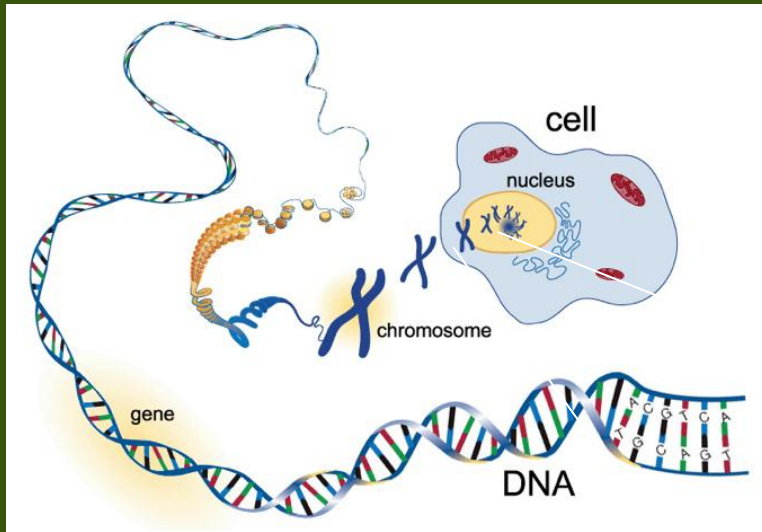


BONFIELDS, BRODERICKS, GRIFFINS, O'GRADYS, WHITES AND WALLS

Genetic genealogies
and DNA studies in
Limerick



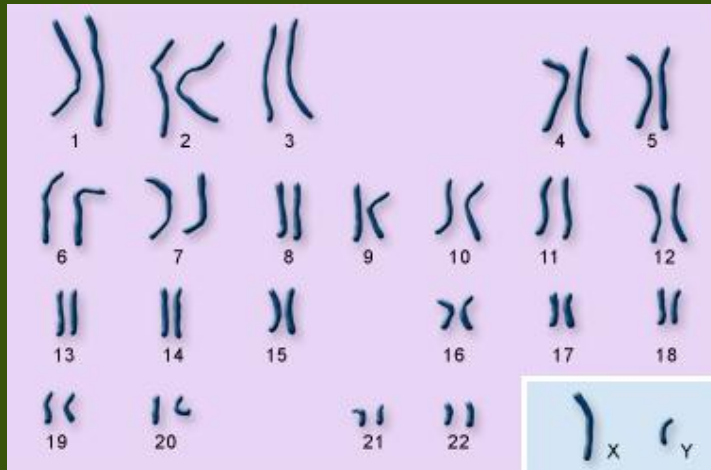
How does the nucleus store its information?



Inside the nucleus are structures called chromosomes.



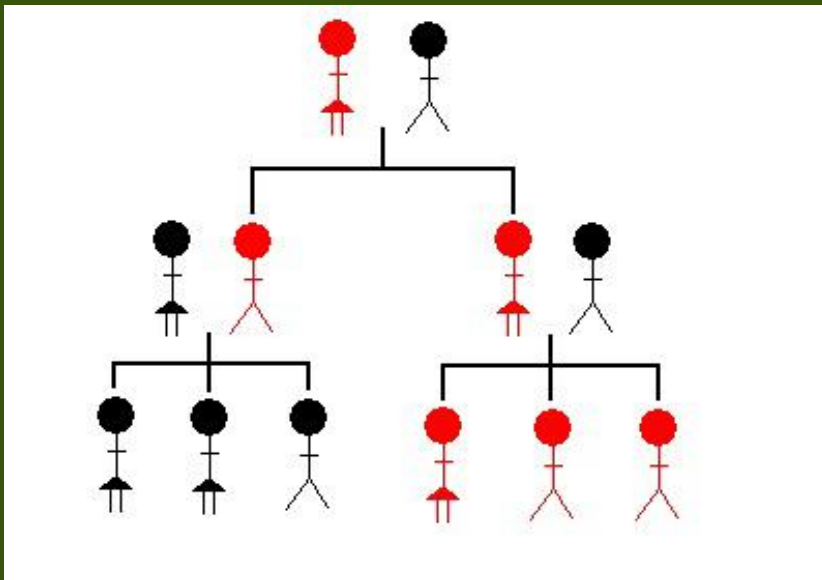
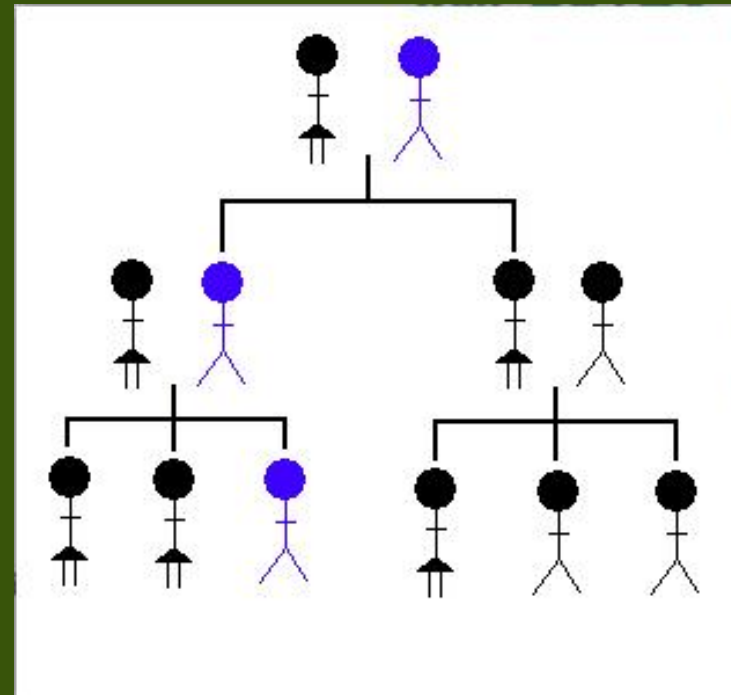
Each chromosome consists of two strands of DNA wound around each other



Chromosomes come in pairs

Geneticists theorised in 2000 that surnames also very rarely mutated and were passed down through father so surnames should be guide to Y-chromosome DNA patterns

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



Mitochondria (the 'soup' that empowers), is transmitted through females so by studying DNA material in mitochondria, we can figure out patterns of inheritance passed through mothers to daughters.

Genetic portrayal of individual surnames – the theoretical picture

Mark A. Jobling, *TRENDS in Genetics* Vol.17 No.6 June 2001

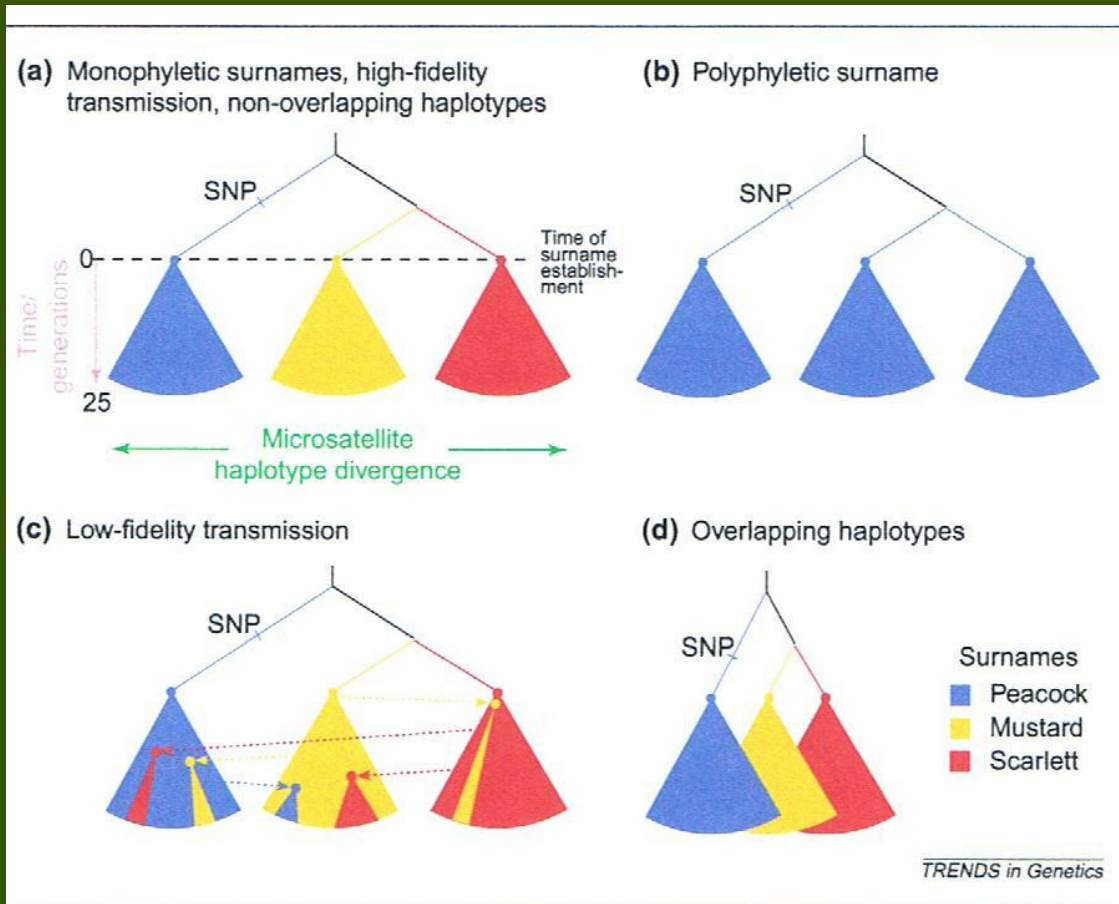
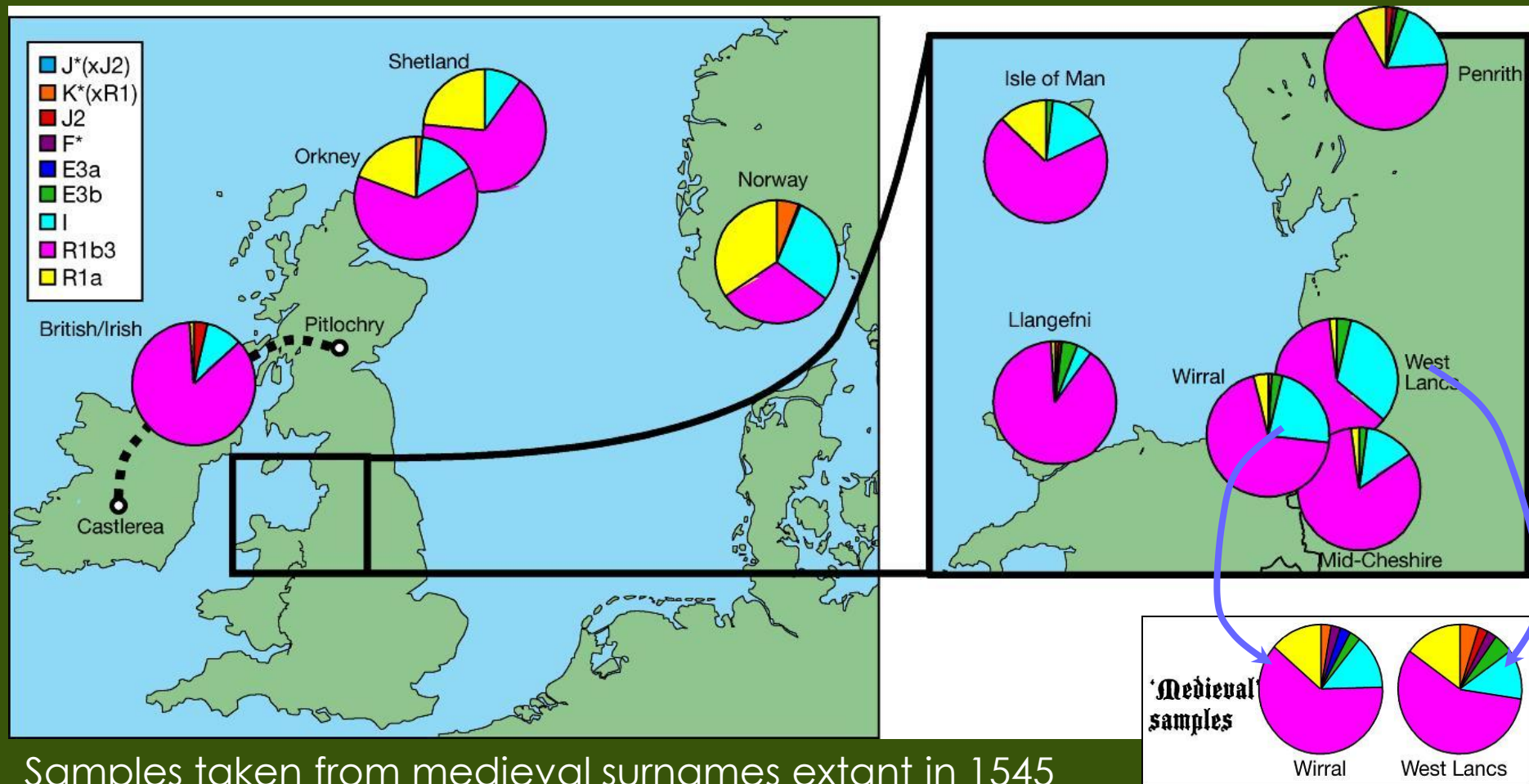


Fig. 1. Relationships between Y-chromosomal haplotypes and surnames. Each panel represents a simple hypothetical relationship between three surnames (Peacock, Mustard and Scarlett) and Y haplotypes under different founding and subsequent conditions.

- (a) An ideal situation. Each surname has a unique founder whose haplotypes are highly diverged from the others. One (Peacock) is distinguished by a single-nucleotide polymorphism (SNP) as well as by microsatellite haplotype. There is no illegitimacy or other disturbance in transmission of surnames.
- (b) Polyphyletic Peacocks (distinguished by different SNPs)
- (c) The effects of illegitimacy, surname adoption or maternal inheritance events (dotted lines) on the correlation between surnames and haplotypes.
- (d) The effects of close haplotype relationship of the three founders. Microsatellite haplotypes in the descendants overlap between all three surnames

As tests by individual citizen scientists explode in number, in 2015, B & D are proving the predominant reality. Question remains – why so?

Study in the Wirral in 2008 - Bowden *et al.* (2008)
Mol. Biol. Evol. 25, 301-9



Samples taken from medieval surnames extant in 1545 (Wirral) and 1366 (West Lancs) are very different from modern patterns.

What were the medieval surnames of Limerick?

What was their DNA signature?



**LINN NA NGÉINNTE ÉIREANNACHA:
GENES OF CELTS, VIKINGS AND NORMANS**



now evolved into GLOBAL LIMERICK DNA

- ▶ Brian Hodkinson of City Museum, “Who’s who in medieval Limerick” 1200-1541
- ▶ A check on the Hodkinson data is to look at the surnames of Limerick city and county which are recorded in local townland names ... but how old are townland names? SOME townland names are pre 12th C in origin e.g. Bartragh (on Moy estuary, Mayo), witnessed in Tírechán’s 7th C text in *Book of Armagh* as “Bertriga”
- ▶ See, however, Nollaig Ó Muraile 2001: “...a diachronic examination I made some years ago of the toponymy of one county, Limerick. This revealed that only a small number of pre-Norman Gaelic names occur among the townland names of that county, no more than 28 out of about 1720 names with 250 from the period 1200-1500, 1041 from 1500-1700 and 393 post 1700.
- ▶ “???? ..”when it comes to settlement-names, as reflected in townlands, it is remarkable that more than 98% of those in Co. Limerick are of post-Norman provenance or at least are not recorded in any pre-Norman source which admittedly is not quite the same thing.” ????

PROBLEM!
Relatively
little
evidence for
Irish
language
surnames in
Limerick prior
to 17th C
*Leabhar
Muimneach*

AI 922: Tomrair mc Elgi iarla do Gallaib for Lumnech



NORSE

AI 1058: the Munstermen themselves burned Luimnech lest the others (Leinstermen & Vikings) burn it and they were engaged as they were turning out of it and a few of the others and a great many of the Munstermen were slain including Úa Lígda, *airchinnech* of Emly, mac Con Chorne, king of Ely and Úa Gébennaich, king of Smallcounty.



IRISH

AI 1087: Niall Úa Cétfada died in Limerick

AI 1093: *Mac Flaind Uí Mail Shechnaill, rí Temrach tánic i tech Uí Briain co Luimnech*

AI 1108: Úa Beoáin, steward of Limerick, dies

AI 1203: The Justiciar, that is Maeler Mór and the foreigners of Ireland make a great hosting to Luimnech against Uilliam



NORMAN

LIMERICK NAMES IN IRISH ANNALS STILL TO BE
COLLATED BUT SHOW MIXED POPULATION
OF NORSE, IRISH & NORMAN

- ▶ **BONFIELD** – 1 example of Bonfell in 1401, 2 exs Bonevyle in 1288 from manor of Any, 3 exs of de Boneville in 1297, 1320-1327 (1 from Lough Gur & 1 from Any which has placename in 1287 “Bonevyleston”).
- ▶ **BRODER/BRODERICK** - None
- ▶ **GRIFFITH** - 3 examples of O Grioffa in 1445, 1458, 1473
- ▶ **O GRADY** - 5 examples of O Grada 1180-85, 1320, 1389, 1418, 1485; 4/5 holding ecclesiastical office
- ▶ **WHITE** – 35 examples of White/Wyte in period 1300-1350 ALONE as well as 31 Albus, Blond, Blount, Blound
- ▶ **WALL**– 24 examples of de Valle/Valle

NAMES IN HODKINSON'S LIST OF
 “WHO'S WHO IN MEDIEVAL LIMERICK”

BONFIELD

Johannes de Bonevile is member of Dublin Merchant Guild in 1237-8

(Connolly & Martin 1992, 73)

John de Boneville holds Typercathyn in Oboy (cantred in Carlow) in 1307

(Dryburgh & Smith 2007, §135)

ROGER DE BONEVILE is witness in grant of land in Oboy pre 1221

(Curtis 1932, 51)

Michael Bonekyl is juror in Antrim in 1297 ? (Dryburgh & Smith, §26)

Johannes de Boneville, knight is witness in Dublin re church of Bowlek in Munster

(St John Brooks 1936, §490)

Adam Bonkill is juror at Nenagh in 1338 ? (Dryburgh & Smith, § 282)

Robert Boneville is juror at Youghal in 1347 (Dryburgh & Smith, § 289)

Emma and Johannes Bonevile owns lands at Bonevilisland, in Kilkea & Moone, Kildare

(Mac Niocaill 1964, 177-179)

BONFIELD is Norman name of 2nd rank, mainly in rural contexts south of Dublin – associated with locative de



THESE NAMES IN OTHER PARTS
OF IRELAND

BROUDER is associated with Norse/English personal name, borrowed by Irish

► BROUDER/BRODERICK

Broder = man who killed Brian Boru in *Cogadh Gaedhel re Gallaibh*

Meic Bruaidha (17th C) – *ollamhain* of O'Briens for some considerable time; based on Sliabh Callan in west Clare.

Brodericks = based in Galway, made up of Brodor + *-ic* suffix

ORIGINS

Bróðir = derived from common noun 'brother'. "There are some few instances in Wscand but in the main they are late. The name is common in Swedish and Danish and found in several Danish placenames. Some may be the Old English *bróþor* "brother, monk"

The king of Uí Chonaill Gabra (west Limerick) = Bruadar +809. 14 years after first appearance of Vikings in Ireland > suggests English origins?

Clonmacnoise graveslab



► O'GRADY

Ruaidri Ua Gráda slain by Foreigners at Tibberaghny, Clare in 1185 (Annals of Loch Cé)

Domnall Ua Gráda *dux Ceneoil Dungaili* dies in 1268 – around **Tomgraney, Co. Clare** (Annals of Connacht)

Aneislis Ua Gráda slain 1283 in internecine O'Brien fight in Clare (Annals of Inisfallen)

Domnall mac Domnaill, *taisech Ceneoil Dungaile* slain 1311 – in internecine O'Brien fight in Clare (Annals of Inisfallen, Annals of Connacht)

Fear Gráid m. Ailgeanáin, member of Eoganacht, killed by his own *cenél* (Leabhar Muimneach)

ORIGINS

Fer gráda = early Irish professional term for churchmen, drawing on Pope Gregory's *vir gradus* – man of rank

Middle Irish development where *fer gráda* becomes king or earl's officer.



Ua Gráda is a professional Irish language name associated with independent lordship in Clare in medieval annals

► **GRIFFIN**

Domnall Ua Grifín .i. comarba Coinmind (Cú Mind) died in 1199.

Gruffudd ap Cynan, half Irish/half Welsh ruler of Gwynedd in north Wales, died 1137

Gruffudd ap Rhys ap Tewdwr, prince of Deheubarth in south Wales, died 1137

Gryffvd vap Nogoyt – Welsh prince said to attend King Arthur's crown-wearing

(*Brut y Brenhinedd*, § IX.12)

“a knight called *Griffinus*, nephew of Fitzstephen,” baron of Knocktopher & grandson of Nesta and Gerald of Pembroke

(Giraldus Cambrensis §41)

Raymond the constable, Griffin his brother in 1192

Master Griffin de Valle is witness before 1242 in Ormond (Curtis 1936, 99)

Griffin Harolt is juror in Dublin re Malahide in 1291 (Dryburgh & Smith, §83)

Thomas Griffin is juror at Naul, Co. Dublin in 1292 (Dryburgh & Smith, §85)

vill **of Carrimacgriffyn** – Tipperary/Waterford border (Curtis 1936)

John Griffyn is juror re manor of Rathwire, Co. Meath in 1323 (Dryburgh & Smith 2007, §224)

Roger Griffyn is juror re lands of hospital of St John in Dublin in 1331 (Dryburgh & Smith, §245)

Griffin is Norman French word *grifon* used of bird of prey but becomes personal name in **Wales**/Ireland under influence of Welsh *Gruffudd* recorded as personal name of half Irish kings from mid 11th C



► **Wall**

Identified by Hubert Galwey (1970) as descendants of a Seffrid de Valle at Rouen (1066-1083) & Richard de Valle at Préaux (1087-1100). Take part in conquest of England as vassals of Roger de Baumont & were given land in Warwickshire and south Wales.

“The de Valles have strong claims to be counted amongst the first invaders. They appear early in Irish records and are closely associated with one of the foremost Norman leaders Raymond le Gros.” (Galwey 1970, 13).

First mention of family in Ireland is in grants to Abbey of St Thomas, Dublin between 1177-1188. Witnesses to charter include Gilbert &, Stephen de Valle

They establish estates at Ardristan/Rathtoe, near Tullow, Co. Carlow and Inchiolagan/Tulachany south of Kilkenny city by 1200.

They are in north Cork between Castletownroche & Doneraile by 1260.

They are in Coolnamuck, Co. Waterford from c. 1295 and in Kilcash & Rathkenny, Co. Tipperary by 1300.

- 1289
- John de Valle is bishop of Ardfert 1348- 1372
- Stephen de Vale is bishop of Meath 1369-1379 & Lord High Treasurer of Ireland 1372-3

Wall is from de Val and has a well documented Norman pedigree. Found throughout colony south of Dublin



► WHITE

Ricardus Albus pre 1200

Walterus Albus & Johannes Albus in 1222-1223 Dublin Merchant

Mauricius Albus in 1224-5 Guild

Walterus Albus de Bristoll in 1234-5

Henry Albus owns quarter virgate land at Bunratty 1287 (Dryburgh & Smith
2007, §65)

Reginald le Wyte owns land in Dunamaggan, Kilkenny in 1293

Hugh Albus owns land in Rathoath, 1333

William Albus de Whyteston' holds land in Carlingford 1334

Robert Whyte & Simon Albus own land in Thurles, 1338

John Whit owns land in Carlow, 1354

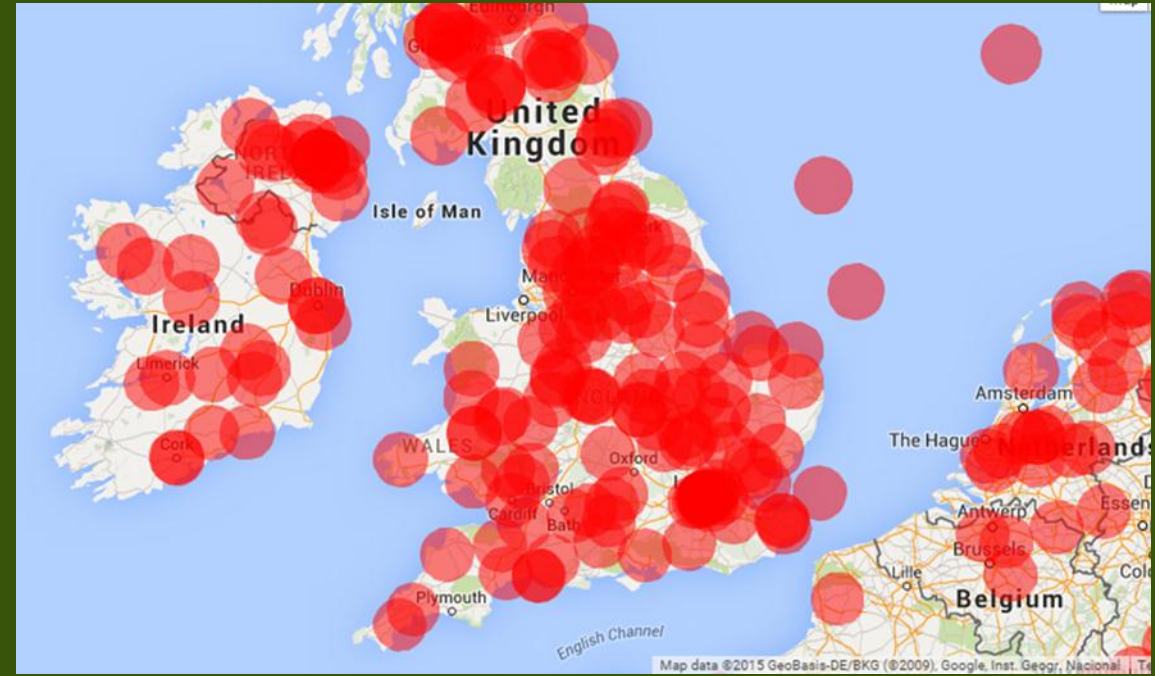
Jurors with names in Albus, Wyte, Wit etc in same areas; some with *de*
names. Substantial numbers

Thomas White is juror at Cork in 1287-8

John Albus, Thomas the Wyte, Roger Wyte are jurors at Cashel in
1338

White is found through
Irish colony at early
stages of surname
records. It is common
epithet in English, Norse
and in Irish (as *finn*)





I-M 253

FAMILY TREE DNA – WHITES (45 WITH IRISH ANCESTRY); 22 ARE R-M269 & 7 ARE I-M 253



“At the request of the commons, it is ordered and established by authority of the said Parliament. That **every Irishman, that dwells betwixt or amongst Englishmen** in the county of Dublin, Myeth, Uriell and Kildare, shall go like to one Englishman in apparel, and shaving of his beard above the mouth and shall be within one yeare sworne the liege man of the king in the hands of the lieutenant or deputy, or such as he will assigne to receive this oath, for the multitude that is to be sworne and

shall take to him an English surname of one towne as Sutton, Chester, Trym, Skryne, Corke, Kinsale:

or colour as WHITE, Blacke, Browne:

or art or science, as Smith or Carpenter;

or office as Cooke, Butler;

and that he and his issue shall use this name under payne of forfeiting of his goods yearely ...”

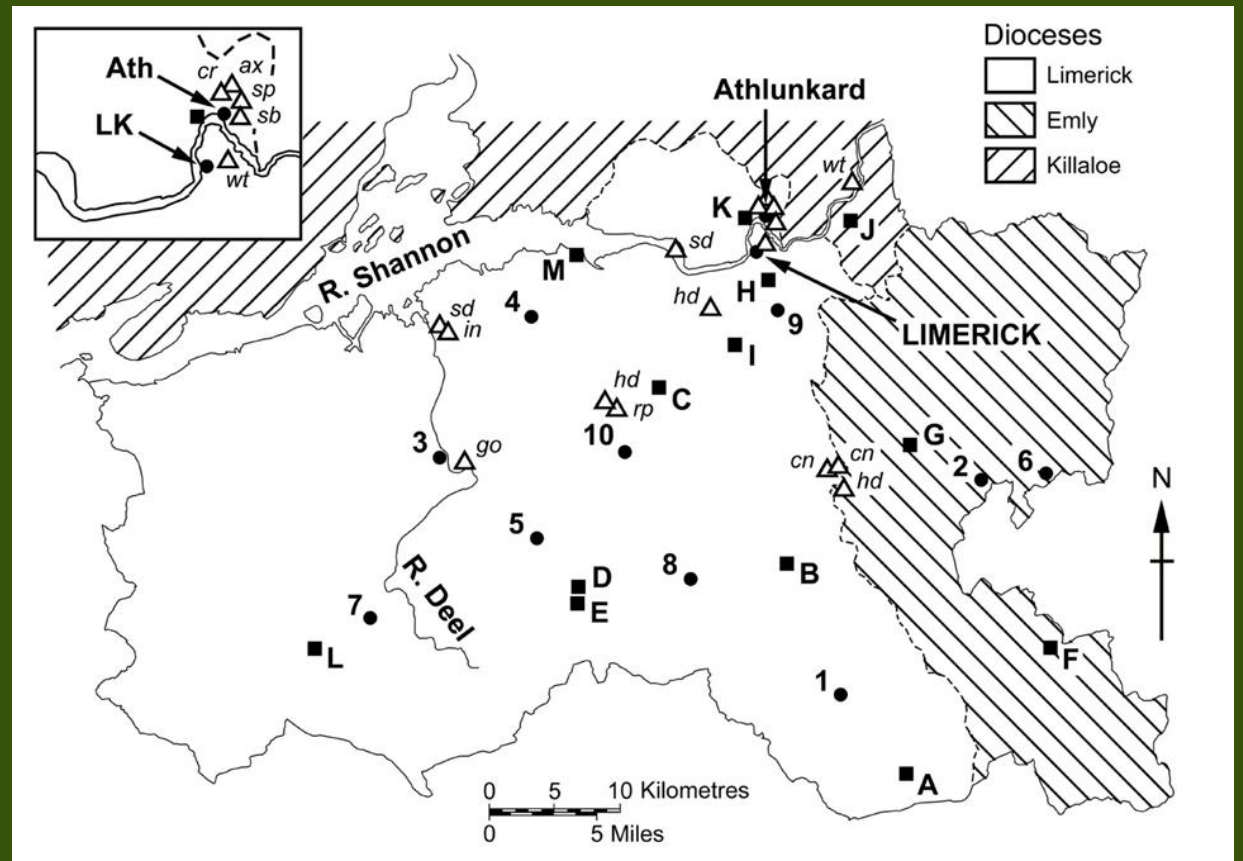
The statutes at large passed in the parliaments held in Ireland (Dublin 1786), vol I, 29.

“THE PAST IS A DIFFERENT COUNTRY....”
ENACTMENT OF IRISH PARLIAMENT IN 1464:

Distribution of Viking material through Limerick – matches distribution of early Whites

- Conclusion – Whites represent pre Norman population of Scandinavians?

Isogg: “Y-DNA haplogroup I is a European haplogroup, representing nearly one-fifth of the population. It is almost non-existent outside of Europe, suggesting that it arose in Europe. ..The two main subgroups of haplogroup I likely divided approximately 28,000 years ago: I1-M253 et al has highest frequency in Scandinavia, Iceland, and northwest Europe. In Britain, haplogroup I1-M253 et al is often used as a marker for "invaders," Viking or Anglo-Saxon”



PRELIMINARY beginnings of geographical study of DNA samples taken from individuals with medieval Irish surnames. To be continued....

Galway



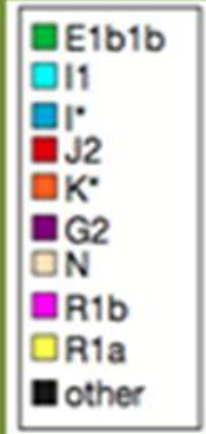
Tulsk



Limerick



Wexford



With thanks to Dr Turi King of Department of Genetics, University of Leicester

Surnames from Limerick are heavily influenced by Old English names

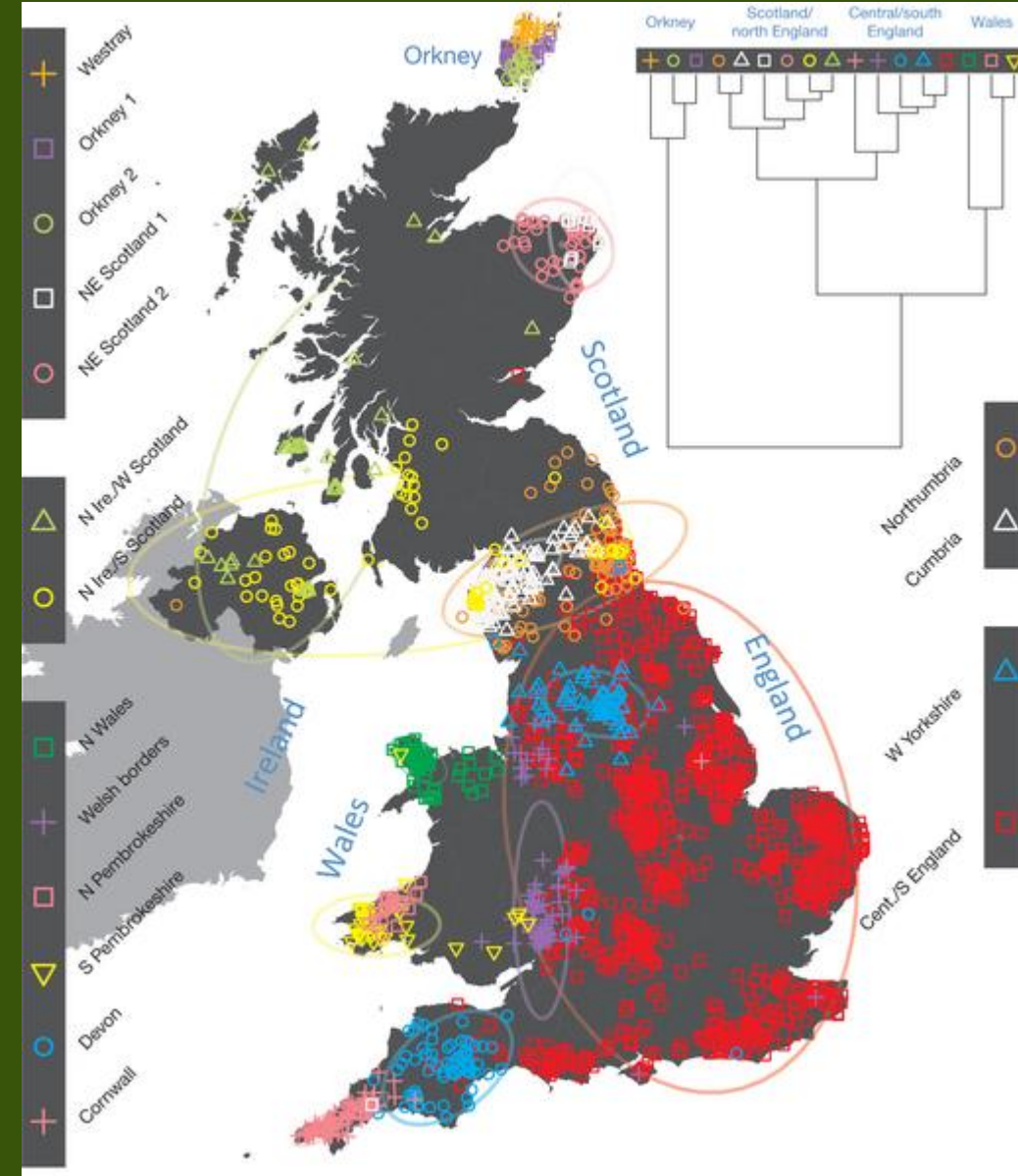
Limerick townlands almost entirely post Norman in origin?

Specific surnames show variety of ethnic backgrounds

Is genetic genealogy primarily revealing geographical location & not ancestry ?

- ▶ The regional genetic differentiation and differing patterns of shared ancestry with 6,209 individuals from across Europe carry clear signals of historical demographic events. We estimate the genetic contribution to southeastern England from Anglo-Saxon migrations to be under half, and identify the regions not carrying genetic material from these migrations. We suggest significant pre-Roman but post-Mesolithic movement into southeastern England from continental Europe, and show that in non-Saxon parts of the United Kingdom, there exist genetically differentiated subgroups rather than a general 'Celtic' population.

PEOPLES OF BRITAIN – STRONGLY LOCATIONAL NATURE 519, 309–314 (19 MARCH 2015)



Treatment of Eire

We explicitly excluded samples from Eire (the Republic of Ireland) from our European analyses, and as possible contributors to the ancestry profiles of the UK clusters, principally to allow assessment of the major migrations from continental Europe into the UK. **Detailed early analyses, which included samples from Eire with the other European samples, provided evidence of shared Irish ancestry with our UK samples, presumably reflecting in part migrations from Great Britain into Eire and vice versa.** Eire thus acts as a source and a sink for ancestry from the UK, which severely complicates interpretation of estimated ancestry profiles, since sharing of ancestry with Eire could reflect British migration into Eire rather than the converse. Also, the UK and Eire could share ancestry because both descend from some similar ancestral populations.

So Irish (and Limerick) genetics still need detailed investigation.

