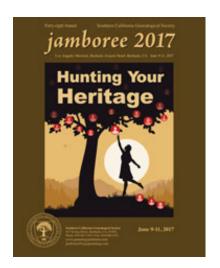
#### **DNA vs Irish Annals**

A summary of results to 2017 with examples from major surnames & haplogroups



**Brad Larkin** 

Prepared for the Southern California Genealogical Society Jamboree 2017



#### Overview

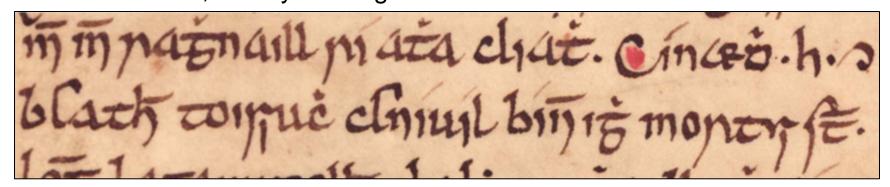
- The Irish Annals were compiled by monks and scholars for more than 1000 years and contain events and genealogical information for most Irish surnames.
- This presentation examines how much modern DNA can be linked to those lineages and how consistent the DNA findings are with the Annals.

# **Topics**

- Introduction to the Annals
  - What are the Annals?
  - Where to find them?
- Prehistoric Era
- Major DNA Lineages by Region
- Dispersion of Surnames

#### What Are The Annals?

- Written records about Ireland prior to 19<sup>th</sup> century
- Hand Written Chronicles at Monasteries
  - Cover contemporary events about 400 ad to 1690 ad
  - Most famous compilation: The Annals of the Four Masters c.1616
- Papal Registers
  - Archived at Vatican, Now Translated, Online
- Royal Fiants
  - Decrees, mostly relating to real estate and rebellion in 1500s



#### Monastic Annals

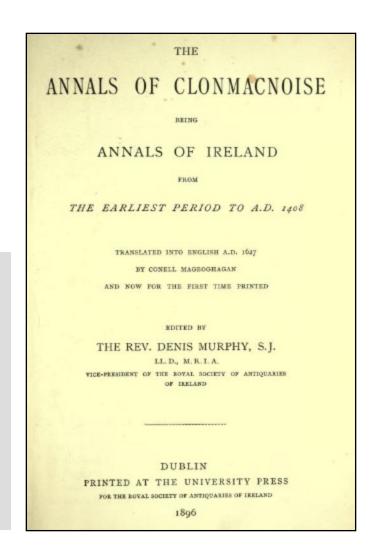
- Titles
  - 28 titles listed on Wikipedia
    - e.g. Annals of Clonmacnoise
  - Annals of the Four Masters
    - 17<sup>th</sup> century compendium of earlier annals
    - Translated to English and published in 19<sup>th</sup> century
- Recorded feast days, obituaries, genealogies, and notable events of the year



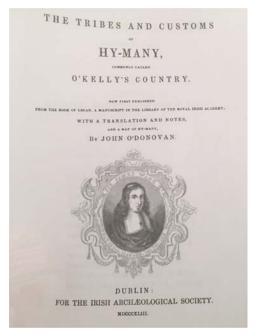
#### Annals of Clonmacnoise

- Written by Irish monks up to the year 1408
- Translated to English in 1627
- Published in English in 1896

[Year 994] King Moyleseachlin and Cahall O'Connor of Connaught made a bridge at Athlone over the [Shannon]. Dermott o'Laghtna prince of the land of Teaffa was killed by some of his [own] men

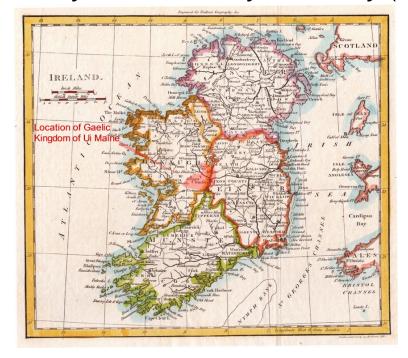


## Genealogical Books Derived from Annals



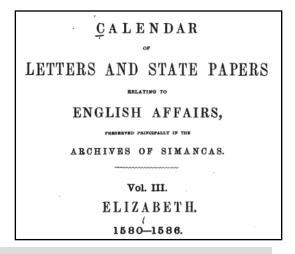
John O'Donovan wrote several in the 19<sup>th</sup> century.

e.g. The <u>Tribes and Customs of Hy-many</u>,
 Commonly Called O'Kelly's Country (1843)



## Royal Fiants

- Most important genealogically are records of the Surrender and Regrant real estate records.
  - Published in 19<sup>th</sup> century as part of the series, "<u>Deputy Keeper of Public</u>
     <u>Records in Ireland</u>"



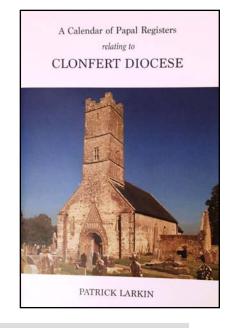
18-JUN-1585

MONTER LORKAN – all lands and heriditaments in Shillanghye as part of the nation of Donall O Madden of Longford [Barony, County Galway]. Granted to be held forever by the service of one knights fee for a rental of £80.00; and to provide 6 horsemen and 24 footmen to the service of the President of Connacht or the Lord Deputy.

<sup>&</sup>lt;sup>1</sup> Fiant Litterae Patentes, Reference # 4718 in Calendar of Letters and State Papers Vol II Elizabeth 1580-1586 in the Twenty-Sixth Report of the Deputy Keeper of the Public Records (1895)

## Papal Registers

- Vatican Archives preserve documents and correspondence now lost within Ireland.
  - Many dispensations for illegitimate sons of priests
  - Rulings on assignment of benefices



[4 June 1427] To the abbots ·· Donald [O'Shaughnessy], cannon of Clonfert· Mandate to collate and assign to John [O'Madden], clerk, who lately received papal dispensation as the son of a priest and an unmarried woman, to be promoted ... the perpetual benefice without cure called the rectory [of Kilfarboy parish, County Clare]<sup>1</sup>

## What is the Overriding Message?

- Surnames are very old in Ireland
- Irish History is full of warfare & raiding
- Ecclesiastical families were not necessarily celebate.
- Explicit genealogy extending to persons mentioned often not possible.
  - Gap in paper records
  - Genetic genealogy across multiple lineages within a surname plus annalistic research can provide *implicit* genealogical connection.

#### Where to Find the Annals

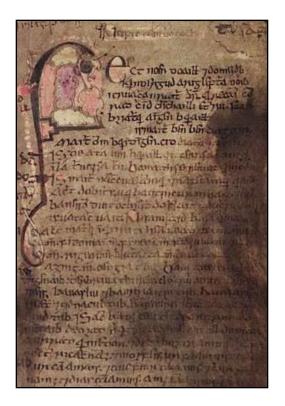
- Most online in some form
- Reprinted in book form
  - Amazon.com
  - Google Books scans of old library editions
- Summarized and Analyzed in Books focused on specific families or regions.

## **Topics**

- Introduction to the Annals
- Prehistoric Era
  - Legends of Invasions
  - DNA Evidence of Invasions
    - Modern Population
    - First Ancient DNA Results
- Major DNA Lineages by Region
- Dispersion of Surnames

## Legends of Invasions

- Lebor Gabála Érenn
  - Book of Invasions of Ireland'
  - Describes two major ancient populations
    - Tuatha Dé Danann
    - Fir Bolg
  - Followed by conquest of a small band of warriors from Spain dubbed the Milesians
    - Mileseans were said to have come from Scythia and spent hundreds of years wandering the earth through many lands



Wikipedia, Lebor Gabála Érenn; Wikipedia, Milesians (Irish)

# Archeology of Irish Population Theory

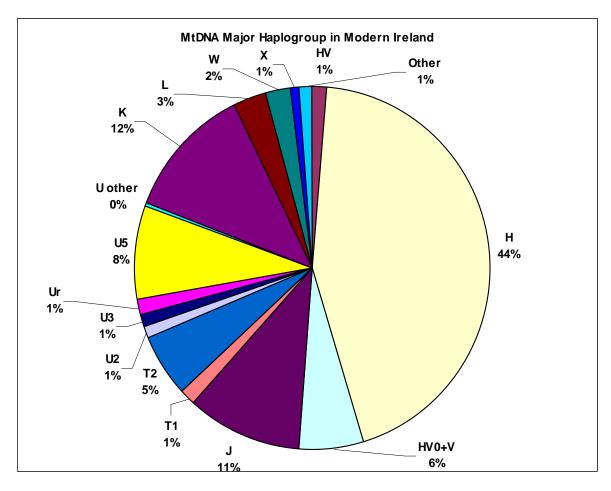
- Archeological evidence for first humans in Ireland ~ 8000 bc
  - stone age, hunter gatherers
- Around 4000 bc Neolithic cattle, farming and stoneworks emerge, population grows
  - Fifty year debate in Anthropology, Linguistics, and Archeology as to whether agriculture spread by movement of people or just movement of ideas and technology.



Wikipedia, Prehistoric Ireland, 2014

## Modern MtDNA Haplogroup Frequencies in Ireland

- Although H is largest group of female lineages.
   Distribution is fairly broad (homologous)
  - 14 groupshaving atleast 1%frequency



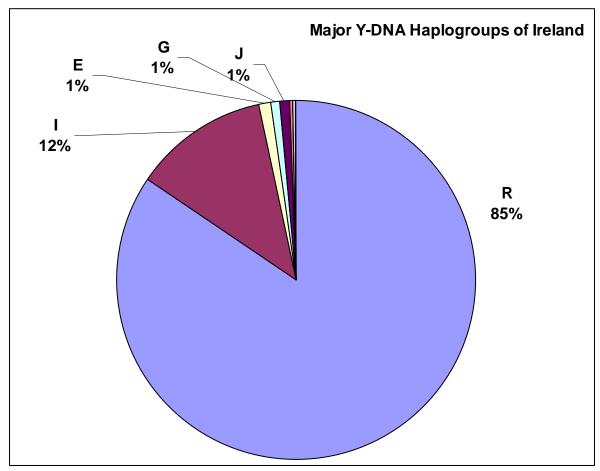
## European Ancient Y-DNA

- Y-DNA samples from ancient graves in western Europe have big differences from modern era:
  - Haplogroups I and G predominant in stone age graves
  - Haplogroup R was not found in Central Europe before 3000 bc

Example	Approx Date	Y-DNA Haplogroup
Cheddar Man - England	8000 bc	"Not properly published"
Sweden	6000 bc	I & I-M223
Germany	5600 bc	G2a & F
Spain	5000 bc	G2a & E
Otzi – Italian Alps	3200 bc	G2a
France	3000 bc	G2a & I-M223

## Modern Y-DNA Haplogroup Frequencies in Ireland

- Haplogroup G has virtually disappeared
- Haplogroup I is outnumbered by Haplogroup R by 7:1



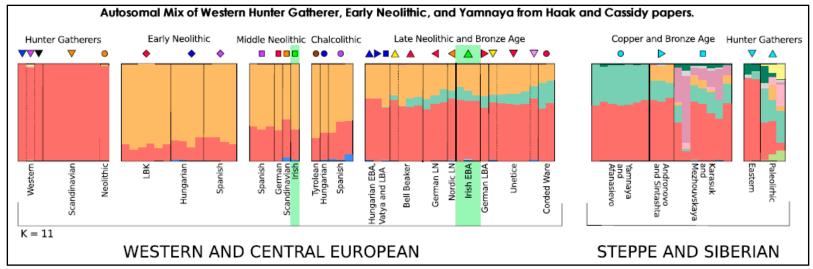
Data from <u>Ireland yDNA Project</u> at FTDNA, 2014 Filtered for origins in Ireland or Northern Ireland (n=3,497)

## What Happened to the Men

- Archeological observation of an Irish population 'collapse' around 2500 bc with metallurgy & Bell Beaker culture arrival in Ireland
- Modern DNA
  - Lots of older MtDNA female Haplogroups
  - High percentage of R1b and especially R1b-L21 males (Y-DNA) with fairly recent population explosion

### Ancient European Autosomal DNA

- In 2015, scientists looking at mutations across all chromosomes in ancient and modern Europeans detected a mixture of two source populations, as they expected:
  - Hunter Gatherers (earliest, post Ice Age inhabitants)
  - Early Neolithic (LBK culture, middle eastern agriculture)
- Surprised to find a 3<sup>rd</sup> source population emerging in the Bronze Age.
  - Earlier and more concentrated in ancient Asia and then Eurasian steppes
  - Yamnaya Culture (corded ware, steppe warrior culture, metal working)



<sup>1</sup>Haak et al (2015), Massive migration from the steppe is a source for Indo-European languages in Europe, Nature

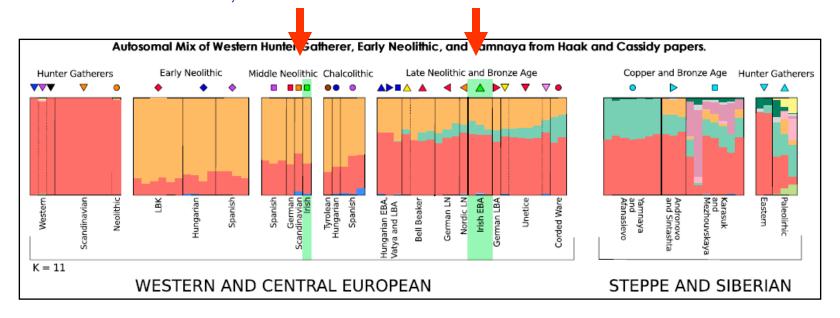
#### First Ancient Irish DNA

- In 2015 Dan Bradley's team produced the first Ancient DNA results for remains in Ireland<sup>1</sup>
  - Woman from ~ 3,200 bc, neolithic age
    - MtDNA Haplogroup HV0
      - ancestor to modern H
  - Males from ~ 1,900 bc, early bronze
     age site on Rathlin Island, County Antrim
    - Y Haplogroup R1b-L21
    - MtDNA Haplogroup U5a1, U5b2 and J2b1a
    - Lactose Tolerance, Blue Eyes



#### **Ancient Irish in Autosomal Context**

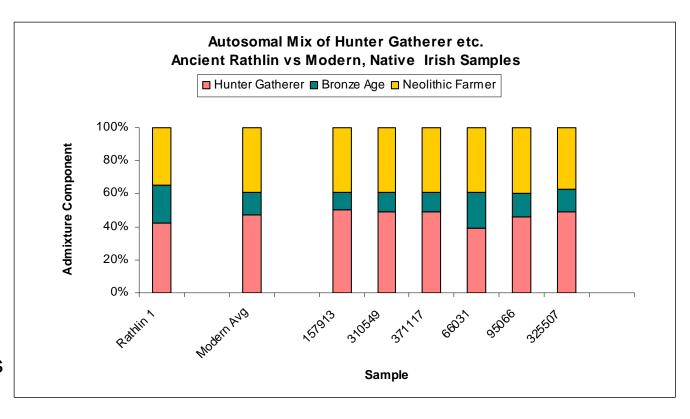
- Consistent with broader European results
  - a mix of three ancient populations over time<sup>1</sup>
  - Western Hunter Gatherers
  - Early Neolithic (LBK culture, middle eastern agriculture)
  - Bronze Age, Charriot Warriors with metal working
    - => CELTS; Y-DNA SNP = L21



<sup>&</sup>lt;sup>1</sup>Haak et al (2015), Massive migration from the steppe is a source for Indo-European languages in Europe, Nature

#### Ancient vs Modern Irish Admixture

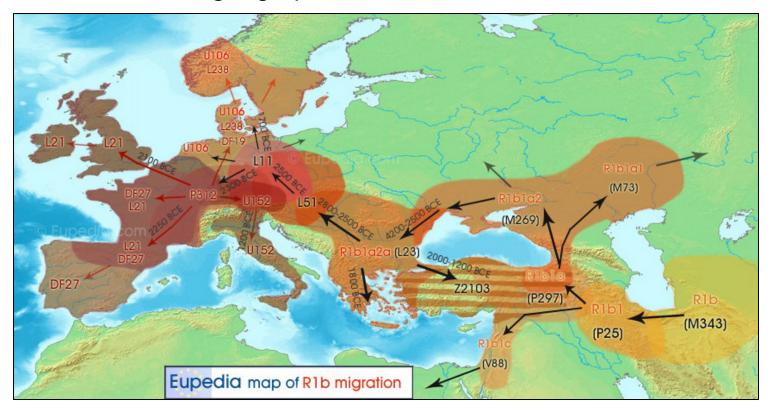
- Comparison
   of Admixture
   values of
   Rathlin 1
   Bronze Age
   aDNA¹ to
   modern Irish²
  - Fairly
     similar
     mixture of
     three
     source
     populations



<sup>1</sup>Cassidy et al (2015), Neolithic and Bronze Age migration to Ireland and establishment of the insular Atlantic genome, PNAS <sup>2</sup> Irish Mapping and Larkin DNA Projects 2017 author compilation of Family Tree DNA *Ancient Origins* admixture values of persons native to Ireland

# R-L21 DNA Entry to Ireland

- Unlike Haplogroups G and I, Haplogroup R went on a much longer journey and got to Europe and Ireland much later in time.
- R-L21 arrival in Ireland estimated at 2,000 bc based on haplotype variations across geographies.



#### DNA vs Book of Invasions

- Could Tuatha Dé Danann from Annals be early Haplogroup I-M223 hunter-gatherers?
- Could Fir Bolg from Annals be neolithic farmers with G2a Y-DNA?
- Does Milesean invasion correspond with archeological arrival of metal-working, mobile chariot-warrior culture of Celts.
  - With R-L21 Y-DNA who had migrated from the Eurasian steppes of Scythia over thousands of years?
- Nothing conclusive, but a case can be made that DNA is supportive of some elements of Irish origin stories such as the Lebor Gabála Érenn which were heretofore dismissed as myths.

# **Topics**

- Introduction to the Annals
- Prehistoric Era
- Major DNA Lineages by Region
  - Ulster
  - Connacht
  - Munster
  - Leinster
  - The Normans
- Dispersion of Surnames

#### Ulster – North of Ireand

- Uí Néill
- Airgíalla
- Ulaid
- Dál Riata
- Other



#### Uí Néill

- Trinity College Study of Dan Bradley et al
  - Sampled Ireland with 17 STR markers across Ireland
  - Genetic signature first identified by John McEwan on YSearch as STR19, aka Northwest Irish, Irish Type I, now named the SNP R-M222
    - About 15% of men from Ireland have this genetic signature
    - Hypothesized as descendants of the Uí Néill <sup>1</sup>
- Northern Uí Néill descended from Niall's son Eoghan
  - Kings of Tyrone, adopted many surnames but not O'Neil
- Southern Uí Néill
  - Kings of Meath and Tara
  - Adopted O'Neill surname
  - 2006 DNA Study<sup>2</sup> of O'Neil and related surnames suggests a very different Y-DNA lineage became the Kings of Tara sometime between 1036 and 1176 ad
    - R-DF27 about 30% of O'Neil surname is DF27; not an L-21 subclade.
    - About 18% of O'Neil surname do carry R-M222

# Airgíalla

- A distinct kingdom in Ulster said to be settled by descendants of three brothers of the 4<sup>th</sup> century: The Three Collas
- Some genealogies claimed they were descendants of Conn of the Hundred Battles
- Some scholars doubted the Three Collas even existed, alleging they were just aliases for some Uí Néills.
- DNA links 33 Airgíalla-affiliated surnames with a distinctive marker
  - R-L21 with DYS 425 Null
    - New high-resolution SNP R-S971
  - Legend of the Three Collas looks very true
  - Genealogy and analysts linking Airgíalla to the Uí Néill patrilineally looks false

#### **Ulaid**

- Ancient peoples of northeast Ireland
- Power waned in Christian era
  - 19<sup>th</sup> century genealogy writers tended to blend or abstract Ulaid genealogies
- Territory heavily planted by Scots in 17<sup>th</sup> century
- New Hypothesis: FGC9811 may be a Y-SNP marker for paternal lineages from Ulster which are not part of Clan Colla and Scots Modal lineages
  - R-L21-L513-S5668-FGC9811
    - On YTree.Net: <u>FGC9795</u> block

#### The Dál Riata

- Described as an early subkingdom of the Ulaid
- Reputed to have emigrated from Ireland to Scotland due to pressure in Ireland in 6<sup>th</sup> century
  - Spanned the Irish Sea for some time.
  - Brought Christianity & Gaelic language with them.
  - Migration so ancient that some believed Dál Riata
     DNA does not exist or cannot be differentiated from Picts.

# Kenneth MacAlpin, King of Alba

- Led Irish 'Scots' in 839 ad three-way battle with Picts and Norse Vikings in what is today called Scotland.
  - Resulted in domination of the Picts by the Scots and the formation of 'Scotland'
  - Kenneth descended from Dál Riata<sup>1</sup>
- DNA evidence among many Scottish surnames linked to MacAlpin suggests that Kenneth's Dál Riata lineage has been identified.<sup>2</sup>
  - SNP L1065 (aka CTS11722 & S749, consistent with STR profile known as Scots I Modal).
    - Example Surnames: MacGregor, MacRae, Campbell, Buchanan, MacKinnon, MacFie, MacQuarrie
  - Evidence that Highland Scots are descendants of the Dál Riata from Ireland.

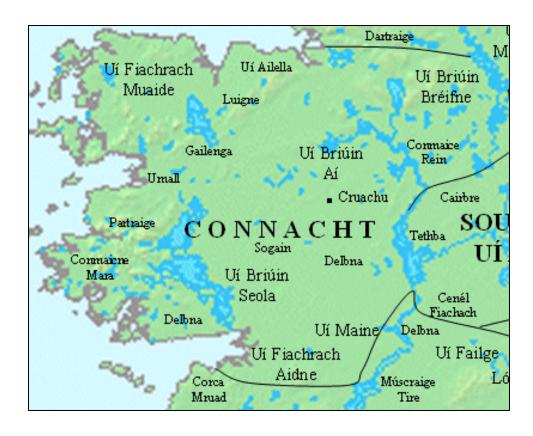
## MacAuley DNA Distribution

- Distribution of Clan MacAulay DNA Project Participants
  - Irish Sea Area
  - R-CTS4466 on Isle of Lewis
  - R-DF27-Z2571 in Antrim & Scotland
  - RI-L21 and R-M222 in other parts of Ireland
  - SNP testing shows little Scots Modal L1065



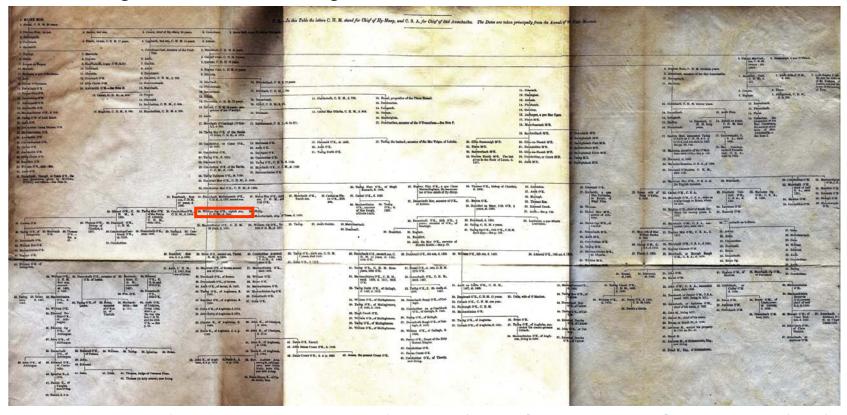
#### Connacht – West of Ireland

- Uí Maine Kingdom
  - O'Kelly
  - O'Connor
- O'Rourke



## Uí Maine Pedigree by O'Donovan

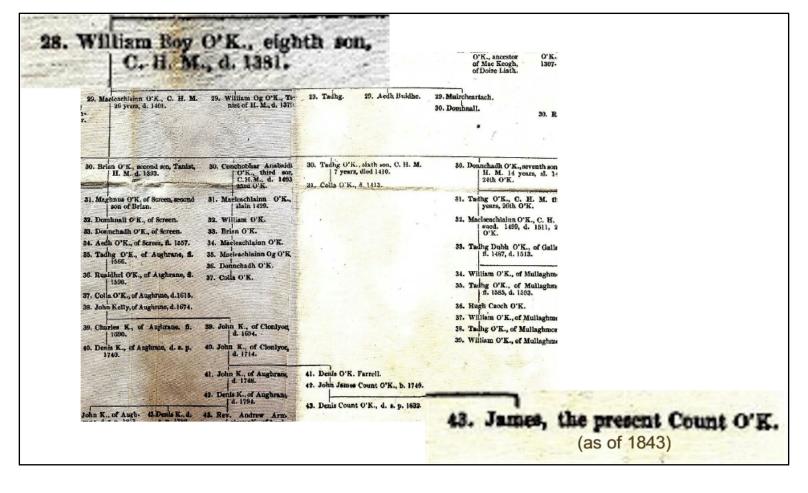
- King Máine Mór led his people to re-conquer and occupy southern Connacht in the 4<sup>th</sup> century.
- Highlighted in red in the middle is William 'Boy' O'Kelley
  - Died in 1381, one of last Gaelic Chieftans of Hy Many.
  - 28<sup>th</sup> generation from King Maine Mor.



Pedigree Image from provided by Aidan Kelly of the Kelley/Kelly Y-Chromosome DNA Surname Project (2016)

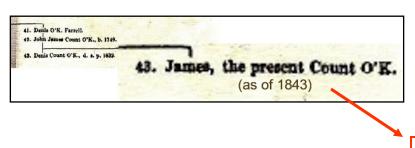
# Pedigree of Count O'Kelly

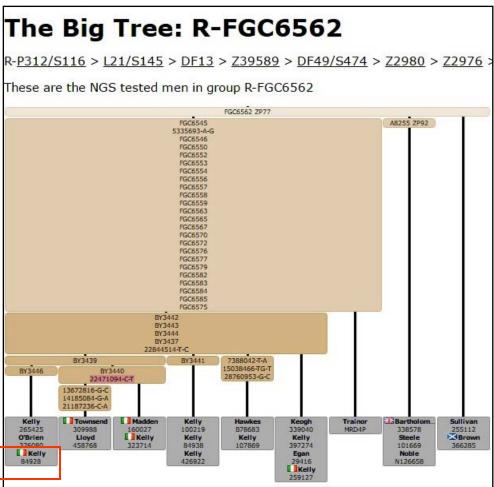
 O'Donovan's pedigree includes a line of descent to Count James O'Kelly who was known to O'Donovan in the 19<sup>th</sup> century



# O'Kelley Pedigree and DNA

- Kelly DNA Project shows multiple Y-DNA lineages from Galway.
- Including descendant of Count James O'Kelly in the O'Donovan Pedigree





#### O'Connor

- Six septs of O'Connor surname cited in annals<sup>1</sup>
- O'Connor of Connacht
  - Ruaidrí Ua Conchobair, (last) High King at time of Norman invasion in 1169.
    - Last identified heir in annals: Aed Ua Conchobair d. 1233 'daughtered out'
- O'Conner DNA project has not been able to link samples to septs in the annals<sup>2</sup>
  - Percentage of haplogroup I larger than average for Irish surnames (16%).
    - Project sample from County Galway has the I-M223 marker of stone age European men

#### O'Rourke

- Main clan situated north of Ui Maine in Briefne
  - Modern County Leitrim area
- High Percentage of M222 Haplogroup
- Person claiming descent from Chieftain of 13<sup>th</sup> century has DNA results: R-M222-BY3338<sup>1</sup>

LC1259·3 - A conference took place between Aedh O'Conchobhair and Brian O'Neill, at Daimhinis on Loch Erne, when peace was made with Domhnall O'Ruairc by Aedh O'Conchobhair, and the sovereignty of the Breifne was given to him<sup>2</sup>

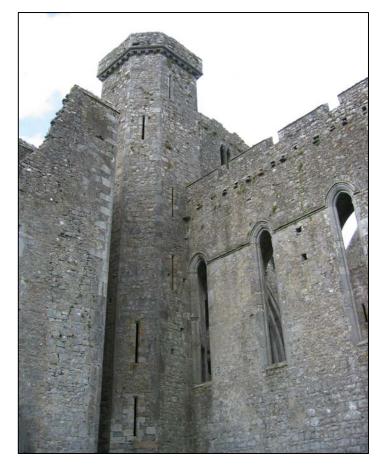
#### Munster – South of Ireland

- Eoghanacta
- Brian Boru & the Dál gCais
- Breassal Breac
- Éile O'Carroll
- Murphy



## Eóganachta- Kings of Munster

- Ailill Aulom, King of Munster
- Kingship alternated between lineages of sons, seated at Cashel, Tipperary
  - Surnames: McCarthy,
    O'Sullivan, O'Callaghan,
    O'Keefe, Kirby,
    O'Mahony, O'Donoghue



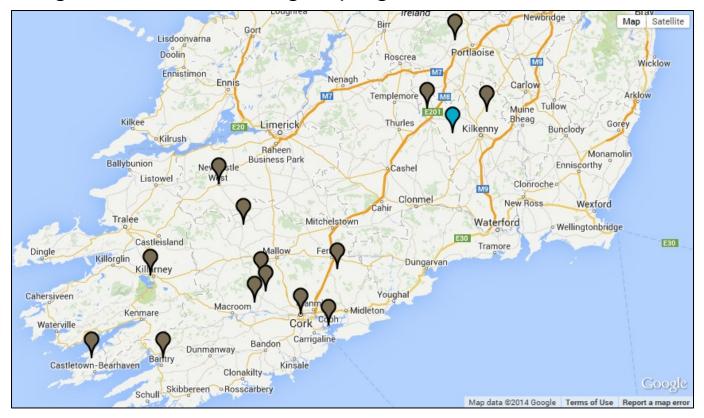
## Eóganachta DNA vs Annals

Annals	DNA Cluster	Frequency of DNA within surname project
Eóghanacht Chaisil & Rathlind descendants of first Christian King of Munster (d. 489)	Irish Type II R-L21-DF13 -CTS4466	O'Sullivan, O'Keeffe, O'Donoghues (S), > 50% O'Mahonys 30% McCarthy (grp A) 23% O'Callaghans 4%
Cárthach, King of the Eóghanacht Cashel (d 1045)	R-L21-DF13 -DF21-L362	McCarthy (grp B) 27% O'Callaghans 12%

Overall the common origin of the Eóganachta in the Annals is well-supported by the DNA evidence with the caveat that there are multiple McCarthy lineages.

## Eo'ganacht Chaisil

- DNA Distribution
  - R-CTS4466 Irish Type II
  - Eo'ganacht Chaisil subgrouping



## Brian Boru & Dál gCais

- Brian mac Cennétig mac Lorcáin
  - Born along the Shannon River in County Clare
  - King of the Dál gCais then High King of Ireland
  - Proginetor of the O'Brien
     Lords of Thomond
    - Lineage intact today



- called Irish Type III

R-L21-ZZ10-Z253-L226-FGC5628-DC1



## R-L226 Distribution

- Participants from Ireland
  - All R-L226 positive subgroup.



#### Surnames: R-L226 vs Annals

Dál gCais Surname	Surname % of R-L226	R-L226 as % of Surname
O'Brien / Bryant	13%	19%
Kennedy	6%	6%
Casey	4%	50%
Hogan	3%	31%
McGrath	2%	23%
Carey	3%	17%

Dál gCais Surnames with frequency < 2% in R-L226 Project: Aherne, Caisin, Quinn, O'Mahoney, McMahon, Ryder / O'Markahan

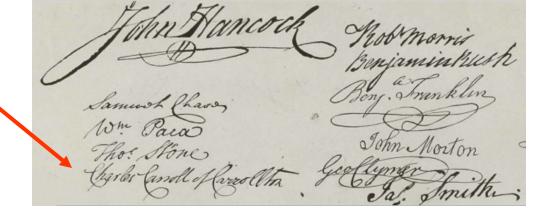
#### **Breassal Breac**

- New low level SNP: R-Y5058
  - a subclade of P312 and DF27
    - Common STR markers: DYS481=24, DYS520=21
  - Common in surnames
     associated in the Annals with
     Breasal Breac, King of Leinster
     in about 150bc.
    - Ryan (Tipperary)
    - O'Dwyer
    - Leary
    - Kennedy (Wexford)
      - Cannady
    - Carroll
    - Donovan (Cork)



## Éile O'Carroll

- Charles Carroll of Carrollton, Maryland
  - Only Roman Catholic signer of U.S.
     Declaration of
    - Independence
  - Pedigree back to Gaelic chiefs of Éile



- Territory in modern Tipperary & Offaly
- Descended from 4<sup>th</sup> century Irish King named Cian
- DNA Lineage Identified: R-DF21-Z16282

## Other Surnames & Z16282

Surnames with members associated with <i>Cian</i> in Annals and having Z16282 members	Other Surnames having Z16282 not associated with Cian in Annals	Surnames associated with <i>Cian</i> in Annals which so far do not have Z16282 members
Bohan / Bowe	Purcell	Corcoran
Dooley	Springer	Healy
Flanagan	Tracey	O'Gara / O'Hara
Keeffe		Uí Maine Delbna I
Kealy / Kelly		urach Uí Failge ue Múscraige Lóigis
Meagher / Maher / Mahan		Tire <b>Éile</b>
Redmond		is) Osraige Eóganacht
Murphy		Uanthme Caisil

## Murphy

- Most common surname in Republic of Ireland today.
  - Relatively few mentions in the Annals
  - Largest number of Murphy's in Griffith's Valuation in County Cork.

#### DNA

- Largest number are part of R-M222 Northwest Irish type
- 2<sup>nd</sup> largest CTS4466 Irish Type II

### Leinster – East of Ireland

- Uí Chennselaig
  - Énnae Cennsalach, contemporary of Niall of the Nine Hostages
- Uí Dúnlainge
  - Said to be cousins of Chennselaig from Énda Niada
  - Split into 3 groups in 8<sup>th</sup> century
    - Uí Muiredaig
      - O'Toole surname
    - Uí Dúnchada
      - FitzDermot surname
      - Larkin surname
    - Uí Fáeláin
      - O'Byrne surname



Donncha Ó Corráin, <u>Ireland before the Normans</u>, 1972

#### Leinster DNA

- Uí Chennselaig
  - Kinsella, Kinsley, Kinsey surnames
    - No DNA Project
  - Murphy Project (Leinster)
    - No meaningful Leinster DNA sample assembly
- Uí Dúnlainge
  - McDermott, Dermott, FitzDermot, O'Toole surname projects
    - No meaningful Leinster DNA sample assembly
  - O'Byrne
    - R-L21-DF13-ZZ10-Z255
  - Larkin (Wexford)
    - R-L21-DF13-ZZ10-Z253 (negative for R-L226)
    - By annalistic pedigree, the surname progenitor, King Lorcán mac Fáelán (d. 941 Dublin), was 8<sup>th</sup> cousin to Bran macMáelmórda (deposed 1015), the O'Byrne progenitor.
  - DNA supportive of annalistic pedigree.

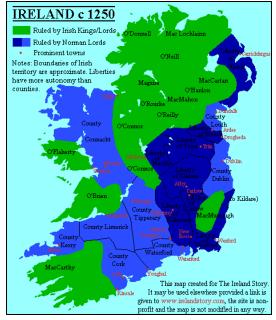
#### The Normans

 About 1.5% of the population of Ireland have surnames associated with Norman lords

- Burke, Fitzgerald, Power, Barry, Roche,

Butler, Grace, Cusack, Dillon

- Three Most Powerful Dynasties
  - Butler
  - Burke
  - FitzGerald



#### Lords Butler

- Descendants of Norman family that came to Ireland with King Henry II ~ 1171 ad
- Large holdings
  - Loyal to the British Monarch but generally remained Catholic
  - Ormond Palatinate (Tipperary & Kilkenny)
    - Earldom extinct 1846
    - Last Marquis of Ormond (without lands) died 1997 without male heir.
    - One English estate remains with 18<sup>th</sup> Viscount Mountgarret believed to be a patrilineal descent.
      - No identified DNA test results.

## de Burgh / Burke / Bourke

- William de Burgh, Norman invasion of Connacht in 1175 & 1200
- Earl of Clanricarde lineage became extinct 1916
- Burke surname survives
  - Largest group, from Ireland
    - R-M269 U106 L48 Z2
      - Suggests Anglo-Saxon / Germanic paternal ancestry



## Fitzgerald Dynasty

- Maurice FitzGerald, Lord of Lanstephan
  - Norman knights coming from occupation of Wales
  - Prominent in Strongbow's original invasion force of 1169.
    - Expected to be R-L21 if Welsh ancestry like Stuarts of Scotland
- Earls of Leinster & Kildare
  - Built many of the prominent buildings around Dublin
  - Original earldom exists, but fortune was lost by 20<sup>th</sup> century
  - Maurice Fitzgerald, a gardener from Oxfordshire, is currently the 9th Duke of Leinster
- DNA Lineage identified from descendant with Barron surname
  - I-M253 haplogroup (aka I1 haplogroup)
    - Suggests Viking Ancestry

## Summary

- Genetic Genealogy DNA testing offers exciting new evidence to historians and archaeologists
  - Sampling coverage and resolution of testing technology reaching useful levels for informing historical questions.
  - Ancient Y-DNA results are starting to come in
- In general, Annals are supported by DNA evidence
  - Macro Level: replacement of mesolithic male population of Ireland (Haplogroups G & I) by Celts (Haplogroup R)
  - Micro Level: Connachta, Northern Ui Neill, Eóganachta, Dál Riata, Clan Colla distinctness
  - Exceptions occur: Clan Colla relations, O'Neil portion of Uí Néill
- Reliable pedigrees back to historical figures are few but very valuable where they do exist to help 'root' the DNA genealogies.

## **Topics**

- Introduction to the Annals
- Prehistoric Era
- Major DNA Lineages by Region
- Dispersion of Surnames
  - Most Common Modern Surnames
  - Frequency in Annals vs Modern
  - Genetic Diversity in Modern Surnames

## Dispersion of Surnames

- Geographical Diversity
  - Is M222 really Northwest Irish?
- Patrilineal Genetic Diversity from Y-DNA
  - Correlation of Genes & Annalistic Clans in Kennedy Surname
- Y-Haplogroup Diversity Among Surnames

#### Most Common Surnames

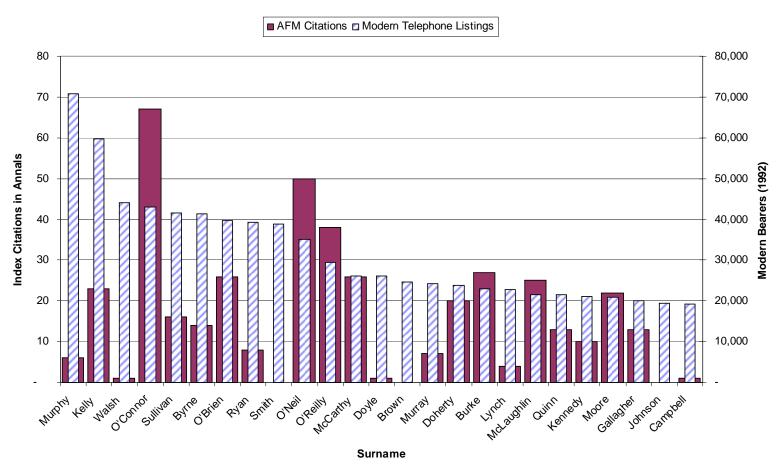
Irel	and			United States			United Kingdom	
Rank in			U.S.					
Ireland Surname	Bearers	% Ireland	Rank	Bearers	% U.S.	UK Rank	Bearers	% UK
1 Murphy	70,900	1.35%	58	304,551	0.11%	55	106245	0.19%
2 Kelly	59,800	1.14%	69	261,865	0.10%	60	105551	0.19%
3 Walsh	44,100	0.84%	265	153,684	0.06%	90	109516	0.20%
4 O'Connor	43,000	0.82%	385	122,332	0.05%	291	58806	0.11%
5 Sullivan	41,500	0.79%	92	227,034	0.08%	310	45812	0.08%
6 Byrne	41,300	0.79%	1106	41,069	0.02%	176	46307	0.08%
7 O'Brien	39,700	0.76%	234	180,099	0.07%	239	78284	0.14%
8 Ryan	39,200	0.75%	177	142,106	0.05%	123	62875	0.11%
9 Smith	38,800	0.74%	1	2,389,788	0.89%	1	755716	1.36%
10 O'Neil	35,000	0.67%	633	229,229	0.08%	219	86393	0.15%
11 O'Reilly	29,400	0.56%	210	183,254	0.07%	174	78720	0.14%
12 McCarthy	26,200	0.50%	384	82,560	0.03%	182	45400	0.08%
13 Doyle	26,100	0.50%	391	73,518	0.03%	162	49093	0.09%
14 Brown	24,600	0.47%	4	1,401,254	0.52%	5	407034	0.73%
15 Murray	24,300	0.46%	123	190,334	0.07%	84	77127	0.14%
16 Doherty	23,900	0.46%	829	101,705	0.04%	378	24816	0.04%
17 Burke	22,900	0.44%	229	168,139	0.06%	184	43670	0.08%
18 Lynch	22,700	0.43%	237	115,431	0.04%	245	34075	0.06%
19 McLaughlin	21,600	0.41%	392	92,793	0.03%	528	18152	0.03%
20 Quinn	21,500	0.41%	386	82,433	0.03%	357	25904	0.05%
21 Kennedy	21,200	0.40%	130	172,144	0.06%	98	69299	0.12%
22 Moore	20,800	0.40%	16	698,671	0.26%	33	144446	0.26%
23 Gallagher	20,100	0.38%	433	68,181	0.03%	185	43183	0.08%
24 Johnson	19,500	0.37%	2	1,995,229	0.74%	11	273029	0.49%
25 Campbell	19,200	0.37%	43	374,082	0.14%	47	119099	0.21%
Top 25	797,300	15.18%		9,851,485	3.65%		2,908,552	5.22%
Total Population Records	5,251,852			269,762,843			55,768,712	

A <u>Survey of Irish Surnames</u> 1992-97, Sean J Murphy;

U.S. Census Bureau, 2010 Surname Distribution; UK Surnames on SofeMinene.co.uk

#### Modern Surnames vs Annals

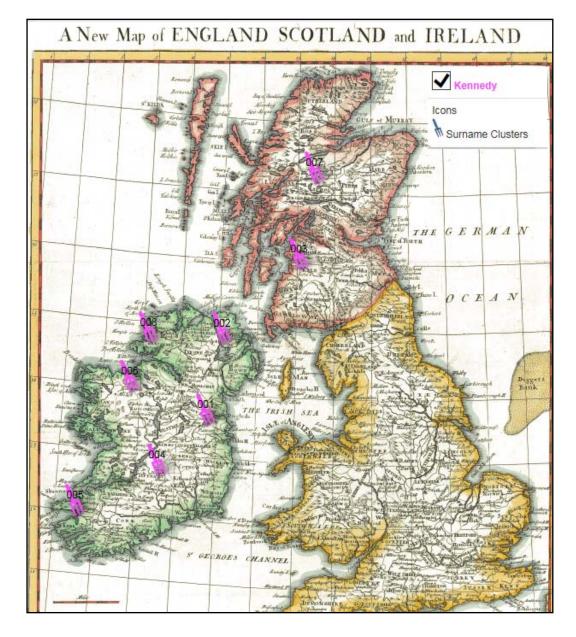
Ireland Surname Frequency Comparison: Modern vs Annals



Author count of surname citations in index of The Annals of Ireland by the Four Masters, IGF edition, translated by Owen Connellan (1846). A <u>Survey of Irish Surnames</u> 1992-97, Sean J Murphy

## Kennedy Surname Distribution

- 19<sup>th</sup> Century United Kingdom
- Rural clusters with Kennedy surname in Ireland and Scotland



## Kennedy Surname DNA Diversity

DNA Group	Pct of Surname	Modern Origins	Annals
R-M222	13%	Donegal	Ui Niall
R-L513-L193	8%	Scotland & Ulster	Dál Riata
R-L226	7%	Cork & Tipperary	Dál gCais
R-DF27-Y5058	1%	Wexford (JFK lineage?)	Breassal Breac
R* ungrouped	67%		
Non R	5%		

## Dispersal & Mixing

- •DNA reflects people a lot of dispersal and diversity.
- •In virtually any surname, there are representatives of most major European haplogroups.

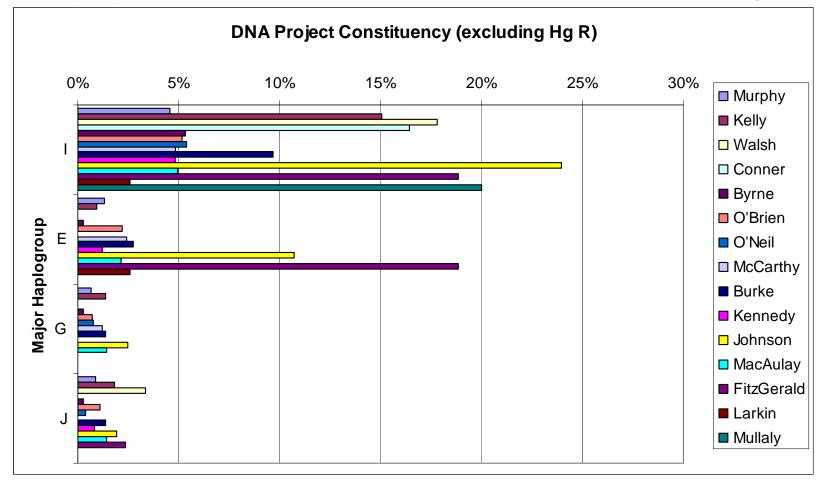


Image copyright © 2014 by Brad Larkin, based on analysis of mentioned DNA project members with Y-DNA surname affiliation

# Summary - Specific Findings DNA vs Irish Annals

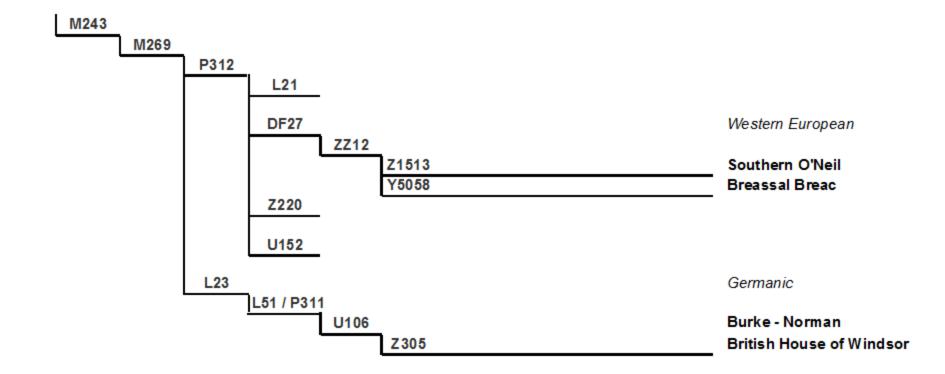
- Uí Néill
  - Northern Uí Néill R-L21-Z2961-M222
  - Southern O'Neil R-P312-DF27-ZZ12-Z1513
- Ulaid
  - R-L21-L513-S5668-FGC9811
- Dal Riata
  - R-L21-L1335-L1065
- Breassal Breac
  - R-P312-DF27-ZZ12-Y5058
- Connachta
  - R-L21-Z2961
  - R-L21-Z2961-M222
- Clan Colla Airgíalla
  - R-L21-DF21-Z3000, DYS425 Null
- Ely O'Carroll
  - R-21-DF21-Z16282
- Eóganachta
  - Group A R-L21-CTS4466
  - Group B R-L21-DF21-L362
- Dál gCais
  - R-L21-ZZ10-Z253-L226 Irish Type III
- Leinster
  - R-L21-ZZ10-Z255 Ui Faelain, Byrne of Wexford
  - R-L21-ZZ10-Z253-Z2185-Z2186 Larkin of Wexford
- Normans
  - Burke R-M269-U106 Germanic
  - Fitizgerald I-M253 Viking



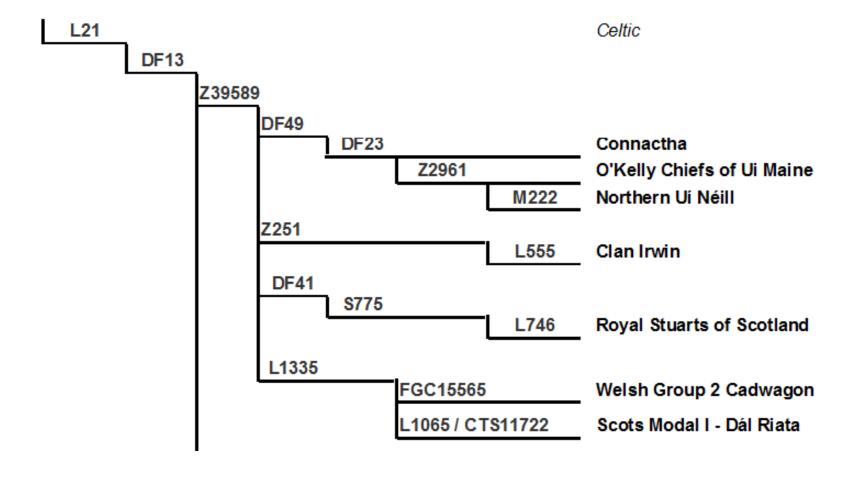
Mike Christie, public domain image of <u>Ireland</u>
<u>Early Peoples and Politics</u>, 2008

**Updated 13 June 2017** 

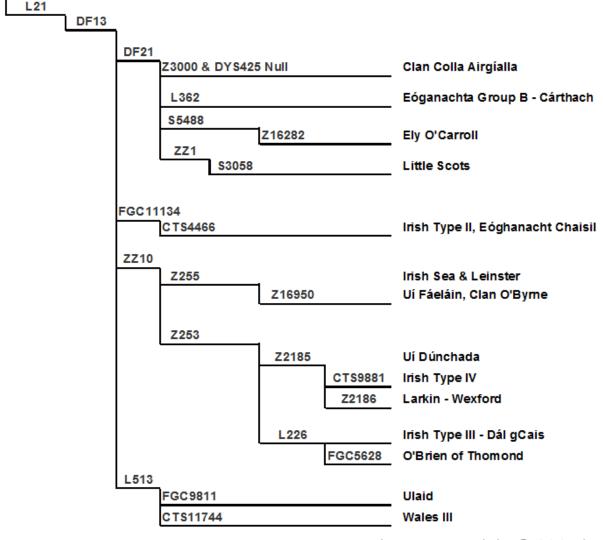
## M269 – Non L21 Branches



#### R-L21 Z39589 Branch



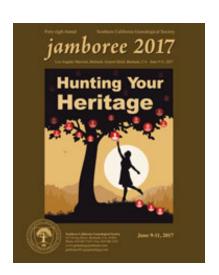
#### R-L21 Other Branches



## Questions?

#### **DNA vs Irish Annals**

A summary of results to 2017 with examples from major surnames & haplogroups



**Brad Larkin** 

