed in NW Britain - McDonald (Scotland), Calkin (North Wales), Roderick (South Wales) and in Ireland - Irish Colla names.



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Colla historic surnames:

Biggins, Boylan, Calkins, Carroll, Connolly, Devine, Duffy, Hart, Higgins, Hughes, Kelly, MacDougall, McAuley, McClain, McDonald, McGinnis, McGuire, McKenna, McMahan, Neal, Newell, Paden, Pate, Roberts, Roderick

Selected references:

Book of Ballymote, 1390

Annals of the Four Masters, 1632-1636

John O'Hart (1824-1902), *Irish Pedigrees*, 1892

Edward MacLysaght, *Surnames of Ireland*, 1969

Peadar Livingstone, *The Fermanagh Story*, 1969

Donald Schlegel, *Clogher Record*, 1998 and 2002



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DNA of the Three Collas

People with Colla Surnames Who Match the DNA of Various Septs – 67 Markers

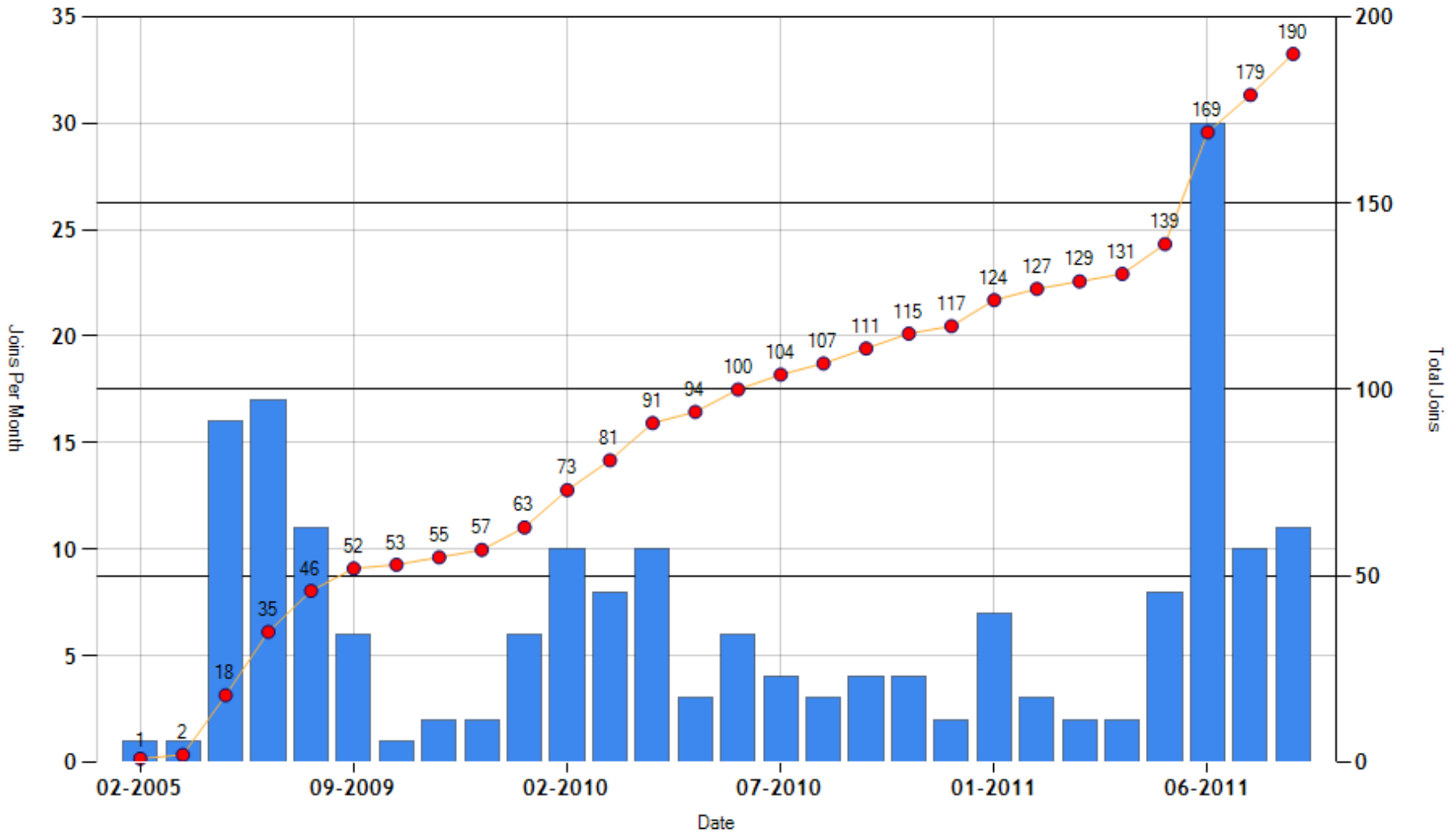
Sept	Calkins	McDonald	McGuire	Carroll	Roderick	McMahon	McKenna	Biggins	McAuley	Kelly
Clan Colla	23	21	17	13	11	8	9	7	3	4
Niall	0	18	2	8	0	0	0	0	7	18
South Irish	0	2	0	1	0	0	1	0	1	4
Brian Boru	0	2	1	1	0	1	0	0	0	1
Airghialla 2	0	1	24	0	0	2	0	0	1	0
Ely Carroll	0	0	0	9	0	0	0	0	0	2
Dalriada	0	27	0	0	0	0	0	0	0	0
Hy Maine	0	0	0	0	0	0	0	0	0	5
Other R1b	0	81	2	14	2	7	1	0	5	38
Norse R1a	0	61	0	0	0	0	0	0	0	0
Total	23	213	46	46	13	18	10	7	17	72



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Project Joins





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What defines Clan Colla DNA?

SNPs:

..... haplogroup R1b1a2a1a1b4 (R-L21 positive) and DF21

Markers:

..... 425=0 (100%)

..... 511=9 (98% = 9, and 2%=10)

..... 413a=22 (95%=22, and 3%=23, and 2%=21)

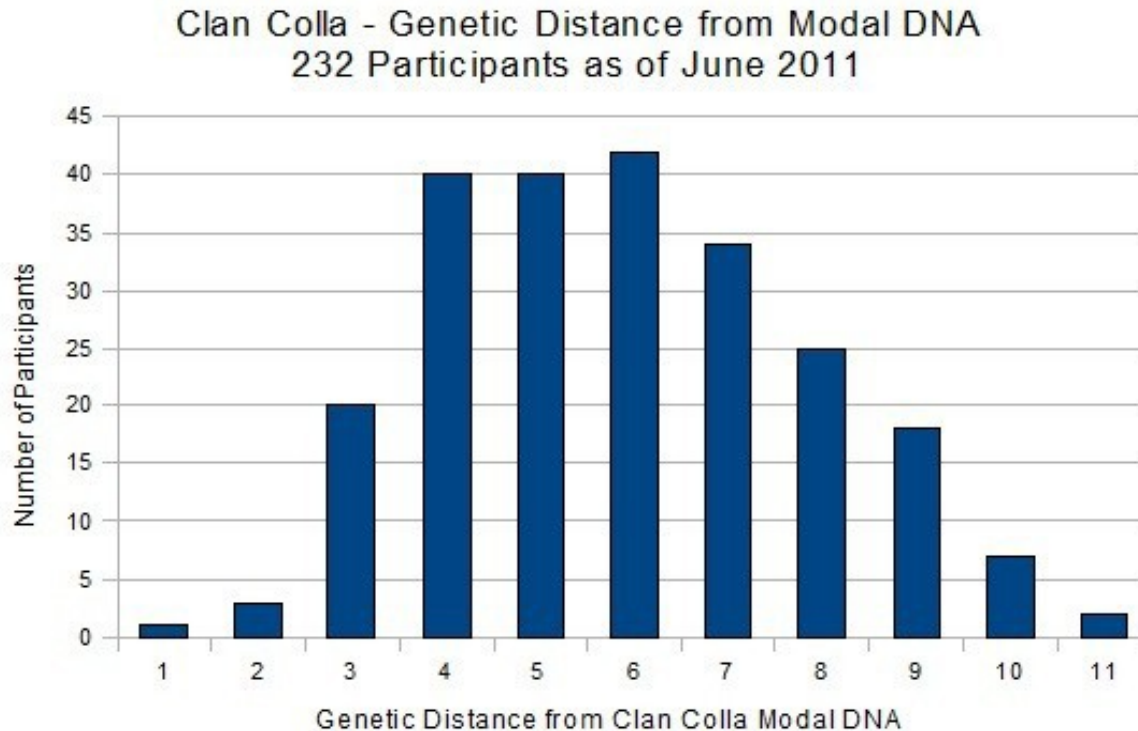
GD (Genetic Distance) from Clan Colla modal (DURRQ at Ysearch) of 11 or less



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The average genetic distance (GD) of the participants in the Clan Colla project is 6, with a range from 1 to 11 on 67 markers.

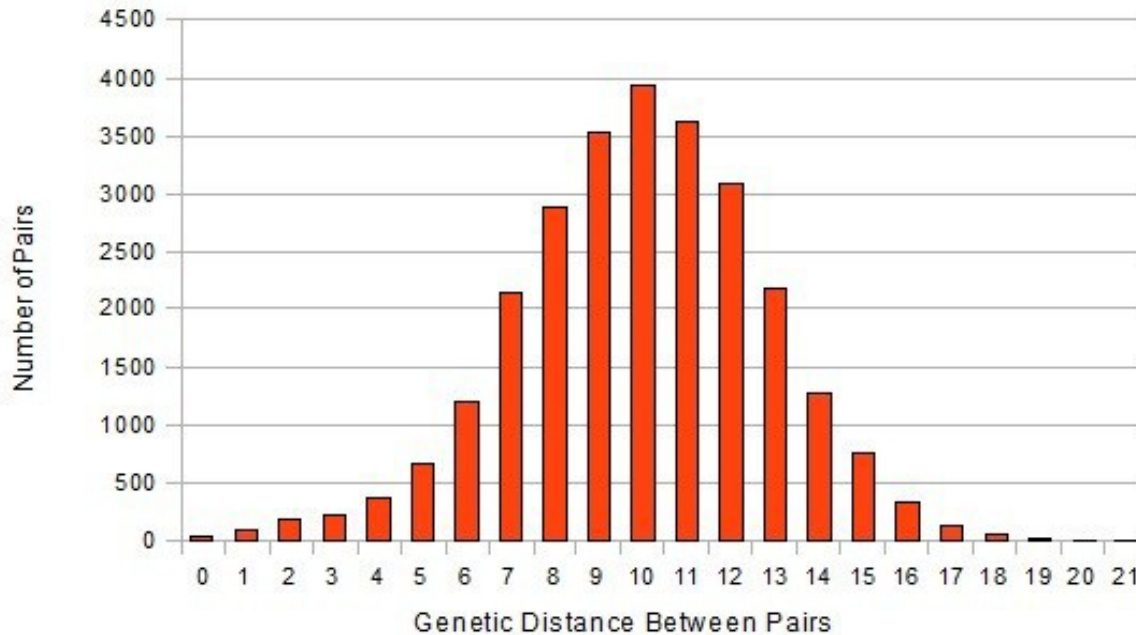




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Clan Colla - Genetic Distance in DNA Among Participants
26,796 Pairs Among 232 Participants as of June 2011

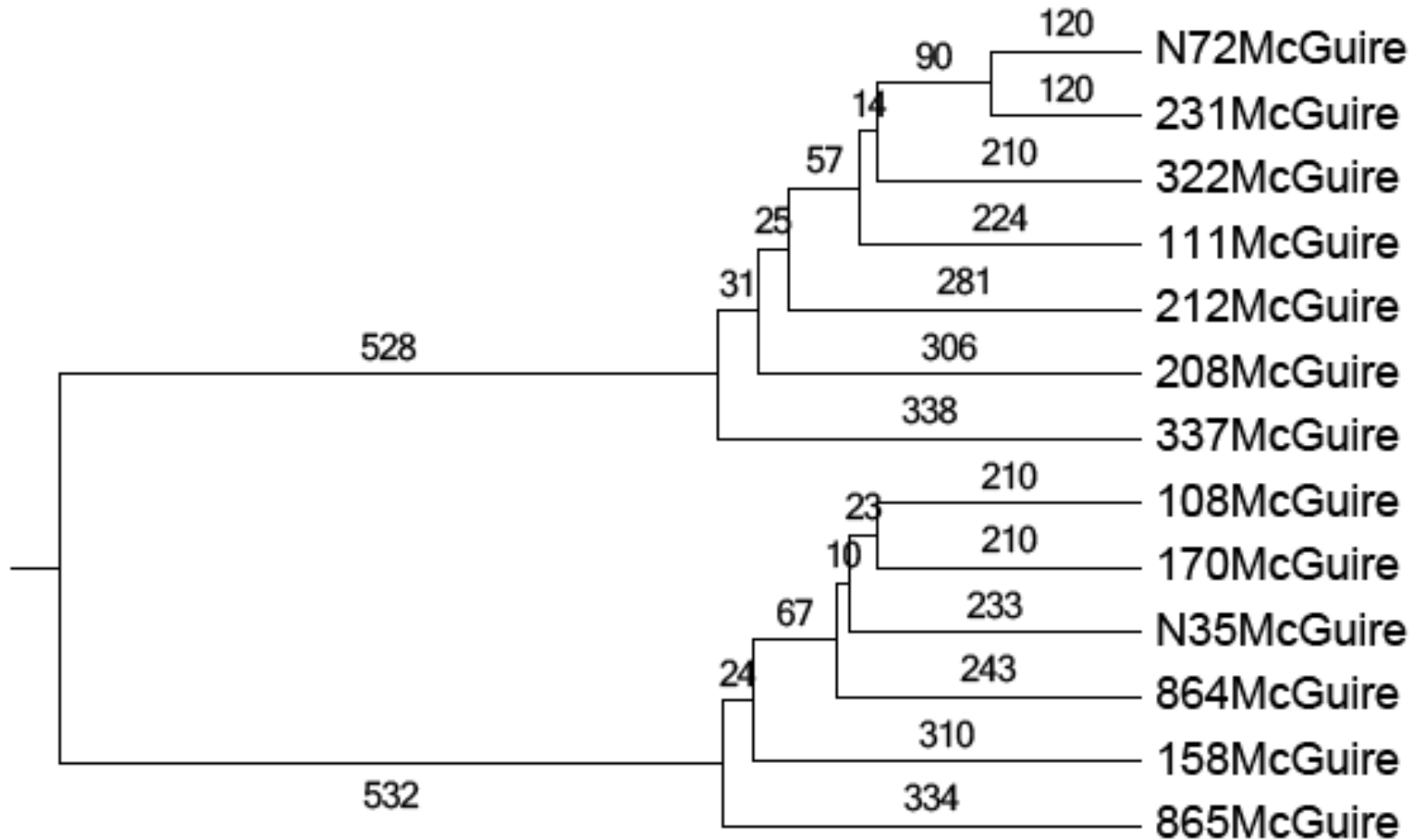




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McGuire - Network Tree



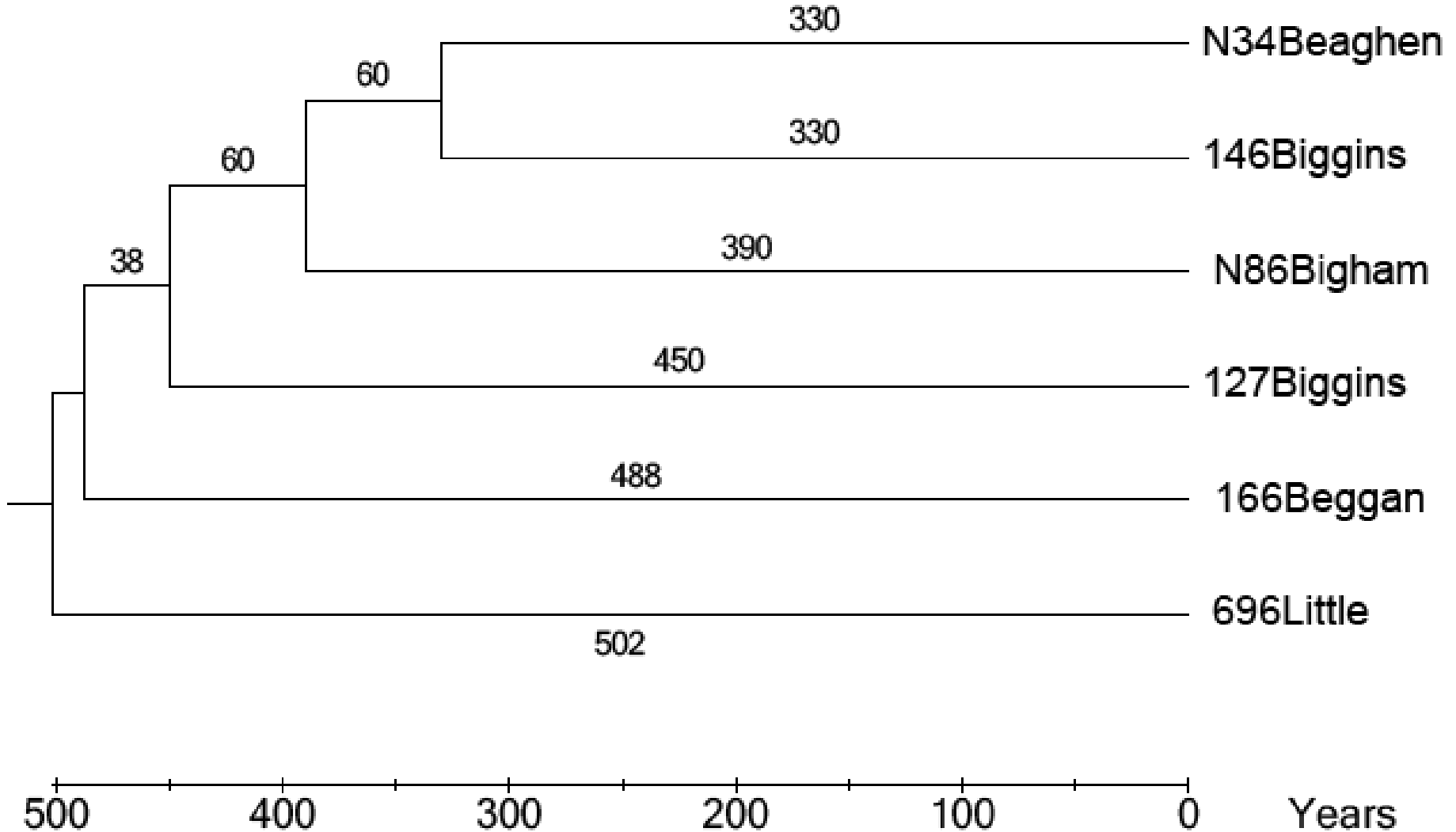
800 700 600 500 400 300 200 100 0 Years



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Biggins - Network Tree

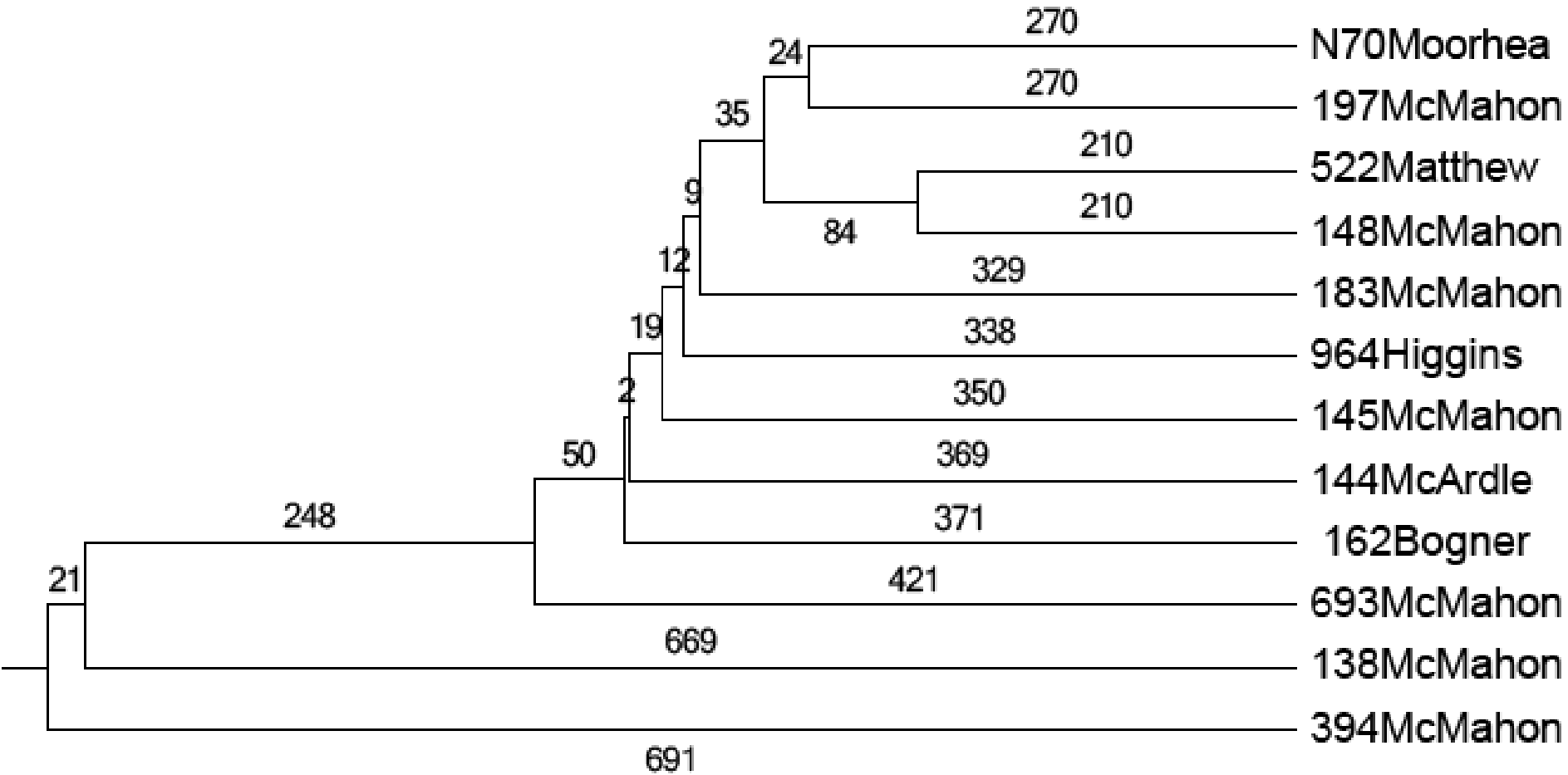




Clan Colla 425 Null Project



McMahon - Network Tree



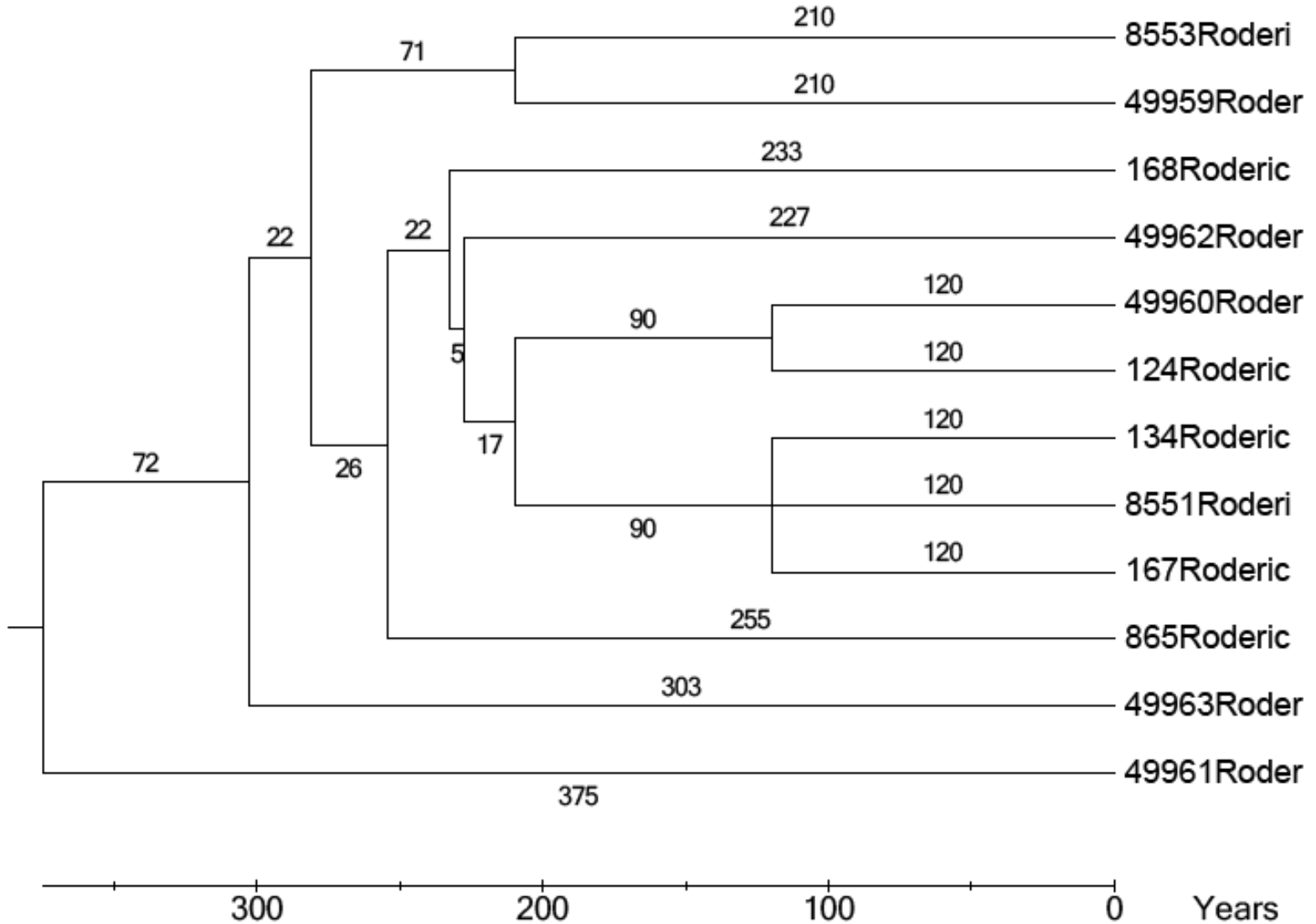
600 500 400 300 200 100 0 Years



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Roderick - Network Tree





Clan Colla 425 Null Project



Future and continuing work for the project...

- Add new members.
- Continue to research surnames.
- Do network analysis with Fluxus, PHYLIP.
- Analyze new 111 markers: 505=9.
- Test new SNPs.
- Hope for a Clan Colla SNP.



Clan Colla 425 Null Project



In Summary the following can be said about the project:

1. The growing Clan Colla data is showing that the cluster is representative of a unique stable population within the R-DF21+ population.
2. The DNA picture that has emerged is consistent with the perceived historical knowledge pertaining to Oriel in the early part of the first millennium.
3. The data also supports the view that Clan Colla originated in a Celtic tribe in NW Britain before migrating to Oriel.
4. Y-chromosome DNA has verified an ancient Irish pedigree for historians, and genetic genealogists.

