

Graveslab for *Magnus Mec Orristin* carved by *Fergus mak Allan* from *Clonca church, Co.Donegal*

Surname research and DNA: publications, possibilities and pitfalls

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Genetics is very young but rapidly evolving discipline

Irish Times (Sept 7th 2010) – first full sequence of Irish genome (of single individual) published.

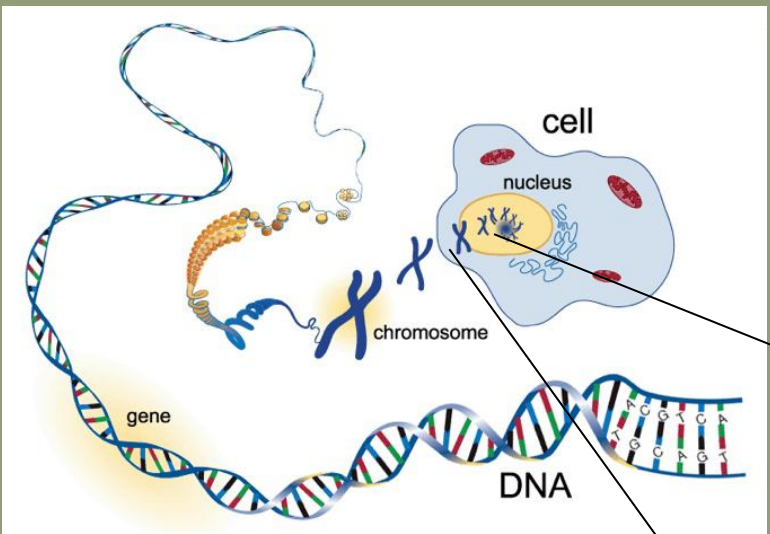
A genome is ALL of body's inherited information.

Work to date on population origins has looked at specific bits (DNA sequences): - haplotypes and haplogroups - rather than all inherited info (genome)

Academic studies now seem to be leaving surname genetics behind – baton taken up by commercial firms... and historians?



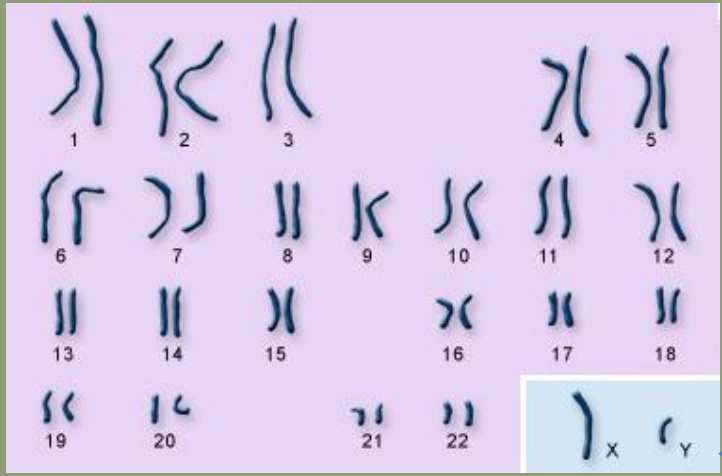
How does the nucleus store its information?



Inside the nucleus are structures called chromosomes.

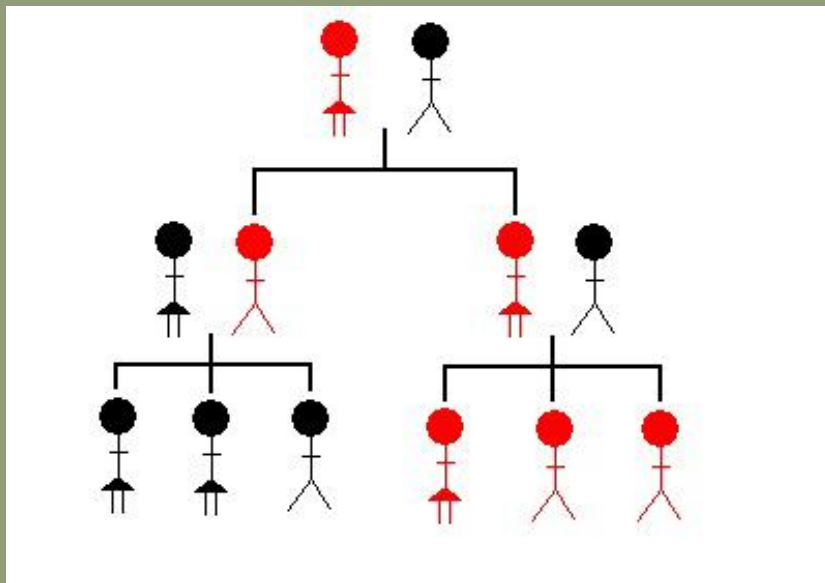
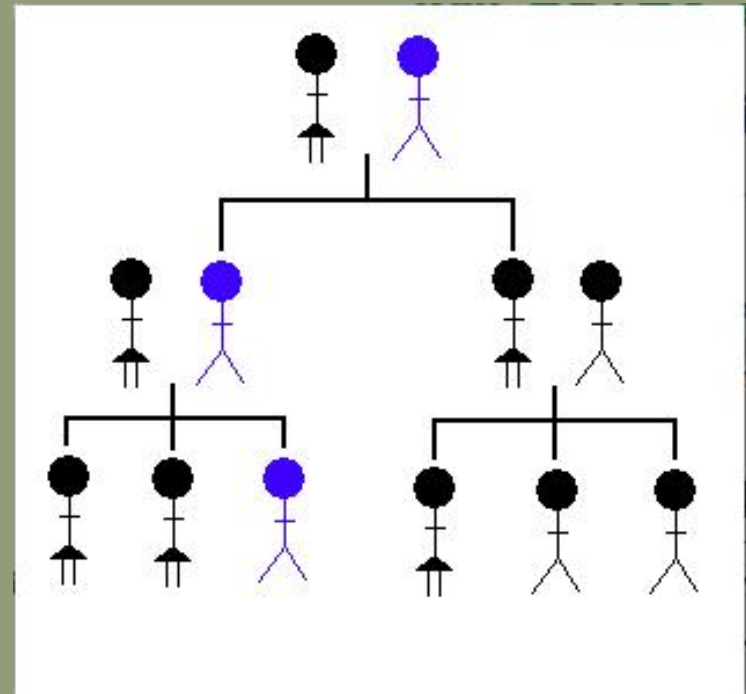


Each chromosome consists of two strands of DNA wound around each other



Chromosomes come in pairs

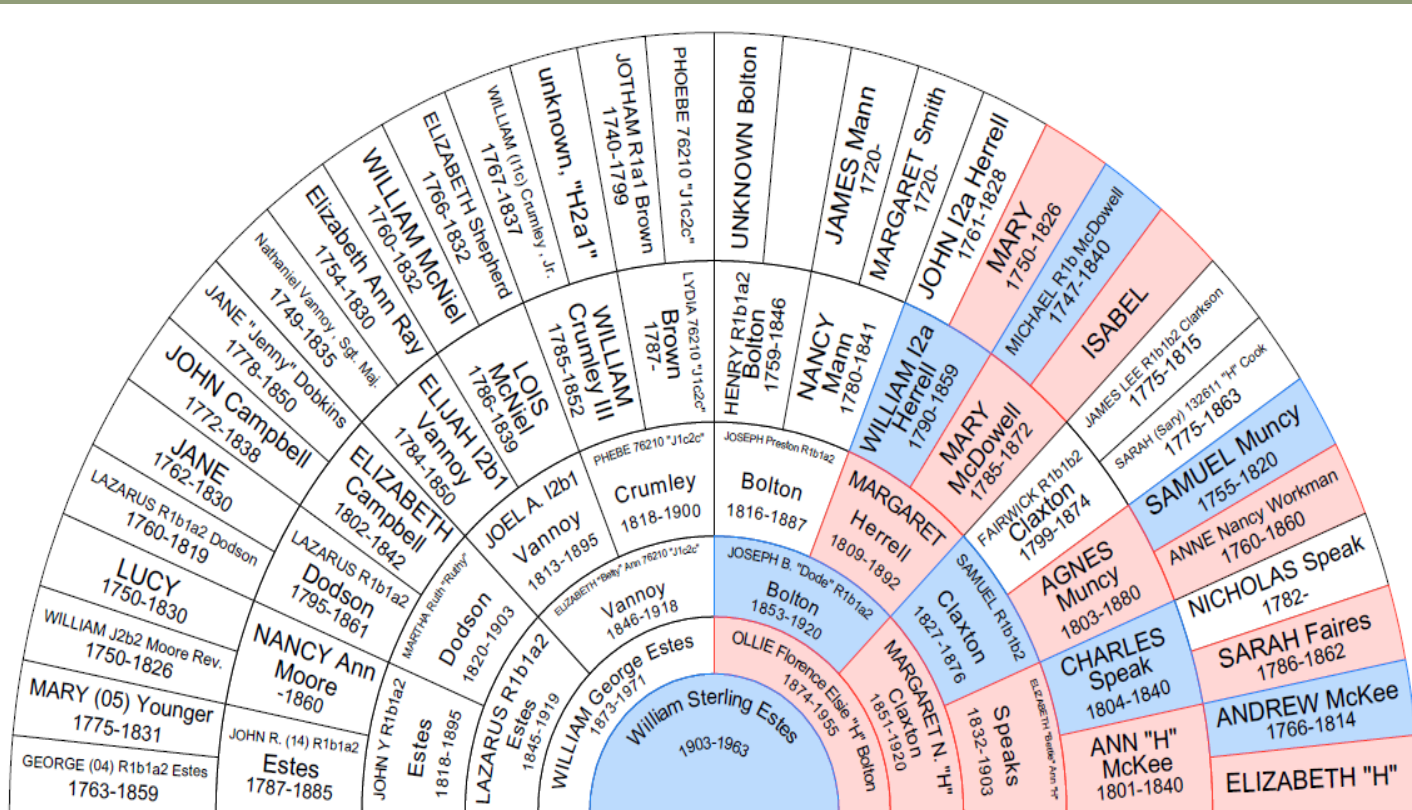
In the case of the Y chromosomes, these are inherited directly from your Dad. They very rarely mutate so, like surnames themselves they can tell us something about the ultimate origin of a family



Mitochondria is transmitted through females so by studying material in the mitochondria, we can figure out patterns of inheritance passed through the mothers.

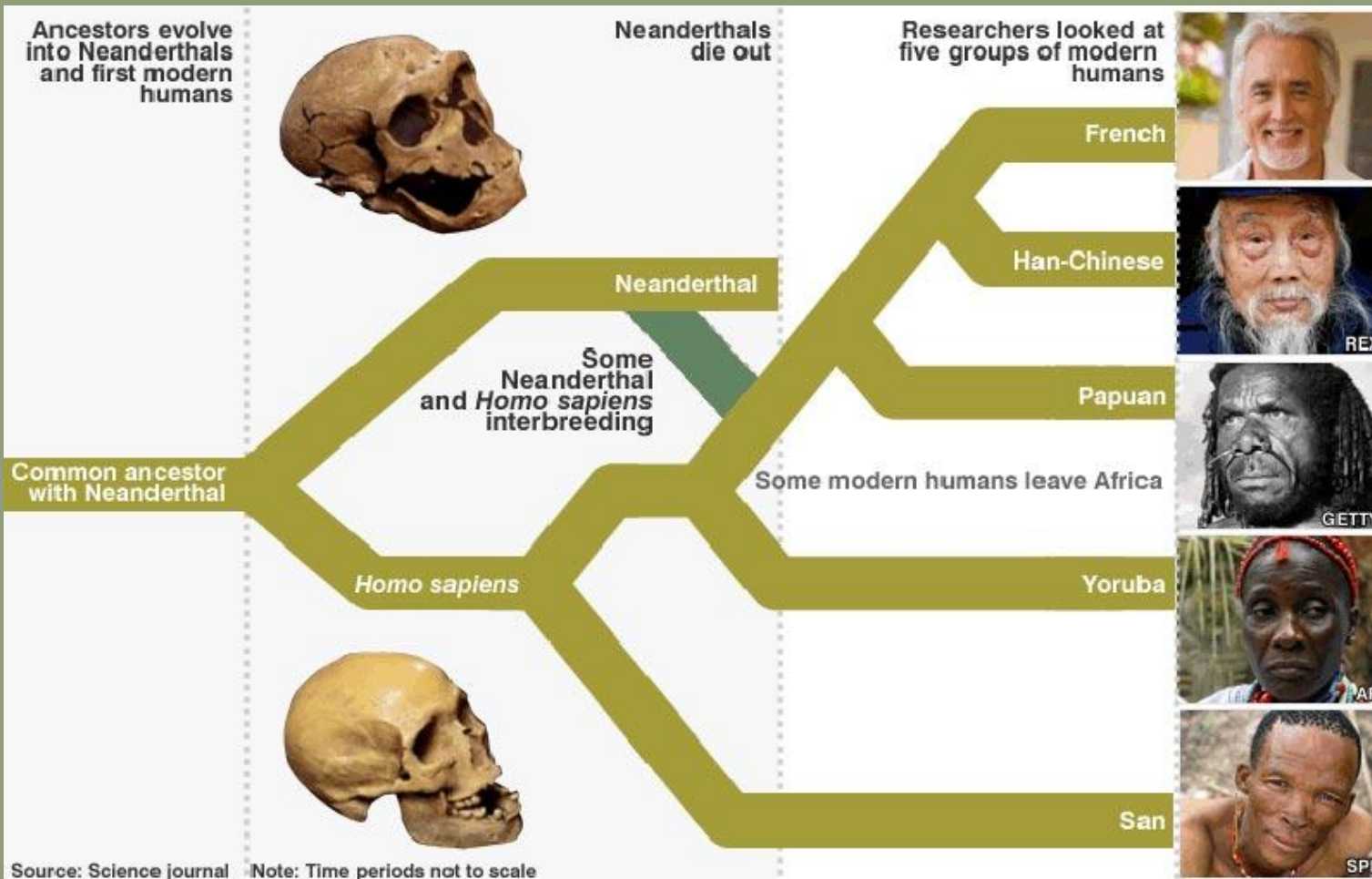
New technique of autosomnal DNA

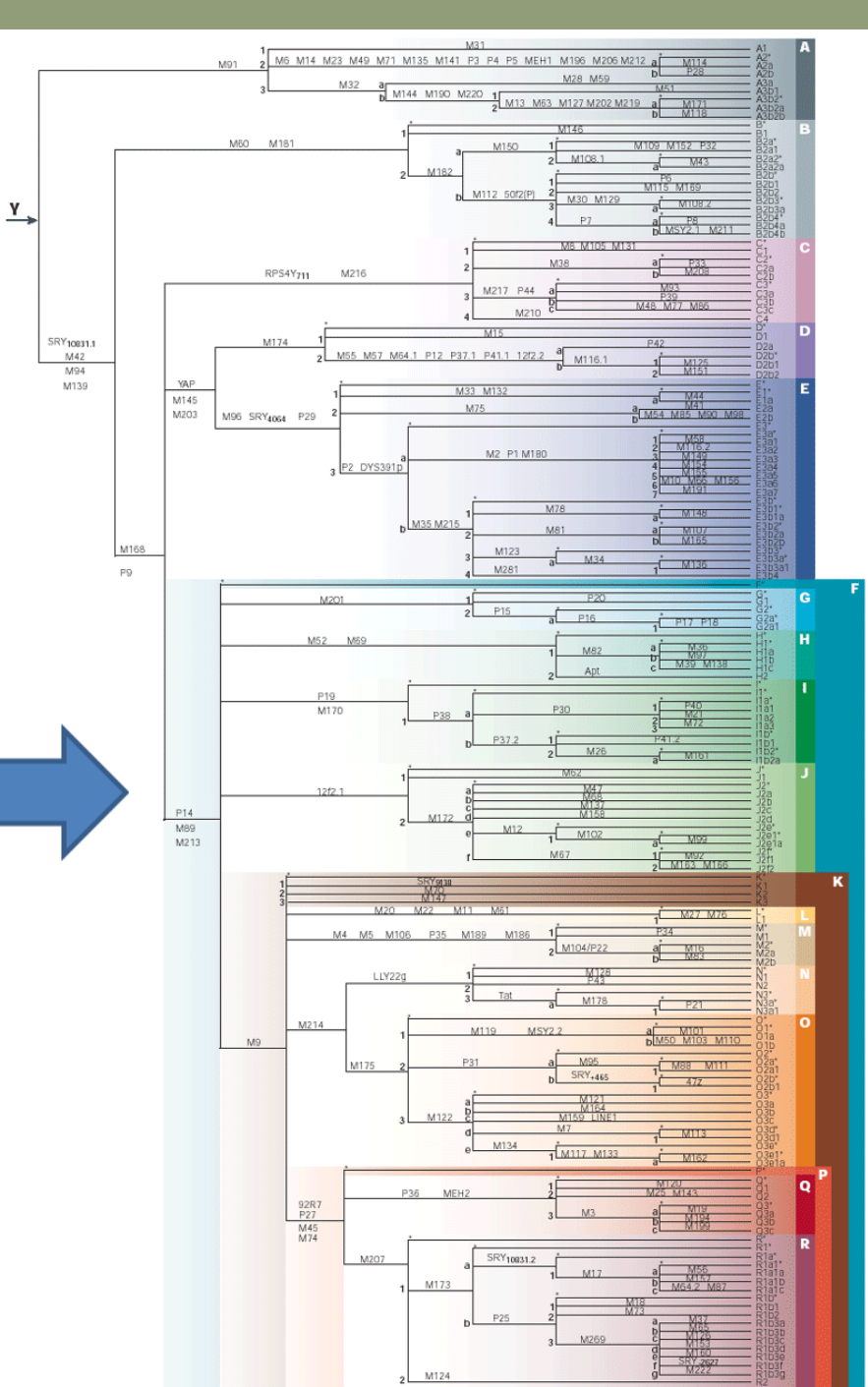
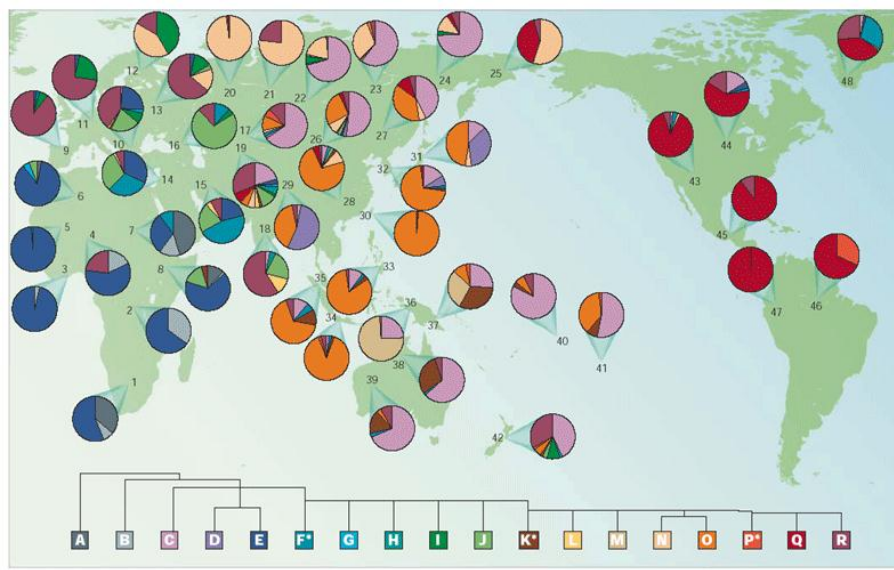
Used to investigate recent generations (both males and females) through analysis of the way in which the 22 chromosomes get shuffled in each individual



This is the most relevant technique for individuals seeking to explore immediate ancestry and attempting to break the barrier imposed by the lack of easily available records prior to mid 19th C

Measuring STRs > Haplotypes > Haplogroups > Phylogenetic tree

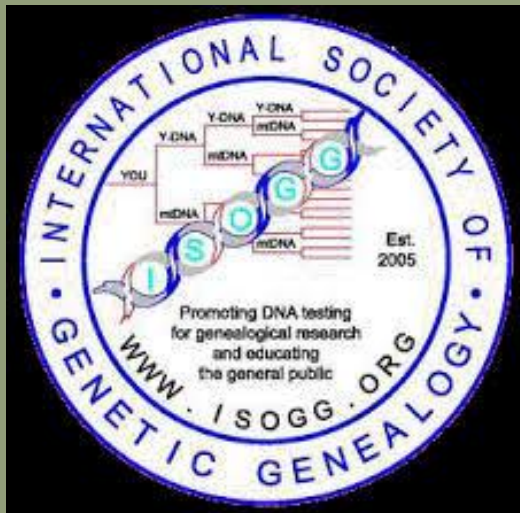




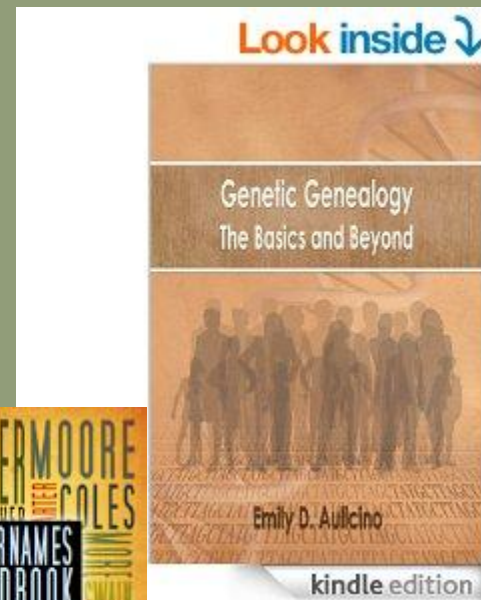
Situation as published in 2003 (when only small number of STRs measured because of expense involved in testing procedure.



Commercial firms like Family Tree now selling "Big Y" test products involving "next generation sequencing" – exponentially more STRs measured in 2015

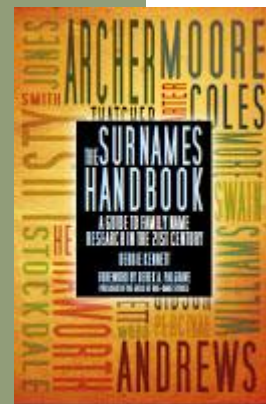
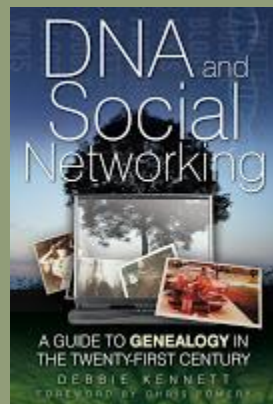


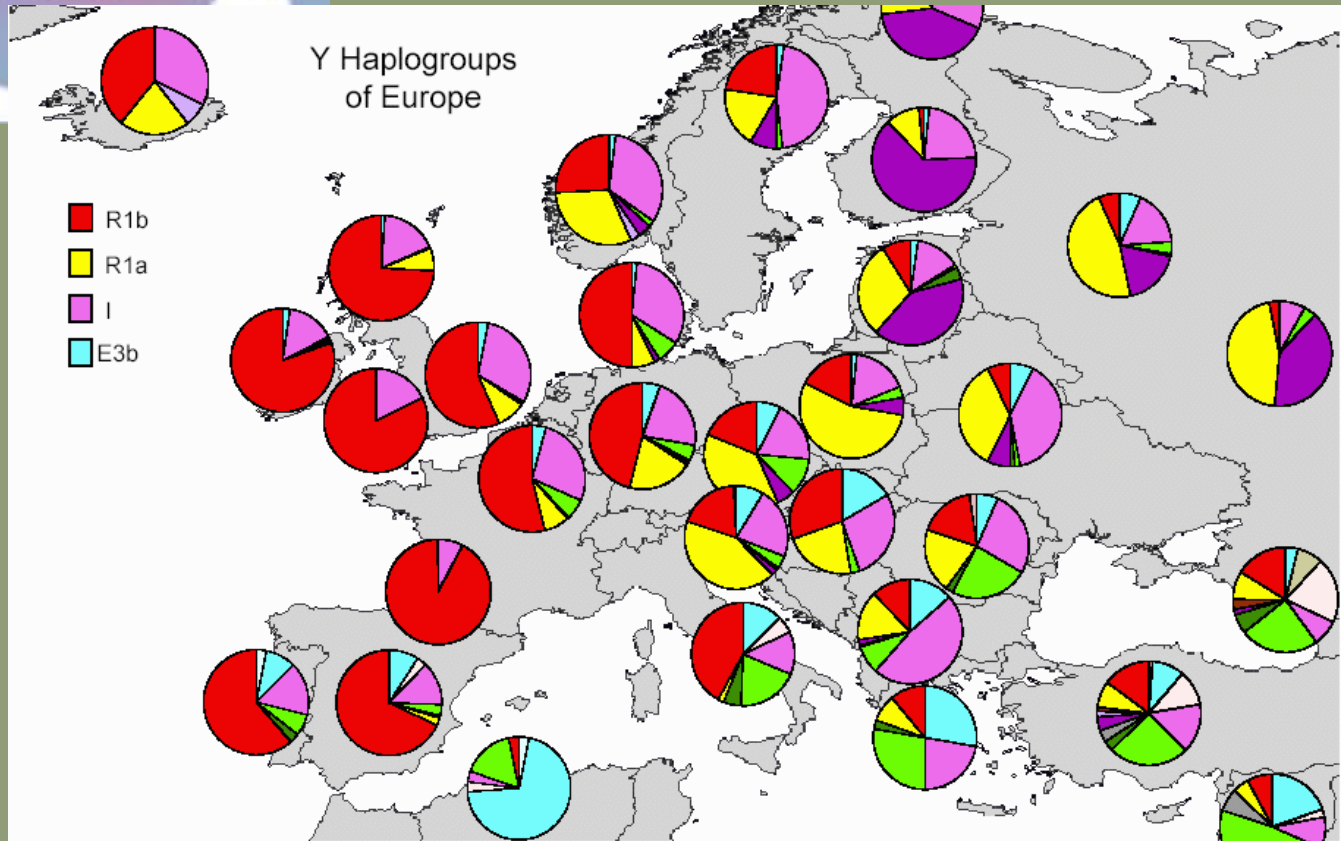
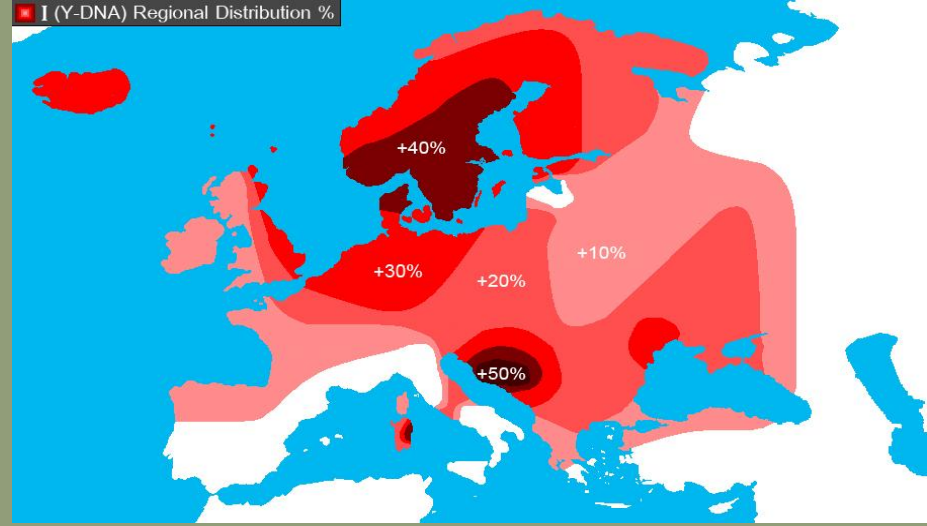
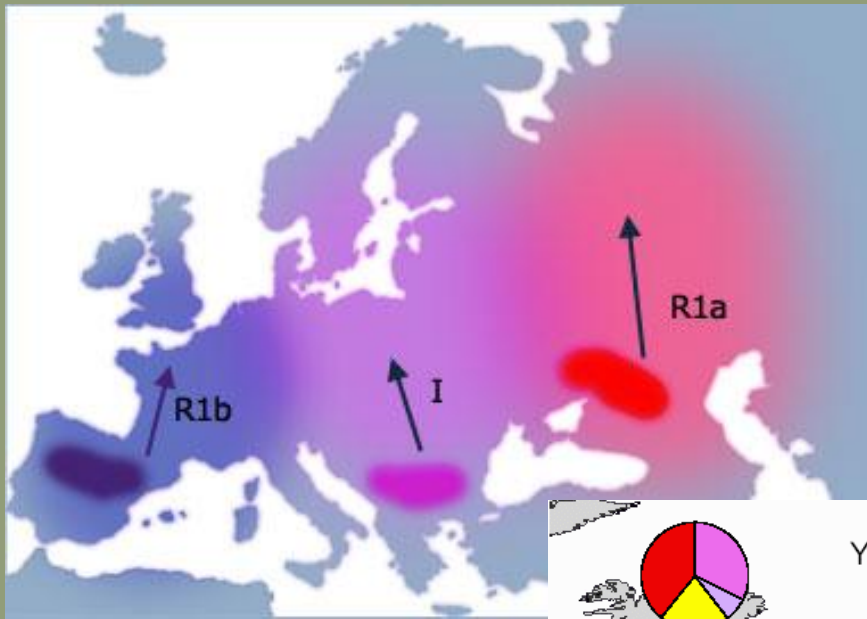
BACK TO OUR PAST

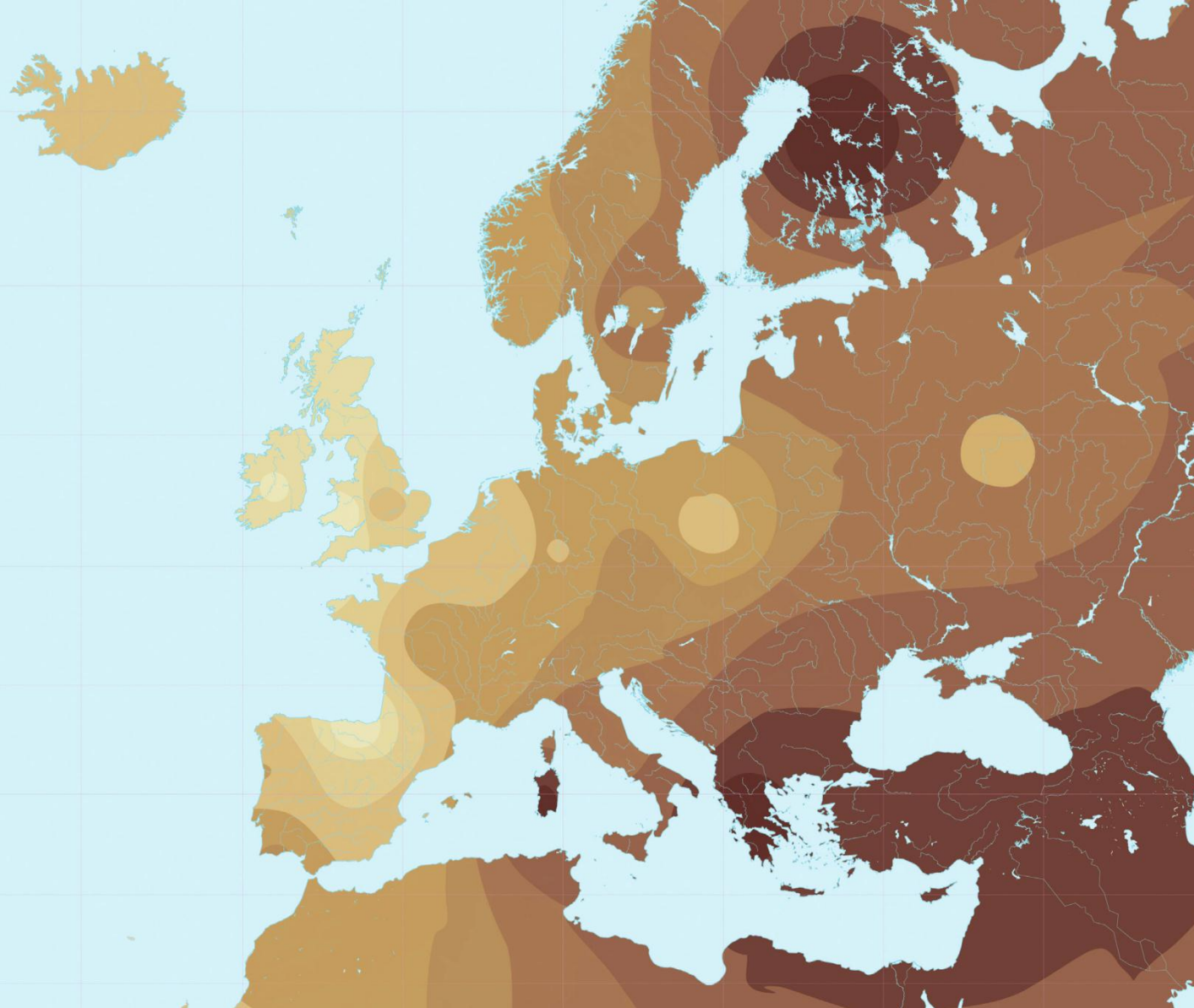


The DNA Workshop
in the FamilyTreeDNA Theatre

Time	Thursday 16th	Friday 17th	Saturday 18th
10.15	Which DNA test is best for you? Maurice Gleeson	Discovering Richard III Turi King	The basics of DNA testing Linda Kerr
11.15	How DNA rewrote my family tree Geoff Swinfield	Fishing in the gene pool for Vikings Mark Jobling	I've got my autosomal DNA results but what do I do next? Debbie Kennett
12.15	Ancestry testing using DNA: the pros and cons Mark Thomas	DNA for beginners – the three tests Debbie Kennett	Famous British DNA Katherine Borges
13.15	Autosomal DNA success Emily Aulicino	Scottish DNA – clans, families and surnames Alasdair Macdonald	The multilingual origins of medieval Irish surnames Cathy Swift
14.15	The genetic history of the United Kingdom: the People of the British Isles project Garrett Hellenthal	Autosomal DNA – how to use it in practice Maurice Gleeson	It's not just "deep ancestry" – how next generation testing and Y-STRs can take your genealogy research forward John Cleary
15.15	Exploring surnames, DNA and genealogy in the Low Countries Maarten Lamuseau	Fromelles – the role of DNA in the identification process Peter Jones	The genetic legacy of British India – the FIBIS DNA Project Valmay Young and Geraldine Charles
16.15	How to convince relatives and strangers to test and why Emily Aulicino	DNA and family history: discoveries and challenges from a DNA project administrator Sue Honoré	Using DNA to solve adoption cases Maurice Gleeson







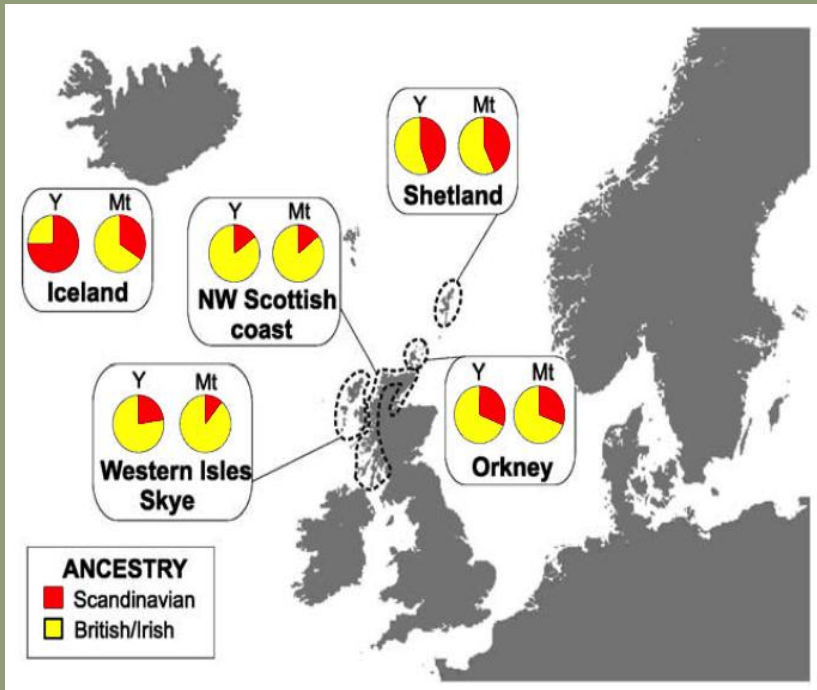
Map Of Y-chromosome genetic differences between different parts of Europe as produced by TCD group

This map is currently feeding into anti-Celtic invasion models for early population of Ireland – closest Y chromosome correspondances are with Basque region of Spain rather than the archaeologically defined Celtic homelands of central Europe.

Genetic evidence for a family-based Scandinavian settlement of Shetland and Orkney during the Viking periods

S Goodacre^{1,4}, A Helgason^{2,4}, J Nicholson¹, L Southam¹, L Ferguson¹, E Hickey¹, E Vega¹, K Stefánsson², R Ward^{3,*} and B Sykes¹

¹Weatherall Institute of Molecular Medicine, University of Oxford, Oxford OX3 9DS, UK; ²deCODE Genetics, Sturlugata 8, 101 Reykjavik, Iceland; ³Institute of Biological Anthropology, University of Oxford, Oxford OX2 6QS, UK



An example of an admixture study searching for ethnic origin

- ◆ Analysed mtDNA and Y markers, and used admixture approach
- ◆ Close to home, male and female proportions similar, so family-based settlement
- ◆ Further afield, male-biased settlement
- ◆ Most biased in Iceland
- ◆ Sex differences are interesting

This study, Goodacre et al., 2005 used both Y chromosomes and mitochondrial DNA to suggest that as one moves further away from Scandinavia, the more Norse migration is dominated by males. Thus the further away from Scandinavia one is, the more useful surnames (and Y chromosome DNA) are for finding Viking ancestors.

B. McEvoy & D. Bradley, "Y-chromosomes and the extent of patrilineal ancestry in Irish surnames" *Human Genetics* 119 (2006), 212–19.

"L. Moore et al., "A Y chromosome signature of hegemony in Gaelic Ireland" *American Journal of Human Genetics* 78 (2006), 334-8

B. McEvoy, C. Brady, L. T Moore and D. G Bradley, "The scale and nature of Viking settlement in Ireland from Y-chromosome admixture analysis", *European Journal of Human Genetics* (2006) 14, 1288–1294.

McEvoy, B., K. Simms, & D. G. Bradley "Genetic Investigation of the Patrilineal Kinship Structure of Early Medieval Ireland", *American Journal of Physical Anthropology* 136 (2008), 415–22

Work by Trinity College Dublin (Department of Genetics) on the early surnames and remote ancestors of Irish families – aim was to identify patterns of DNA inheritance and change. THESE STUDIES ENCOURAGE THE REVISITING OF IRISH SURNAME HISTORY AS ACADEMIC SUBJECT.

Moore, McEvoy et al first examined 796 chromosomes from all areas of Ireland and the vast majority (85.4%) belonged to the R1b3 haplogroup

The answer on the postcard:

Ireland was the first country in Europe to adopt hereditary surnames. The earliest recorded elsewhere in Europe are assigned to the eleventh century.



John O'Donovan's list of "progenitors of various important native families" in *The topographical poems of John O'Dubhagain and Giolla na naomh O'Huidhrin* (1862): Munster and south Connacht examples

- O'Brien of Thomond, died 1014.
- O'Callaghan of Desmond, flourished 1092.
- O'Conor of Corcomruadh, died 1002.
- O'Dea of Thomond, flourished 1014.
- O'Donnell of Corco-Bhaiscin, slain 1014.
- O'Donoghue of Desmond, flourished 1030.
- O'Donovan, slain 976.
- O'Dugan of Fermoy, flourished 1050.
- O'Faelain of Decies, flourished 970.
- O'Flaherty of Iar Connaught, flourished 970.
- O'Heyne of Ui-Fiachrach, flourished 950.
- O'Keeffe of Desmond, flourished 950.
- O'Loughlin of Burren, died 983.
- O'Mahony of Desmond, slain 1014.
- O'Quin of Thomond, flourished 970.
- O'Scanlan of Ui-Fiachrach, flourished 946.
- O'Sullivan of Desmond, flourished 950.

Case study of Dingle peninsula, Co. Kerry

- [5th C] MOCCU DOVINIAS ogam stones in Dingle & Iveragh
- Modern name of Dingle peninsula = Corcu **Duibne** < DOVINIAS
- BUT Leaders of territory = Ua Failbi (descendants of Failbe); Cronan son of Failbe died **in AD 1027.**
- *Claind Fland as mó gabas ríge and .i. Fálbe 7 Congal* – “the family of Fland which is the greatest who took kingship there; that is Failbe and Congal.



Surname Falvey (from Fálbe) thus derives from 11th C while territorial name Duibhne derives from 5th C or earlier

- Primary Valuation Property Survey in 1847-64:

<u>Clare</u>	4	<u>Cork</u>	50
<u>Cork city</u>	8	<u>Kerry</u>	87
<u>Limerick</u>	3	<u>Waterford</u>	1

Mathesons's 1890 Special Report on Births in Ireland: (Falvey)

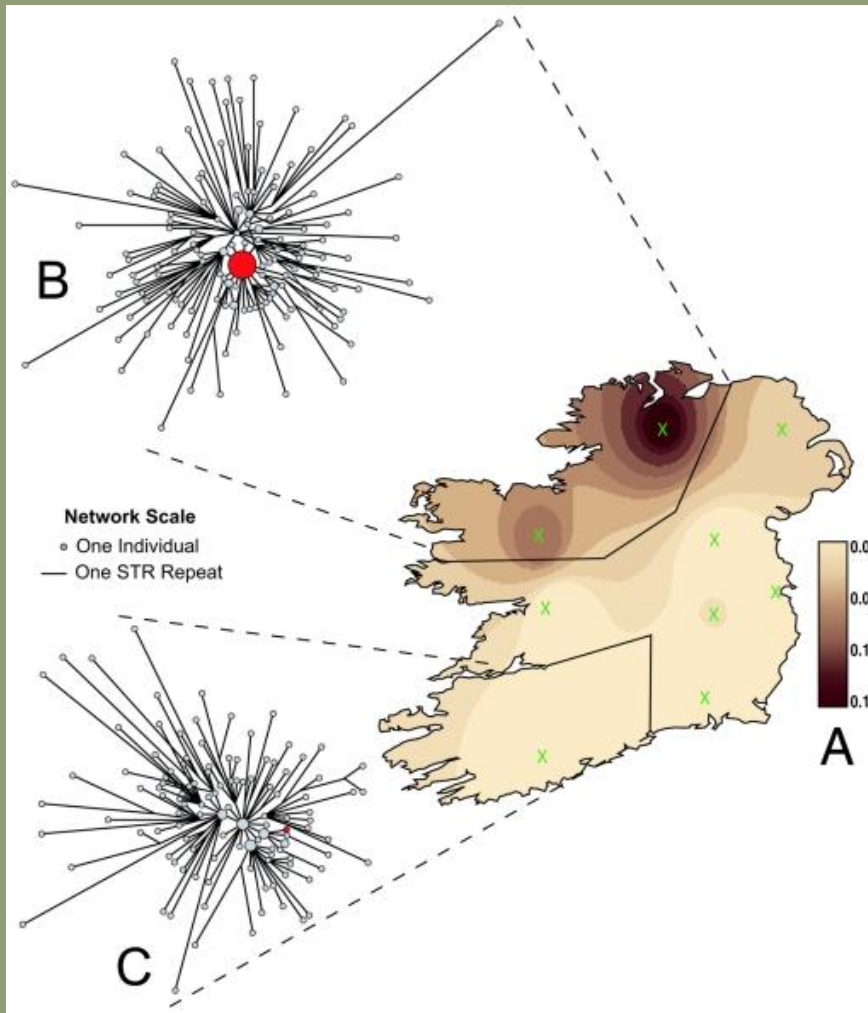
Leinster	1
Munster	16
Connacht	0
Ulster	0

Famous DNA



- **Niall Noigiallach aka "Niall of the Nine Hostages"** (d450/455 ad.) was one of the greatest Irish kings. He was said to have consolidated his power by leading raids on the Roman Empire, taking hostages from rival Irish royal families, Britain and the European mainland, thus earning the name Niall of the Nine Hostages? Saint Patrick was said to have been kidnapped and brought to Ireland as one of his hostages during his raids.
- Researchers indicate that there could be as many as 3 million descendants of Niall alive today. **Most of his descendants are concentrated in northwest Ireland, an area where DNA testing has shown that one in every five males have inherited his Y-chromosome.** Studies also that outside of Ireland, approximately one in 10 men in western and central Scotland also carry the gene, and 2% of European American New Yorkers carried it as well, likely due to the historically high rates of Irish emigration to North America.

A need to explain a particular distribution of haplotypes produced NÍALL OF NINE HOSTAGES theory in 2006



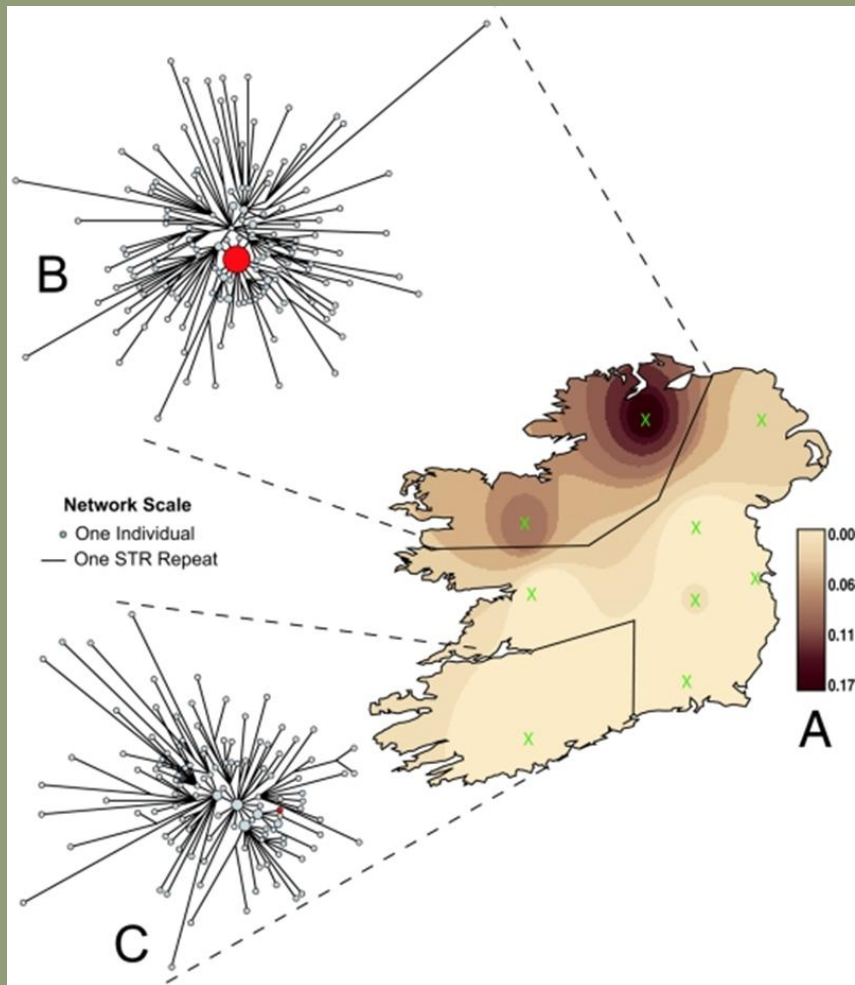
Test for 17
microsatellites:
haplotype IMH
peaking in NW

This haplotype is
“Virtually absent in
SW” but **note! It is**
equally absent in
eastern midlands

“Siring of offspring was related to power and prestige”

- Case of Lord Turlough O’Donnell who died in 1423 and who had 18 sons with 10 different women and counted 59 grandsons in the male line. In 17th C Mac Fhirbisigh genealogies, this man is “Toirdhealbhadh an Fhíona” – Turlough of the wine.)
- **“Turlough and other O’Donnells were members of the most powerful and remarkably durable royal lineage in medieval Gaelic Ireland, the *Ui Néill*, literally translated as descendants of Níall... [they] claimed high-kingship of Ireland from the seventh century to the eleventh century AD (Pender 1951). The ultimate origin of this dynasty is attributed to the conquering sons of the eponymous and possibly mythological fifth-century warlord Níall of the Nine Hostages. The historical region under *Uí Néill* power coincides with the peak in the frequency of the IMH. (my emphasis).”**

Until we have studies of Uí Néill descendants in midlands,
alternative explanation for haplotype distribution needed in
my view....



Research backdrop to study of Viking names in Ireland – McEvoy *et al* 2006

Findings:

- 1) Surnames were first adopted in Ireland from ca. AD 900 to 1200, roughly coinciding with the period of Viking activity. During this time, numerous Norse personal names (and nicknames) were introduced onto the island, which later passed into hereditary surnames often by the prefixing of Mac or O', meaning 'son of' and 'grandson/descendent of', respectively. Not every putative Norse surname must necessarily have been founded by a Norse male. However, as a group, current bearers of these surnames have a prima facie link to Viking society and may be at least enriched for such ancestry.
- 2) Norse surnames were identified according to McLysaght, *Irish Families: Their Names, Arms and Origins* Dublin: Irish Academic Press, 1985 as the major general reference for individual Irish surname origins.
- 3) The number of surnames with a putative Norseorigin is relatively low and in some cases there are multiple possible origins for a single surname. For these reasons,

The sample population of 47 men came from 26 names thus including multiple representatives of some names as follows (number): **Arthur (2), Beirne (2), Bligh (1), Boland (3), Caskey (1), Coll (1), Coppinger (2), Doyle (4), Gohery**

(2), Hanrick (2), Harold (1), Hendrick (1), Higgins (2), Kells (2), Kettle (1), Loughlin (1), McGetrick (3), McLoughlin (3),

Nelson (1), Norris (1), O'Higgins (1), Sugrue (2), Sweetnam (1), Thunder (1), Toner (3) and Tormey (3).

Conclusions of McEvoy *et al.* in 2006

- **There is little convincing evidence for substantial Scandinavian patrilineal ancestry in a cohort of Irish men bearing surnames of putative Norse origin.** The absence of an appreciable legacy in both the general Irish population sample and this subgroup with a potential historical/cultural link to Norse society suggests a very limited general Norse genetic legacy in Ireland dating to the Viking period (ca. AD 800–1200).
- It may be that the number of Norse and their descendants who settled and remained in Irish Norse colonies was small compared to their overall population; perhaps restricted to a thin, upper, stratum of these societies. **The bulk of the Hiberno–Norse settlement population over the longer term may simply have been culturally adapted indigenous Irish.**

➤ The proposed model of Viking migration is based not only on a Norse root for the surnames examined but also requires that the personal names from whence these derived were largely restricted to Hiberno–Norse settlements. There is some evidence that they had a degree of popularity in a native Irish context and if such exchange was common it may mean that Norse names had begun to become disassociated with Norse colonial societies by the time of widespread surname adoption. The original personal names/nicknames could also have been introduced through a Norse female or indeed any other nonpatrilineal ancestor leaving no Y-chromosome trace when these names eventually became incorporated into hereditary surnames.

In other words, the approach of investigating only those whose surnames are putatively Norse in origin may be flawed since those names may, in fact, have been given to (genetically) native Irish

The 2011 case of the Scottish comedian, Fred Macaulay (Scottish version of McAuliffe)

IN 2011 researchers found Fred Macaulay was not Norse as assumed (Mac Aulaidh = son of Olaf) – when his results were analysed, he had R1b Eoganacht the genetic signal of a royal family who ruled the province of Munster in the ninth and tenth centuries. The slave market in Dublin would have put high price on a royal slave.

“Once he was put up for sale, Fred’s ancestor was almost certainly bought by a Viking lord from the Hebrides who was probably called Olaf or was from the household of Olaf. He then sailed back north with his new and prestigious acquisition. At some point the Irish slave had sex with a Macaulay woman and his DNA marker, Rib Eoganacht was insinuated into their lineage that way. It is the most plausible explanation and it appears to fit the facts. Fred Macaulay was delighted.” (Moffat 2013, 210)

Amlaoibh (Irish version of Scottish Aulaidh) < Norse Ólafr as ancestral name amongst Irish families

- Of the most numerous personal names in Mac Fhirbisigh's 17th C *Great Book of Irish genealogies*, Amlaoibh is 61st most common with 74 examples (Ó Muraíle 2004 iv, 46)

Location of **Meic Amhlaoibh** as given by Giolla na Naomh ÓhUidhrín (who died in AD 1420):

“Far from generous Abhainn Ealla, westwards over smooth-wattled Gleann Salcháin, is a bright fair-clustered land without concealment, the land of the noble **Meic Amhlaoibh**.”

Gleann Salcháin lies in barony of Duhallow, Co. Cork and in territory of Eoganachta



End of 12th Century Dublin Citizen Roll: evidence of names of Hiberno-Norse origin

Petrus gille

Gillegod

Ricardus Gillemichel

Gillebrennus

Willekin Gillemichael

Gillamori Blathach

Gilla Isa,

Iarnfin filius Gilli

Duuenald

Gillafinean

Torsten utlag – the outlaw

Turstanus carpentarius

Johannes filius Arcaill

Turchel filius Ade

Turstin de Castello

Reignaldus le bindre

Filius Ade

Filius Turstein

Torkaill of Kardiff

Turstein carbus de Wigornia – charcoal maker from Worcester

Swein de kardif

Iuor de Cardif



Evidence of transition from Norse or English names to Norman names at Dublin

- Nicholaus filius Aldredi
 - Willielmus filius Estmundi
 - Willielmus filius Eilric de Cultere
 - Daniel filius Wimundi
 - Robertus filius Ingelram
 - Radulfus filius Dunstani
 - Radulfus filius Godwini
 - Iordan filius Win
 - Walterus filius Edrici
 - Philippus filius Haraldi
 - Willielmus filius Godrich de Glaucestra
-
- Rodbertus filius Osberti diciuer -the poet
 - Iohannes filius Osberti diciuer – the poet



Dublin Citizen Roll: Largest numbers of personal names = Germanic/French and Biblical

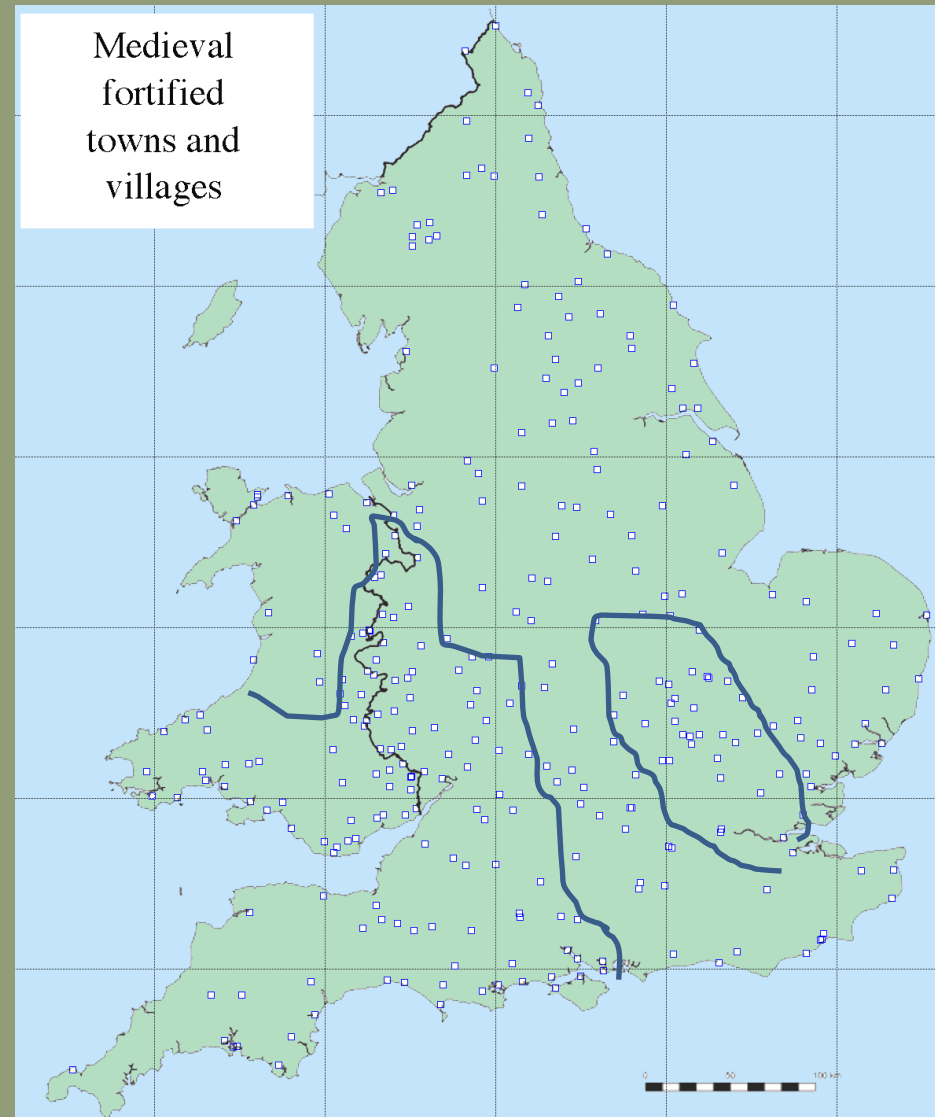
- 198 Willielm
- 122 Ricard
- 118 Iohannes/
- Johannes
- 117 Robert
- 107 Walter
- 89 Roger
- 59 Radulf
- 53 Hugo
- 41 Galfrid
- 40 Henric
- 43 Adam
- 33 *Osbert*
- 29 Nicholaus/Nicol
- 27 Iordan
- 27 Elias
- 26 Simon
- 23 Thomas/Tomas
- 21 Peter
- 20 Rodbert
- 19 Reginald
- 15 Alan + 3 Alin
- 16 Ace
- 15 Urs
- 12 Gillibert
- 16 Alexander
- 11 Bernard
- 11 Baldwin
- **10 Turstein/Turstin**
- 9 Ernald/Arnald
- 8 Randulfus
- 8 Laurent
- 8 Martin
- 8 Marc
- 8 *Godwin*
- 7 Warinus
- 7 Andrew
- 7 Mathias
- 6 *Edward*
- 6 Alured
- 6 Reiner
- 3 *Estmund*
- 5 Godafrid
- 5 Ailward
- 5 Vincentius

This fits with general pattern in Britain which saw rapid change from Anglo-Saxon and Norse names to Norman French names during the twelfth century.

Origins of 12th C Dublin citizens in order of frequency: 310 places of origin

- 36 Cardiff
- 26 Worcester
- 26 Gloucester
- 18 Cornwall
- 19 London
- 13 Bedford
- 13 Exeter
- 12 Bristol
- 12 Northampton
- 11 Haverford West
- 8 Oxford
- 8 Striguil/Chepstow
- 7 Taunton
- 7 Cardigan
- 6 Warwick
- 6 Lichfield
- 5 Bodmin
- 5 York

NB! 207 places only mentioned once!



Implications

- There are people with Norse personal names; there are 7 people who are said to be “Northerners” (*norreis, noreis, Normanni*) and there are 2 people who are called Norse outlaws but no places of origin in Norway or Denmark are listed in Dublin roll.
- There are a handful of names from France (especially in the north-east) and perhaps 3 from Iberian peninsula.
- There seems to be **a high % of late 12th C Dublin population which comes from western England and south Wales**. The towns of these regions sent people in some numbers (especially Cardiff) but there is a very high percentage of individuals, who, originating in small settlements in a rural environment, apparently decide to come to Dublin on their own initiative and settle there to work.
- The question for historians is – **did these people all come after the Cambro-Norman invasion of 1169?** (8 people identified themselves as being from Strongbow’s home base at Striguil/Chepstow). Or was the Dublin of Brian Boru (i.e. 150 years before invasion) also populated by people who originated in western England ?
- Because the fashion for naming people by Norman French names was so strong in Dublin, even people who describe themselves as originating in Wales and Ireland have Norman names. Personal names as such, therefore, are not necessarily a good guide to their ethnic identity. **This is why DNA will be so important.**

A study of Brian Boru's genetic ancestry is published in "Genetic Investigation of the Patrilineal Kinship Structure of Early Medieval Ireland" published in *American Journal of Physical Anthropology* 2008 by Brian McEvoy, K. Simms & D.G. Bradley

Questions posed in this article include:

- Do kingdom names such as Uí Néill or Connachta reflect the ancestor of an élite dynasty or of the population of the primeval "tribal" group as a whole?
- 2006 paper argues that strong IMH haplotype within surnames identified as Uí Néill argues that there is strong evidence that that "tribal group" was marked by strong DNA links between descendants.
- Intention to test this conclusion by looking at other "tribal" groups, Eóganacht and Brian's dynasty, the Dál Cais.

Argument of McEvoy *et al* 2008.

- Although their name derives from a pre-historic and **quasi-mythological** founder Eógan Mór, the group called Eóganacht claimed descent from his **apparently** 5th century AD descendant “Corc” (see Fig.2). The Eóganacht had several geographically distinct branches **reputedly** descended from Corc’s sons.
- The Dál Cais grouping, which came to dominate Munster from the Eóganacht in the 10th century AD, is widely believed to have **forged** a genealogical connection between its eponymous founder (Cas) and Eóghan Mór to legitimize the change in power.
- NB! this remote ancestry fits well with the mid 2000 theories re rate of mutation of Y Chromosome and time back to TMRCA(time to most remote common ancestor.)

McEvoy *et al.* 2008: Investigation of 247 individuals with Munster surnames

- Stage I: group of 247 individuals was divided into 3
 - Eóganacht,
 - Dál Cais
 - random Munster surnames
- Stage II: Results were tested against 184 samples taken without incorporating surname data. This is called the Munster geographic group.

Geographic Munster data

“We next investigated the Munster surname data for evidence of important additional founding lineages (see Fig. 5). **Two potential founding male signatures** (frequent Y-chromosomes surrounded by subsidiary diversity) are apparent, centered or ancestral on haplotypes A and B.

These two clusters of leading Y chromosomes **are scattered between individuals of the three groups used e.g. Eóganacht, Dál Cais & random Munster surnames”**

Results of McEvoy *et al.* 2008 study

“Amongst the Eóganacht nor the Dál Cais surname groupings (nor both together) **none showed significant differences at the tribal level when compared with the Munster surname control sample** (P 5 0.769, 0.952 and 0.808, respectively), indicating that neither designation is under-laid by extensive shared ancestry as a whole.”

This means there is nothing much unifying the various surnames which are thought to descend from Eóganacht ancestry AND nothing unifying Dál Cais surnames either

Conclusions of McEvoy *et al.*, 2008

[While] “our analysis cannot exclude the possibility that some level of patrilineal kinship underlaid the Munster Eóganacht and Dál Cais entities, it does seem that if any existed it was not comparable in extent to the widespread kinship in the contemporaneous Uí Néill grouping from the North of the Island, presumably the descendants of the ancestral eponym “Niall of the Nine Hostages” and his clan.

“Although the Uí Néill and Eóganacht are often thought of as major contemporary rivals from the North and South of the island respectively, genetic evidence combined with surname information suggest they were founded, established and perhaps led by different means and this may reflect wider differences in organization of Irish tribal societies.”

Few historians would see the common ancestry of the Eóganacht and Dál Cais which is proposed in twelfth-century genealogical texts as being anything other than the propaganda of the “new kids on the block” claiming remote and ancestral connections with the traditional kingship of Munster. This paper was framed by geneticists to answer genetic questions (such as theories about TMRCA) ; it WAS NOT designed to answer questions concerning the descendants of Brian Boru or of evolution of Irish surnames in general and it cannot be used in such an attempt.

How did they identify Dál Cais surnames?

Heavy dependence on work of Edward McLysaght and John Hart who in turn draw on 17th C sources such as Leabhar Muimneach

From Aonghus Cennathrach come the **O'Deas** , Cenél Fearmaic, Cenél mBaoi, **Golden/Goulding???**

From Aonghus Cennaitinn come the **Heffernans** and the **Naughtons**

From Aodh son of Cas comes the **Hayes, O'Heas**

From Dealbhaoth son of Cas comes the **Coughlans**

From Lughaidh son of Cas come **Cotters ?**, **Conroys**, **Kearney/Carney**, **Hennesseys/Henchys** and **O'Duffy/Duhig** .

See now Brian Hodkinson, **Who's Who in medieval Limerick** (and early modern Limerick) - <http://www.limerickcity.ie/media/Who%20was%20who%20in%20medieval%20Limerick.pdf>; Cut off date = 1541

http://www.limerick.ie/sites/default/files/Who%27s_who_of_Early_Modern_Limerick.pdf – 1540-1700 & other Limerick sources up to modern era

Surnames used in Dál Cais study include those derived from personal names not attested in 12th C genealogies and/or which are commonly found in 17th C genealogies

McGrath < Mac Raith

No example of Craith or Raith as names in CGH

1 Mag Craith, 1 Clann Mheic Raith, 1 Clann Chraith, 1 Uí Chraich in LMG,

McMahon < Mac Mathgamain

12 examples in CGH

7/8 Ó Mathgamhna, 7 Clann Mhathgamhna; 3 Uí Mhathgamhna, 2 Mac Mathgamhna, 1 Mág/Méig Mathgamhna, in LMG

McNamara < Meic Con Mara

4 examples in CGH

1 Mac Con Mara, 1 Meic Con Mara in LMG

O'Brien < Uí Briain

15 examples in CGH (due partly to spread of fame of Brian Boru and impact on older names like Brion and Bran)

3 Mac Briain, 1 Mac Uí Bhriain, 5 Clann Bhriain, 1 Ó Briain, 1 Uí Bhriain, 1 Síol Briain in LMG

O'Dea < Uí Deaghaidh

No examples in CGH

11 Uí Dheaghaidh, 4 Ó Deaghaidh, 2 Clann Deaghaidh in LMG

O'Grady < Ui Gradaigh)

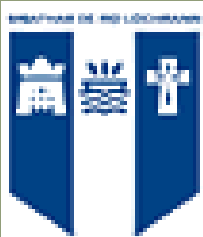
No example in CGH

1 Ó Gráda, 1 Uí Ghrada in LMG



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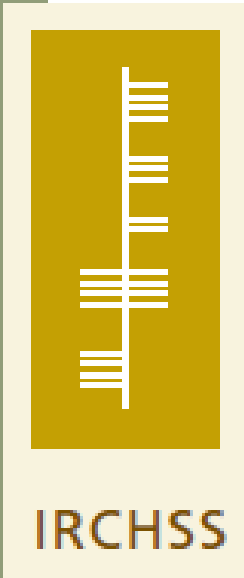
Genes of the Gallgoídel 2009-2011



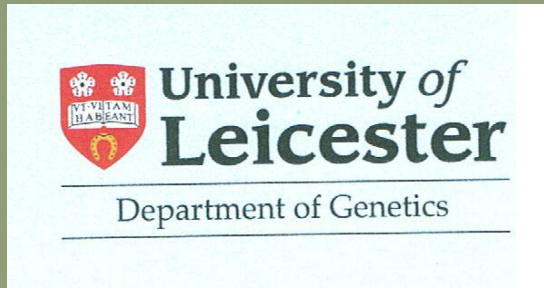
COLÁISTE MHUIRE GAN SMÁL
OLLSCOIL LUIMNIGH
MARY IMMACULATE COLLEGE
UNIVERSITY OF LIMERICK



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IRCHSS



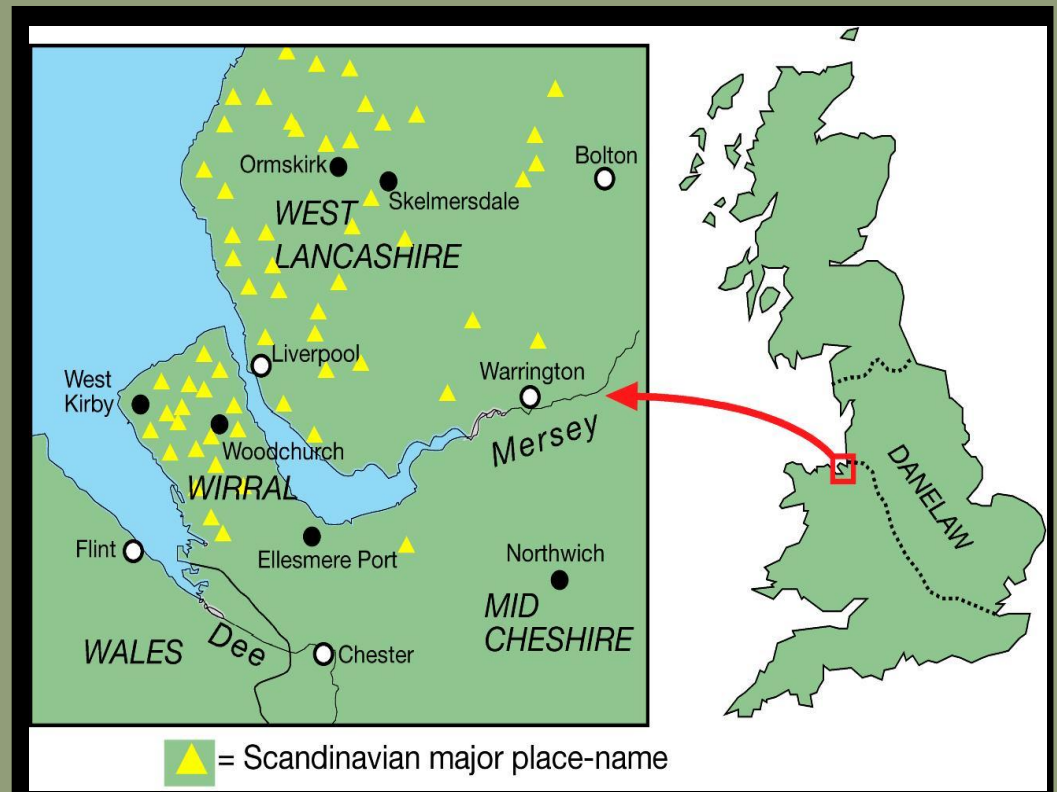
University of
Leicester
Department of Genetics



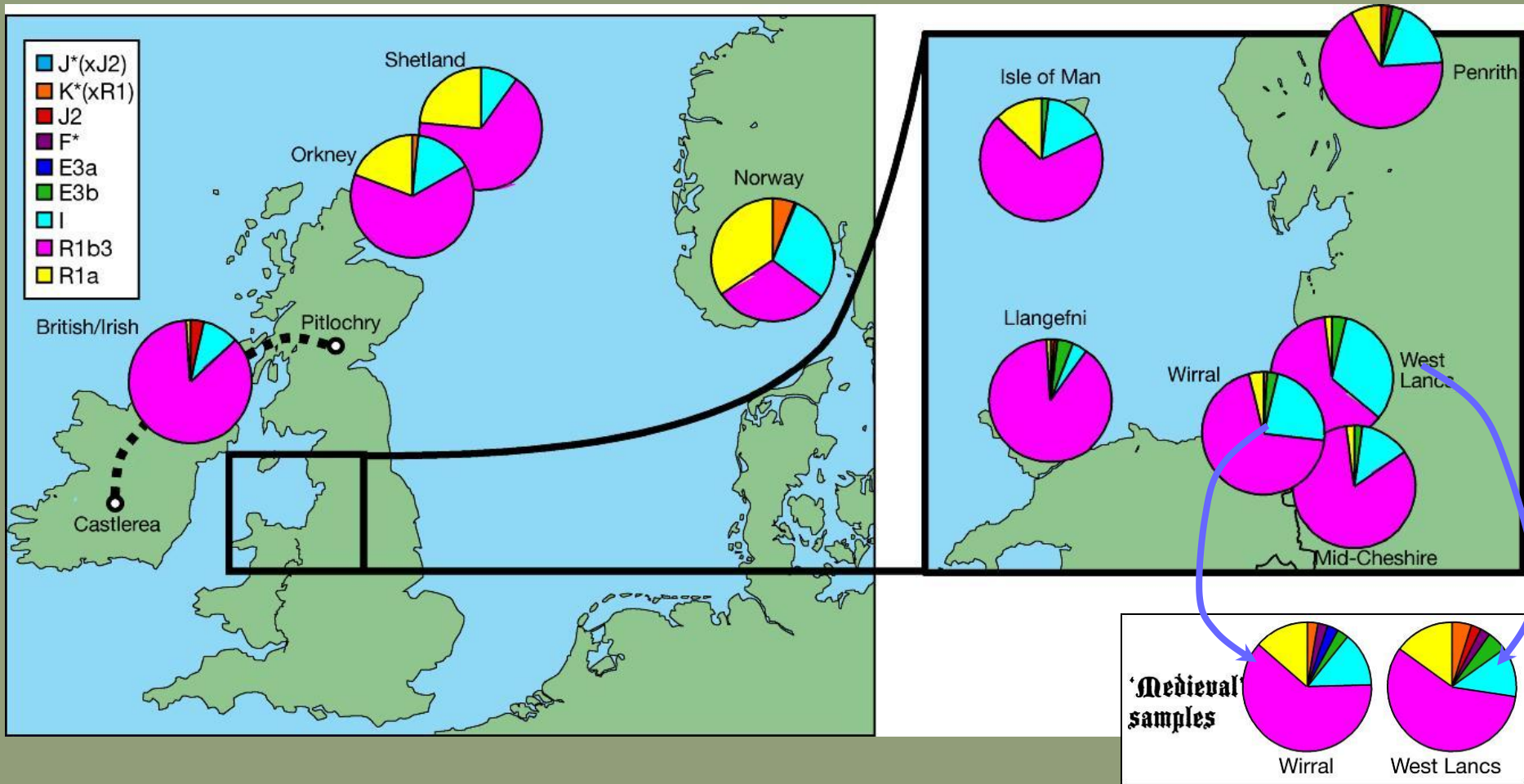
Linn na nGéinte Éireannacha: Genes of Celts, Vikings and Normans 2012- 2013

Seeking Vikings in the Wirral and West Lancashire using surnames

- ◆ Vikings arrived in 902 AD; subsequent massive population growth and immigration
- ◆ Compare two samples for Wirral and W. Lancs:
 - ◆ 1) 'Modern' - two generations of residence
 - ◆ 2) 'Medieval' - as above, plus surnames present in old local surname lists pre-1572



Modern surnames produce one set of haplotypes showing relatively little of yellow type (R1a)



But samples taken from medieval surnames show considerably more

Cross-disciplinary Studies of
Migration of Irish, Hiberno-Norse and other Gaelic-speaking populations in the Viking Age



- Interdisciplinary group formed in 2009 for project *Genes of the Gallgoídel*; www.vikingage.mic.ul.ie
- Decision made in 2012 to test TCD conclusions through application of the Wirral model to Ireland.
- Instead of looking at “putative Norse names” or names with “ancient cultural markers” we decided to investigate families whose surnames were found in the medieval townland names of Wexford, Limerick and Galway .
- Building on that study, we also hope to test divergent theories about mutation rates in Y chromosome DNA by looking at diaspora Irish families with similar surnames

