

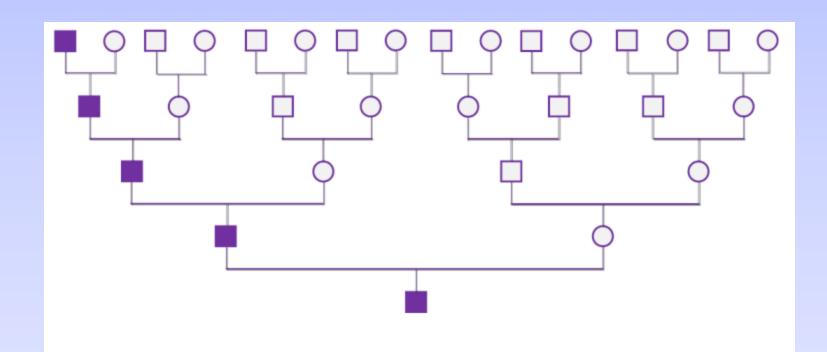
Y-DNA Genetic Testing



Y-DNA Genetic Testing

- Y-DNA flows from fathers to sons intact
- SNPs define Y-DNA haplogroups
- Haplogroups (clans) migrated together
- Timeframe between mutations is 2,000 to 10,000 years
- SNPs not very useful for genealogical research





Path of Y-chromosome DNA

Vermont Genealogy Library

2/24/14



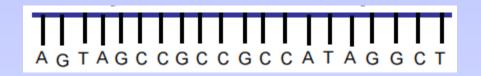
Y-DNA Differences From mtDNA Tests

- Surnames track with Y-DNA inheritance
- Y-DNA has another mutation pattern (STRs)
- Short Tandem Repeats (STRs) are more recent events
- Timeframe between mutations average 175 years
- STRs can be very useful for genealogical research

Y-Chromosome Tests



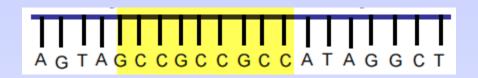
Short Tandem Repeats (STRs)





Short Tandem Repeats (STRs)





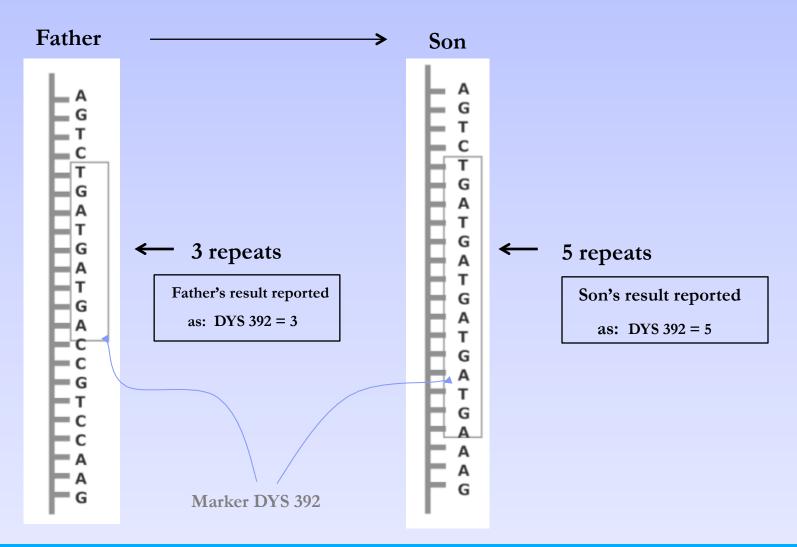
GCC – GCC - GCC

Vermont Genealogy Library

2/24/14



STR Mutations





111		DYS 390	DYS 391	DYS 393		
	gene	marker	marker	marker	gene	
Ser and a series of the series						

Source: National Genealogical Society: Genetic Genealogy The Basics



Standard Y-DNA Testing

Initial Y-DNA tests used 12 STR markers

STR pattern is an individual's 'haplotype'

12	8	9	10	7	13	4	8	17	9	19	12	11	
----	---	---	----	---	----	---	---	----	---	----	----	----	--

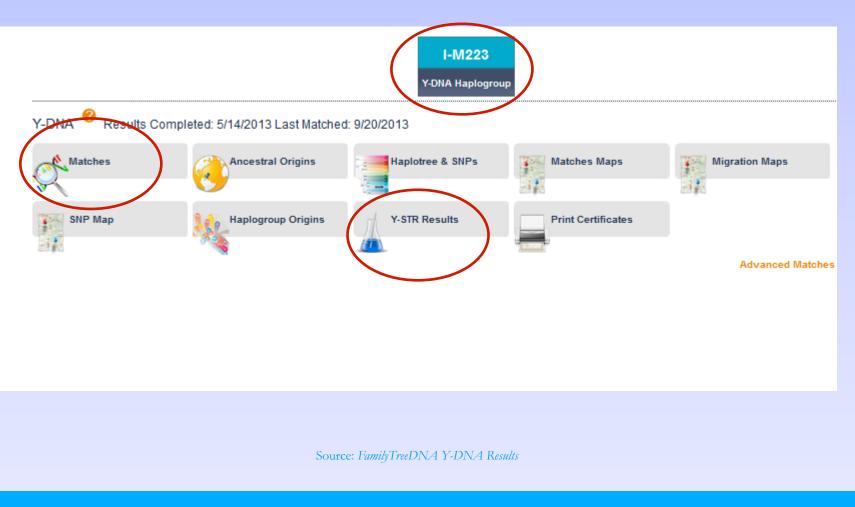
Standard tests today use 33 or 37 markers

Specific haplotypes are associated with SNP haplogroups

Normally haplotypes can predict haplogroups w/o SNP testing



Standard Y-DNA Testing





Y-DNA STR Test Results

Y-DNA	- Standard Y-	STR Values		
ANEL 1 (1-12)				
Marker	DY \$393	DY \$390	DY S15	DY \$391
Value	15	23	15	11
PANEL 2 (13-25) Marker	DY \$458	DY	S459	DY \$455
Value	16		8-9	11
ANEL 3 (26-37)				
Marker	DY \$460	Y-(Gata-H4	YCAII
Value	11		9	19-21

Source: FamilyTreeDNA Y-DNA Results



Using STR Marker Data

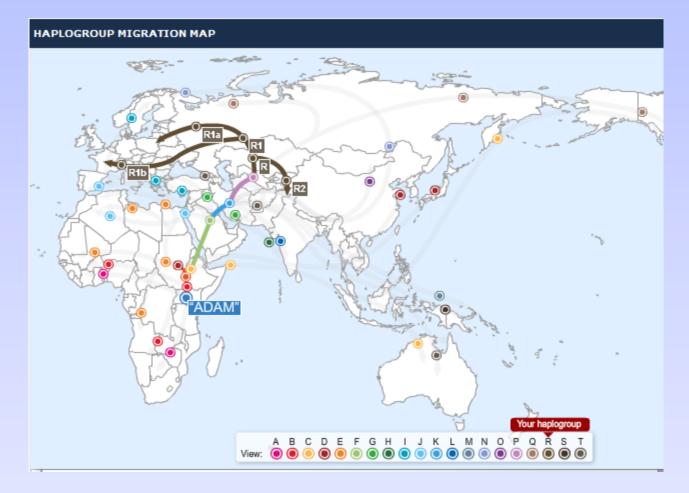
- 1. Download your data
- 2. Understand the results
- 3. Consider joining a DNA Project
 - Surname Project
 - Haplogroup/Haplotype Project
 - Location / Clan Project



	# Markers	1	2	3	4	5	6	7	8	9	10	11	12
	DYS	393	390	19	391	385a	385b	426	388	439	389i	392	389ii
Test	Haplogroup												
A	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
В	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
С	R1b1	13	24	14	11	11	14	12	12	12	13	13	29
D	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
E	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
F	R1b1	13	23	14	11	12	14	12	12	12	12	13	28
G	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
H	R1a1	13	25	16	11	11	14	12	12	10	13	11	30
I	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
J	R1b1	13	23	14	11	11	14	12	12	12	13	13	29

The Smith Surname Group





Source: FamilyTreeDNA.com



	# Markers	1	2	3	4	5	6	7	8	9	10	11	12
	DYS	393	390	19	391	385a	385b	426	388	439	389i	392	389ii
Test	Haplogroup												
A	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
В	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
С	R1b1	13	24	14	11	11	14	12	12	12	13	13	29
D	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
E	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
F	R1b1	13	23	14	11	12	14	12	12	12	12	13	28
G	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
H	R1a1	13	25	16	11	11	14	12	12	10	13	11	30
I	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
J	R1b1	13	23	14	11	11	14	12	12	12	13	13	29

The Smith Surname Group

Markers

DYS

R1b1

R1b1

A

F

Test Haplogroup

1 2

393 390

13 23

13 23



Analysis of Smith Surname STR Data

	# Markers	1	2	3	4	5	6	7	8	9	10	11	12
	DYS	393	390	19	391	385a	385b	426	388	439	3891	392	389ii
Test	Haplogroup												
A	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
B	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
D	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
E	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
G	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
I	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
J	R1b1	13	23	14	11	11	14	12	12	12	13	13	29

	# Markers	1	2	3	4	5	6	7	8	9	10	11	12
	DYS	393	390	19	391	38 5a	385b	426	388	439	389i	392	38911
Test	Haplogroup												
Α	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
C	R1b1	13	24	14	11	11	14	12	12	12	13	13	29

These 7 men have the same haplotype and
likely share a recent common ancestor

DYS 390 ranges from 18 – 27 repeats. C has one more than A & may not share a recent common ancestors

	12	11	10	9	8	1	0	2	4	3
Individual F d	389ii	392	389i	439	388	426	385b	385a	391	19
main haplotyp										
1 71	29	13	13	12	12	12	14	11	11	14
ancestor altho	28	13	12	12	12	12	14	12	11	14

	# Markers	1	2	3	4	5	6	7	8	9	10	11	12
	DYS	393	390	19	391	385a	385b	426	388	439	389i	392	389ii
Test	Haplogroup												
A	R1b1	13	23	14	11	11	14	12	12	12	13	13	29
H	R1a1	13	25	16	11	11	14	12	12	10	13	11	30

Individual F differs by 3 markers from the main haplotype. Likely no recent common ancestor although still haplogroup R1b1.

Individual H differs by 5 markers and is a different haplogroup. Definitely no recent common ancestor with any R1b1 members.



Y-DNA: More markers yields better resolution

Family Tree DNA Tests:

12 markers

25 markers

37 markers

67 markers

111 markers

Ancestry DNA Tests:

33 markers

46 markers

Source: FamilyTreeDNA & Andestry DNA Y-DNA test offerings



Y-DNA Matches – Austin Line (I2b1 / I-M223) (12 Markers)

FILTER M	ATCHES										
Show Ma	Show Matches For: The Entire Database 🗸 For: 12 🗸 Markers Distance: All 🗸 Matches Per Page: 25 🗸 Last Name Starts With:										
12 MARK	12 MARKERS - 51 MATCHES										
Steps	Name		Most Distant Ancestor								
0	Richard K. Austin	🖻 📝 Y-DNA25									
0	Mr. James Eugene Morrow	🖻 🕼 Y-DNA37	Elijah Morrow, b. 1828 KY, d. 1860-86 IN								
0	Richard L Austin	🖻 🕼 Y-DNA25									
0	Mr. William Winter Austin Esq.	🖻 🕼 Y-DNA25									
0	Robert Irving Austin	🖻 🕼 Y-DNA37	Reuben Austin, b.c. 1814, Washington County, NY								
0	Mr. Scott David Pauley	🖻 🕼 Y-DNA37									
0	Richard Levi Austin	🖻 🌃 🛃 Y-DNA37									
0	Ralph Oramel Austin	🖻 🕼 Y-DNA25									
0	Bates		Private								
0	Fuller		Private								
0	Dr. Jean-Marie Charles Bardin Ph.D.	🖻 🔟 🗐 Y-DNA12									

Source: FamilyTreeDNA Y-DNA Results



Y-DNA Matches – Austin Line (I2b1)

(37 Markers)

FILTER MA	FILTER MATCHES										
Show Mat	Show Matches For: The Entire Database 🗸 For: 37 🗸 Markers Distance: All 🗸 Matches Per Page: 25 🗸 Last Name Starts With:										
37 MARKE	37 MARKERS - 10 MATCHES										
Steps	Name		Most Distant Ancestor								
2	Robert Irving Austin	🖻 🚾 🖾 Y-DNA37	Reuben Austin, b.c. 1814, Washington County, NY								
2	Richard Levi Austin	🖻 🔟 🔄 🗲 Y-DNA37									
3	Mr. Stephen Hughes Bostwick	🖻 🔟 🖉 Y-DNA37									
3	Mr. Richard Royal Nelson	🖻 🔟 🔄 Y-DNA111	Nels Nelson (Nillssn), 1869 - 1941								
4	Mr. Bernard Charles Norton	🖻 📴 Y-DNA37	Samuel Stiles, B. 1814, D. 1871								
4	Mr. March		Private								
4	Mr. Michael Wayne Langley	🙉 🔟 🗟 🗲 Y-DNA37	Lewis Benjamin Franklin Langley b. 1884								
4	Mr. Paul Michael Spearin	🖻 🔟 Y-DNA37	John Spearin, 1789-?, Limerick (CAN8,ON3)								
4	Mr. D H POLLOCK	🙉 🔟 🗟 Y-DNA37									
4	Mr. Carl Edward Lettman Jr.	🖻 🜃 Y-DNA37	Sidney Lettman								

Source: FamilyTreeDNA Y-DNA Results

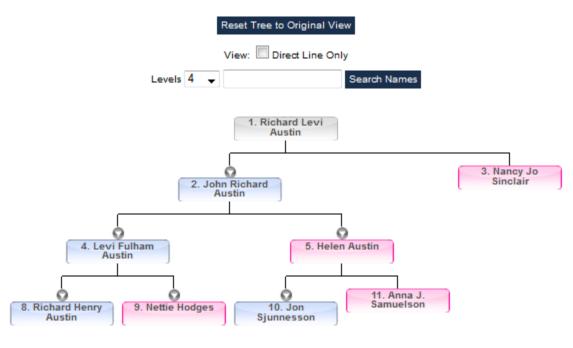


Y-DNA Matches – Austin Line (I2b1)

(37 Markers)

GEDCOM for Richard Levi Austin

Move your mouse over a name to see birth and death details if available. If a down arrow appears over an individual's name, click on it to reveal more on that particular line. Individuals known to be born within the past one hundred years are hidden for privacy unless the GEDCOM owner specified otherwise.



Source: FamilyTreeDNA Y-DNA Results



Y-DNA Matches – McGuire Line (R1b1) (12 Markers)

FILTER MATCHES			
Show Ma	atches For: The Entire Database 👻 For	: 12 🗸 Markers Distance: All 🗸 Ma	atches Per Page: 25 🔹 Last Name Starts With:
E		We recommend ordering the Y-Refine3	87to67 to narrow down your matches v
12 MARK	ERS-6743 MATCHES		
Steps	Name		Most Distant Ancestor
0	Mr. Clellen William Cullen Bryant	🖻 📴 🔄 Y-DNA12	Thomas Bryant b. 1736 and d. 1785
0	Mr. Corey Joseph Smith	🔍 📴 🖾 Y-DNA37	Andrew Smith, b. 1754 and d. 1784
0	Eugene C Smith	📧 📴 🖾 Y-DNA12	
0	James Preston Hay	🔍 📴 🖾 Y-DNA37	
0	Dr. Robert Bruce Henry	📧 📴 🖾 Y-DNA37	
0	John Frvin		

Source: FamilyTreeDNA Y-DNA Results



Y-DNA Matches – McGuire Line (R1b1) (37 Markers)

FILTER MATCHES						
Show Matches For:	The Entire Database 👻	For: 37 🖌 Ma	arkers Distance:	All 🗸	Matches Per Page:	25 Last Name Starts With:
H		We reco	mmend orde	ring the Y-Refi	ine37to67 to na	rrow down your matches with n

37 MARKERS - 23 MATCHES			
Steps	Name		Most Distant Ancestor
3	Kenneth Charles Ward	@ 📴 📝 Y-DNA67	Thomas Ward bef. 1761-Jul. 1831, Bradden, England
3	Mr. Charles Henderson Cone	🖻 📝 Y-DNA37	Daniel Cone 1626-1691
4	Virgil Lee Wilson Jr.	@ 📴 Y-DNA37	
4	Crowell		Private
4	Dr. Stephen Coull Gammie	🖻 📝 Y-DNA111	James Alexander Gammie b. 1858 Aberdeen, Scotland
4	Joshua Andrew White	🖻 📝 Y-DNA37	John White, b. 1843 and d. 1863
4	Mr. Howard Lee Peake Jr.	🖻 📴 🗲 Y-DNA67	Samuel Peak/Peek, b 1787 VA and d. 1861 IA
4	Bowers		Private

Source: FamilyTreeDNA Y-DNA Results



Y-DNA Matches – Giroux Line (R1b1) (12 Markers)

FILTER MATCHES				
Show Matches For: The Entire Database 🗸 For: 12 🗸 Markers Distance: All 🗸 Matches Per Page: 25 🗸 Last Name Starts With:				
12 MARK	ERS-66 MATCHES			
Steps	Name		Most Distant Ancestor	
0	Mr. Rodney O'Dell	@ 🔐 📝 Y-DNA37	WILLIAM ODELL	
0	Dr. MOHAMMED .A. ALANAZY Ph.D.	@ Y-DNA12	Al Joof	
0	Mr. Philip W. O'Dell	🖻 🌃 Y-DNA37		
0	Mr. Charles Fay Arnold	🚊 🔃 🗹 Y-DNA12	Francis Arnold 1870	
0	Mrs. Karen Clark Luhrs	🖻 🕅 Y-DNA67	Veachel Clark	
0	Vincolo		Private	
0	Mr. Joseph Theodore Morley	🖻 🌃 Y-DNA37	Joseph Theodore Morley, b. 1848 and d. 1922	
0	Ms. Lillian Levy	🖻 🌃 Y-DNA12		

Source: FamilyTreeDNA Y-DNA Results



Y-DNA Matches – Giroux Line (R1b1) (37 Markers)

FILTER MATCHES			
Show Matches For: The Entire Database 🗸 For: 37 🗸 Markers Distance: All 🗸 Matches Per Page: 25 🗙 Last Name Starts With:			
37 MARKERS	- 2 MATCHES		
Steps	Name		Most Distant Ancestor
2	Joseph Anthony Moreau	▲ III ¥ Y-DNA67	
4	Roper		Private

Source: FamilyTreeDNA Y-DNA Results



Y-DNA Matches

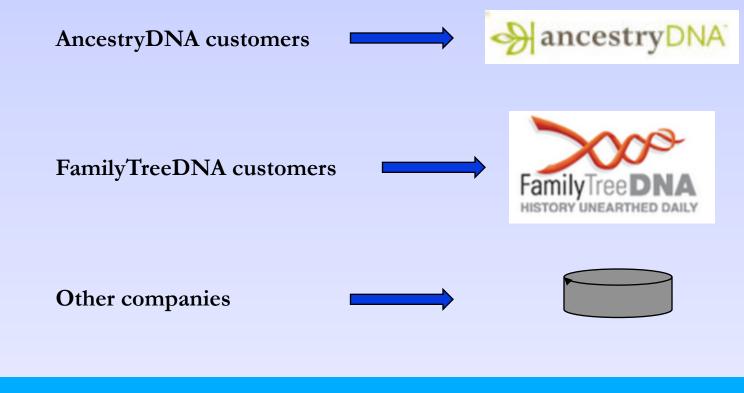
What do you do when you don't have a Haplogroup?

The strange case of one VT-FCGS Member...



Y-DNA STR Test Results

Each testing company has it's own database of customer DNA results





Y-DNA STR Test Results

You <u>can</u> search for those common ancestors in a **bigger** pond!!

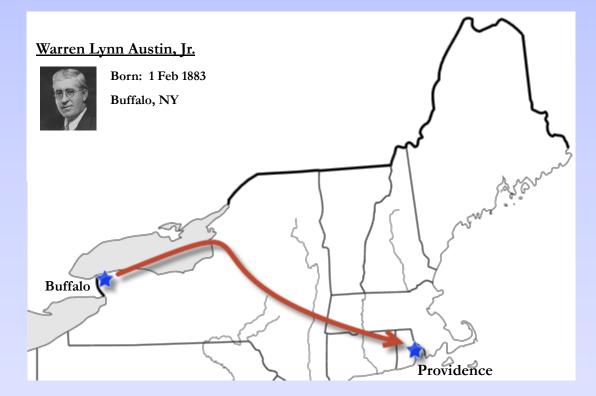




Typical Y-DNA Applications

Application	Objective
Surname Research	Find connections for all people named BRADLEY
Relatedness	Are 2 men named ROY related?
Family Elimination	Narrow down which ADAMS family to investigate
Name Changes & Variations	Are men named FURST, FIRST & FOERST related?
Rare Names	Are Polish & East German KRANSICH families related?
Uncertain Paternity	Resolve adoption, illegitimacy & other questions
Verify Genealogy Research	Validate traditional written genealogy analysis
Famous Roots	Prove we're descended from Thomas CHITTENDEN
Crossing The Pond	Prove our O'REILLY family came from County Mayo



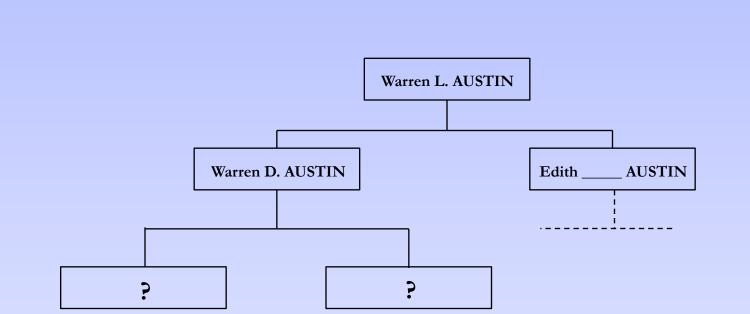




Evidence Uncovered In Buffalo, NY

Record 1: Baptism of Warren L. Austin, 6 Jun 1884, Riverside M. E. Church, Buffalo Parents: Warren & Edith Austin

Birthdate: 1 Feb 1883





Evidence Uncovered In Buffalo, NY

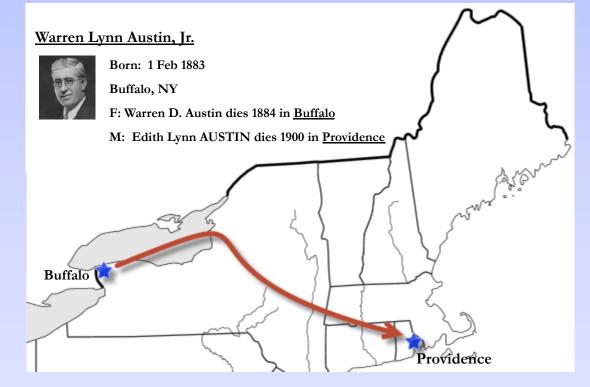
Record 1: Baptism of Warren L. Austin, 6 Jun 1884, Riverside M. E. Church, Buffalo Parents: Warren & Edith Austin

Birthdate: 1 Feb 1883

Record 2: Death card for Warren D. Austin 24 Feb 1884

"Austin, Warren D., 24 Feb 1884 Age 28 years, 10 months, 8 days Only son of Zina."







Warren's Connection to Austin Ancestry

U.S. Census: 'Zina Austin' – 2 men living in NY and both were right ages Various facts ruled out the family of 2nd Zina Austin – leaving Zina in Saratoga County

- [•]Zina & Martha had a son, Warren born in 1855 in Day, NY ("28 yrs, 10 mos, 8 days")
- •1860 & 1870 Federal Censuses had Warren with Zina & Martha (Conger)
- [•]Zina & Martha Austin living in Buffalo 1883-1884 (near Warren & Edith Austin)

Zina Austin from Day, NY, listed in Some Descendants of Richard Austin

- documented ancestry back to 1500's in England



Warren's Connection to Austin Ancestry

Concerns: No birth certificate for Warren L. Austin

No marriage certificate for Warren D. & Edith

No other documentation connecting Warren D. & Zina Austin



Warren's Connection to Austin Ancestry

Concerns: No birth certificate for Warren L. Austin

No marriage certificate for Warren D. & Edith

No other documentation connecting Warren D. & Zina Austin

Obtain DNA sample from one of Warren L. Austin's sons (my uncle)

Submit to FamilyTreeDNA: tested

tested 17 Apr 2013 results 14 May 2013



Y-DNA Research Validation

DNA testing: clearly define the problem you're trying to solve.



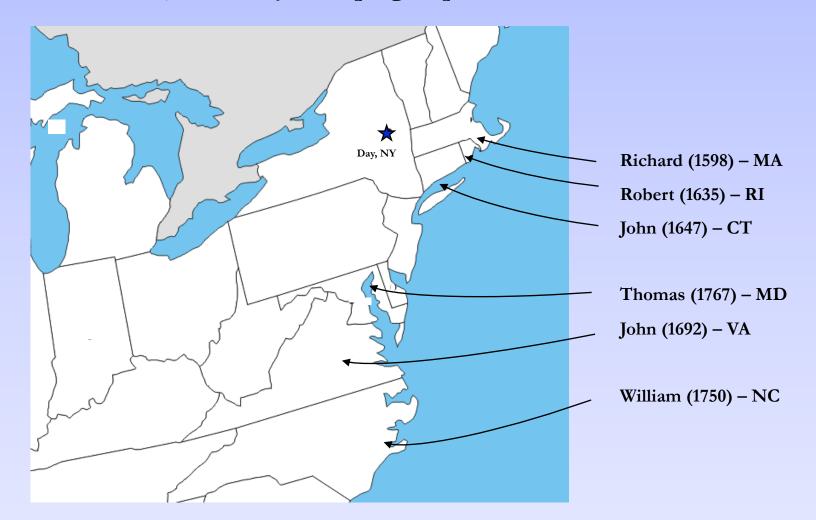
DNA Question: was Warren descended from Richard Austin b. 1598?

Yes?? Then I had an ancestry back to 1500's in England

No?? Back to question "who was Warren D. Austin?"



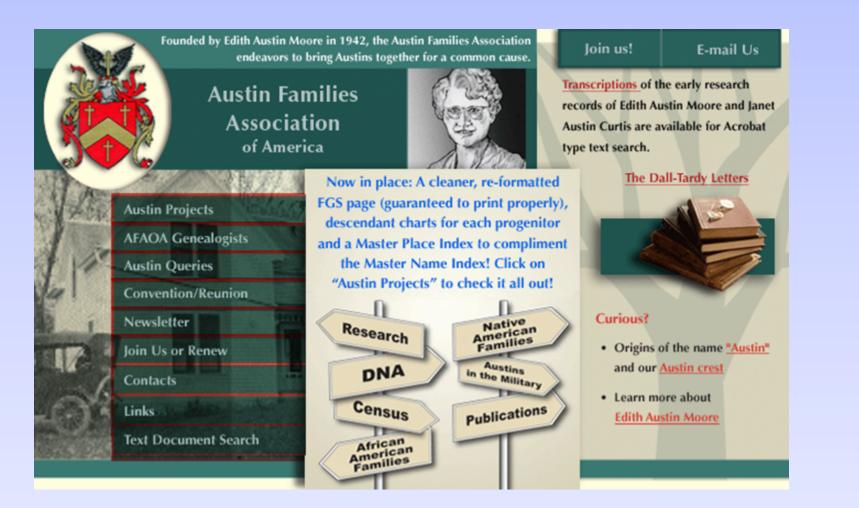
Surname Projects Analyze Haplogroup Data for Relatedness



Y-Chromosome Tests



Y-DNA Surname Projects





Y-DNA Surname Projects



Carol Austin caustin@socal.rr.com , Group Co-Administrator

Surnames

Austen, Austin, Awsting, Ostin



Austin Surname Project Tracks Over 30 American Lines

Coordinating the collection of 37 and 67 marker Y-DNA test results for these and other Austin-Austen lines:

John Austin ba.1692 of Southside Virginia William Austin bc.1750 of North Carolina William Austin b.1793 of Connecticut Thomas Austin b.1767 of Sharpsburg, Maryland Thomas Austin b.1727 of Barbados Samuel Austin b. say 1640 of Boston, Massachusetts Richard Austin bc.1598 of Charlestown, Mass. Robert Austin b. say 1635 of Kingstown, Rhode Island Robert Austin b.1794 of New Hampshire Edward Austin b.1773 Rhode Island

William Austin bc.1813 New York James J. Austin bc.1822 Cobb, Georgia William Austin bc.1700 Ireland of Virginia John Austin bc.1647 of New Haven CT John Calhoun Austin b.1831 of Tennessee William Benjamin Austin b.1827 of Arkansas William Austin bc.1654 of Maryland John Austin bc.1790 Virginia John Austin bc.1821 Tennessee Jonah Austen b. say 1598 England



Austin Surname Project Tracks Over 30 American Lines

Coordinating the collection of 37 and 67 marker Y-DNA test results for these and other Austin-Austen lines: John Austin ba.1692 of Southside Virginia William Austin bc.1813 New York William Austin bc.1750 of North Carolina James J. Austin bc.1822 Cobb, Georgia William Austin b.1793 of Connecticut William Austin bc.1700 Ireland of Virginia Thomas Austin b.1767 of Sharpsburg, Maryland John Austin bc.1647 of New Haven CT Thomas Austin b.1727 of Barbados John Calhoun Austin b.1831 of Tennessee Samuel Austin b. say 1640 of Boston, Massachusetts William Benjamin Austin b.1827 of Arkansas Richard Austin bc.1598 of Charlestown, Mass. William Austin bc.1654 of Maryland Robert Austin b. say 1635 of Kingstown, Rhode Island John Austin bc.1790 Virginia Robert Austin b.1794 of New Hampshire John Austin bc.1821 Tennessee Edward Austin b.1773 Rhode Island Jonah Austen b. say 1598 England

Possible Outcomes

- 1. No matches to any Austin line
- 2. Match to a different Austin line than Richard
- 3. Exact match to Richard Austin's haplotype



	Austin-Austen Family DNA Project Results - Profile Table										201	3					
							3	3	1	3	3	3	4 3	4	3	3	3
	Austin Families Association of America (AFAOA)						9	9	9	9	8	8	2 8	3	8	9	8
					Т		3	0		1	5	5 6	6 8	9	9	2	9
	AFAOA				е	Haplogroup					a	b					
Kit	Database	1st Generation	2nd Generation	3rd Generation	s										1		2
	and Link					****											
80562	TN White Co.	Nathaniel Austin	William Henry b 1805 TN	Thomas A. b 1844 TN	5	E1b1a	15	21	16	10	16 1	8 1	11 13	2 12	14	11 (31
173715	TN White Co.	b 1781 VA	Raleigh	Shelby b 1843 TN	3	E1b1a	15	21	16	10	16 1	8 1	11	3 12	14	11 (31
67778	TN White Co.		b. 1815 TN	John A. bc 1849 TN	5	E1b1a	15	21	16	10	16 1	8 1	1 1	2 12	14	11 (31
80324	TN White Co.	John Austin b 1802 TN	John Meantha b 1838 MC	Pelorus b 1863 MO	2	E1b1a	15	21	16	10	16 1	8 1	11 13	2 12	14	11 :	31
219403	TN White Co.	John Austin b 1779 NC	John Jr. b 1818 TN	William E. b 1860 TN	2	E1b1a	15	21	16	10	16 1	8 1	11 13	2 12	14	11 :	31
32962	VA John southside	Richard Austin bc 1790 GA	Jackson b 1831 LA	William bc 1858 LA	2	E1b1a	15	21	15	10	16 1	8 1	11 13	2 12	14	11 :	31
100758	VA John southside	Richard Ellis Austin b 1822 KY	Freeling Baker b. 1852 K	Harvey Jackson b 1893	1	E1b1a	15	21	16	10	16 1	7 1	11 13	2 12	14	11 :	31
1812	VA John southside	William Austin bc 1750 VA	Hezekiah b 1787 VA	Jonathan A. b 1823 TN	3	E1b1a	15	21	16	10	16 1	8 1	11 13	2 12	14	11 :	31
145277	VA John southside	Joseph Austin res. MO	Joseph b 1820 MO	William G. b 1847 MO	2	E1b1a	15	21	16	10	16 1	8 1	11 13	2 12	14	11 :	31

Over 250 Austin men have submitted y-DNA test results.



Austin-Austen Family DNA Project Results - Profile Table

Last updated 6/11/2013

		Austin Families Asso	ociation of America	(AFAOA)	M a I		3 9 3	3 9 0	1 9	3 9 1	8	8	4 3 2 8 6 8		8	9	3 8 9
Kit	AFAOA Database and Link	1st Generation	2nd Generation	3rd Generation	e s	Haplogroup					а	b			 1		2
80562	2 TN White Co.	Nathaniel Austin	William Henry b 1805 TN	Thomas A. b 1844 TN	5	E1b1a	15	21	16	10 1	6	18 1	1 1	2 12	14	11 3	31
17371	5 TN White Co.	b 1781 VA	Raleigh	Shelby b 1843 TN	3	E1b1a	15	21	16	10 1	6	18 1	11	3 12	14	11 3	31
67778	3 TN White Co.		b. 1815 TN	John A. bc 1849 TN	5	E1b1a								2 12			
80324	TN White Co.	John Austin b 1802 TN	John Meantha b 1838 MC	Pelorus b 1863 MO	2	E1b1a	15	21	16	10 1	6	18 1	1 1	2 12	14	11 3	31
	3 TN White Co.	John Austin b 1779 NC	John Jr. b 1818 TN	William E. b 1860 TN	2	E1b1a	15	21	16	10 1	6	18 1	11	2 12	: 14	11 3	31
32962		Richard Austin bc 1790 GA	Jackson b 1831 LA	William bc 1858 LA	2	E1b1a	15	21	15	10 1	6	18 1	1 1	2 12	14	11 3	31
10075	8 VA John southside	Richard Ellis Austin b 1822 KY	Freeling Baker b. 1852 K	Harvey Jackson b 1893	1	E1b1a	15	21	16	10 1	6	17 1	111	2 12	: 14	11 3	31
13568	MA Samuel	_		Thomas b 1692 MA	8	R1b1a2	13	23	14	11	11	14 1	2 1	2 12	: 13	13	29
19239	MA Samuel	Samuel Austin	Thomas		7	R1b1a2	13	23	14	11	11	14 1	2 1	2 12	: 13	13	29
16561	MA Samuel	say 1640	b 1671 Boston, MA	Benjamin b 1694 MA	6	R1b1a2	13	23	14	11	11	14 1	2 1	2 12	: 13	13	29
25069	MA Samuel	res. Boston, MA	r. Andover, MA	Zebediah b 1701 MA	7	R1b1a2	13	23	14	11 1	12	14 1	2 1	2 12	: 13	13	29
13566					7	R1b1a2a1a1a4	13	23	14	11	11	14 1	2 1	2 12	13	13	29
N50464	MA Samuel	Isaac Eli Austin b 1883 CA				R1b1a2	13	23	14	11	11	14 1	2 1	2 12	: 13	14	29
147277	7	Hezekiah Austin res. VT	Elvin b 1808 VT	Rodney N. b 1844 VT	3	R1b1a2	13	23	14	11	11	14 1	2 1	2 12	: 13	13	29
25039	MA Daniel	Daniel Austin bc 1761 MA	Rensselaer b 1804 NY	Charles V. R. b 1826 MA	4	R1b1a2	13	23	14	11 1	11	14 1	21	2 12	13	13	29
																	_
18245		-	William	William	7	R1b1a2a1a1a4	13	23	14	11 1	11	14 1	2 1	2 12	: 13	13	29
34236		bc 1657 of MD	bc1690 MD	bc 1710 MD	6	R1b1a2								2 12			
134664					7	R1b1a2	13	23	14	11 1	11	14 1	2 1	2 12	: 13	13 :	29
78795			William bc 1732 MD	William b 1754 NC	6	R1b1a2								2 12			
27680			Charles b 1786 NC	William Young b 1818 NC	4	R1b1a2	13	23	14	11 1	11	15 1	21	2 12	213	13 :	29
132468				Elijah b 1792 NC	4	R1b1a2								2 12			
	MD William	Absalom Austin bc 1725 MD	Moses bc 1762 MD	Samuel F. b 1803 NC	6	R1b1a2	13	23	14	11	11	14 1	21	2 12	: 13	13	29
32203		Larkin Kelly Austin	Jasper b 1853 IL	Gregg b 1888 IL	1	R1b1	13	23	14	11	11	13 1	2 1	2 12	13	13	29
98075		_ b 1813		Harvey E. 1902 IL	1	R1b1a2								2 12			
	B <u>IL Larkin</u>	TN	J. Scott b 1855 IL	Rob b 1881 IL	1	R1b1a2	13	23	14	11	11	14 1	21	2 12	13	13	29
	I <u>L Larkin</u>			Albert Edmond b 1905 IL	1	R1b1a2								2 12			
	ME Matthew	Matthew Austin bc 1620 England		Benjamin b 1724 ME	6	R1b1a2a1a1a								2 12			
109394	MD Solomon & John	Solomon Austin b 1744 MD	Philip b 1790 SC	Isaac b 1820 ON	3	R1b1a2	14	23	14	11	11	14 1	2 1	2 12	: 13	13	29



Austin-Austen Family DNA Project Results - Profile Table

Last updated 6/11/2013

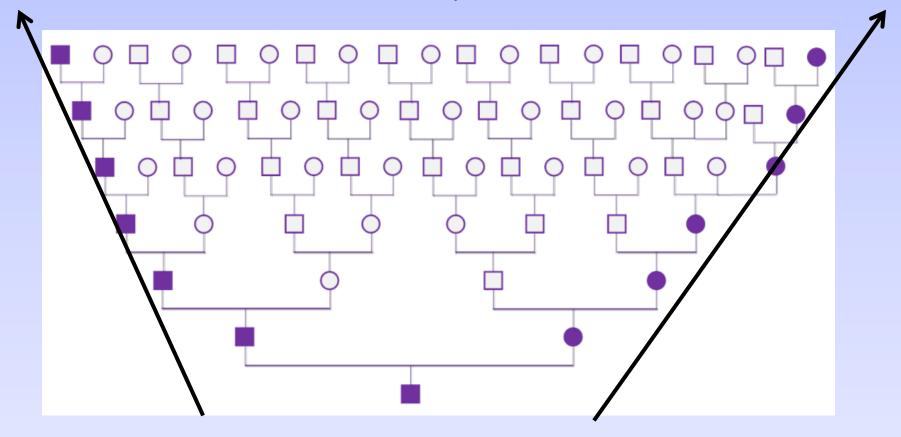
		Austin Families Asso	ociation of America	(AFAOA)	M a I		3 9 3	9	9	9	8 8	3 2	8	3	8	3 3 9 8 2 9	в
Kit	AFAOA Database and Link	1st Generation	2nd Generation	3rd Generation	e s	Haplogroup					a t				1	2	- 2
80562	TN White Co.	Nathaniel Austin	William Henry b 1805 TN	Thomas A. b 1844 TN	5	E1b1a	15	21	16	10 1	61	8 11	1 12	12	14	11 3	1
173715	TN White Co.	b 1781 VA	Raleigh	Shelby b 1843 TN	3	E1b1a	15	21	16	10 1	61	8 11	1 13	12	14	11 3	1
67778	TN White Co.		b. 1815 TN	John A. bc 1849 TN	5	E1b1a	15	21	16	10 1	61	8 11	1 12	12	14	11 3	1
80324	TN White Co.	John Austin b 1802 TN	John Meantha b 1838 MC	Pelorus b 1863 MO	2	E1b1a	15	21	16	10 1	61	8 11	1 12	12	14	11 3	1
219403	TN White Co.	John Austin b 1779 NC	John Jr. b 1818 TN	William E. b 1860 TN	2	E1b1a	15	21	16	10 1	61	8 11	1 12	12	14	11 3	1
32962	VA John southside	Richard Austin bc 1790 GA	Jackson b 1831 LA	William bc 1858 LA	2	E1b1a	15	21	15	10 1	61	8 11	1 12	12	14	11 3	1
100758	VA John southside	Richard Ellis Austin b 1822 KY	Freeling Baker b. 1852 K	Harvey Jackson b 1893	1	E1b1a	15	21	16	10 1	6 1	7 11	1 12	12	14	11 3	1
1812	VA John southside	William Austin bc 1750 VA	Hezekiah b 1787 VA	Jonathan A. b 1823 TN	3	E1b1a	15	21	16	10 1	6 1	8 11	1 12	12	14	11 3	1
145277	VA John southside	Joseph Austin res. MO	Joseph b 1820 MO	William G. b 1847 MO	2	E1b1a	15	21	16	10 1	61	8 11	1 12	12	14	11 3	1

14164	MA Richard		Richard bc 1632 England	Joseph b 1677 MA	8	12b1	15 23 15 11 15 15 11 13 11 14 12 31
16603	MA Richard	Richard Austin		Richards b 1686 MA	7	12b1	15 23 15 11 15 15 11 13 11 14 12 31
20267	MA Richard	bc 1598 England	Anthony bc 1636 England	Anthony	7	12b1	15 23 15 11 15 15 11 13 11 14 12 31
188363	MA Richard	res. Charlestown, MA	res. Suffield, MA/CT	b 1668 MA	9	I2b1	15 23 15 11 15 15 11 13 11 14 12 31
261918	MA Richard			John b 1672 MA		I2b1	15 23 15 11 15 15 11 13 11 14 12 31
33038	MA Richard			Nathaniel	9	12b1	15 23 15 11 15 15 11 13 11 14 12 31
89904	MA Richard			b 1678 MA	9	12b1	15 23 15 11 15 15 11 13 11 14 12 31

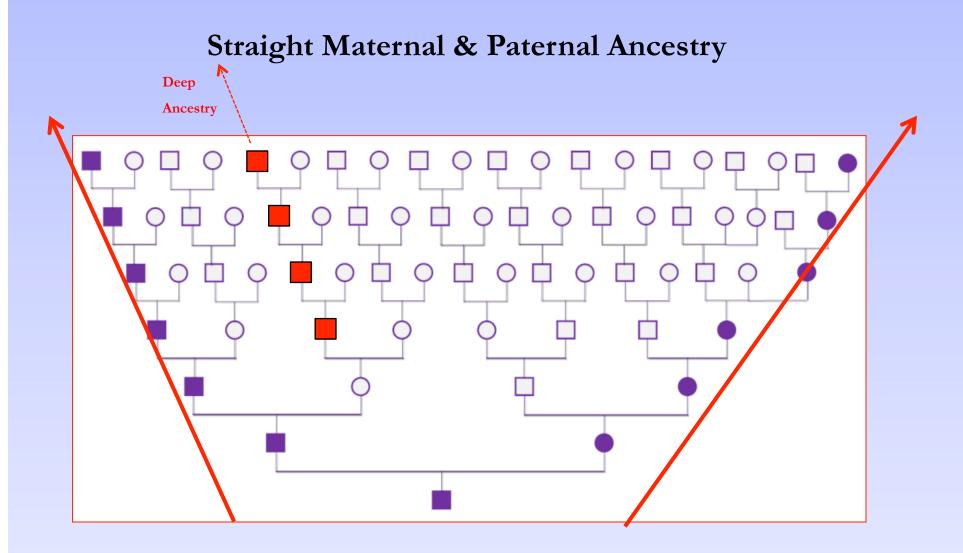


Straight Maternal & Paternal Ancestry

Limited to Only 2 Lines



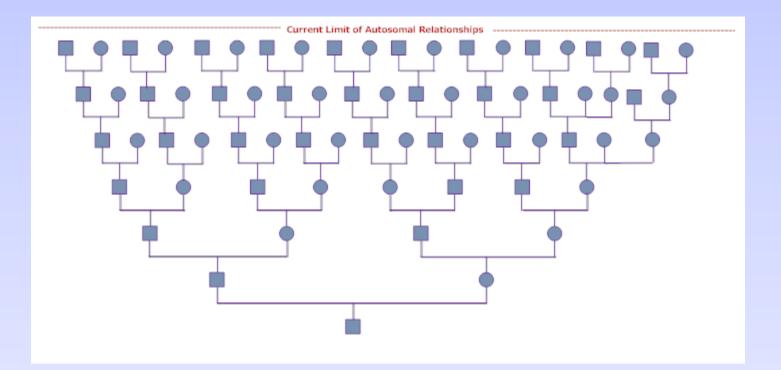






Autosomal DNA Testing Finds More Relationships

Limitation Is 4 to 6 Generations





Which DNA Testing Company Do I Use?





Genetic Genealogy Testing Companies

Critical Attributes

Expertise

Experience

Size of existing DNA databases

Proven track record

Support

Cost



Genetic Genealogy Testing Companies

My Top Picks









DNA Testing Companies

	Y-DNA	mt-DNA	at-DNA*	Medical
23andMe	Ν	Y	Y	?**
AncestryDNA	Y	Y	Y	Ν
FamilyTreeDNA	Y	Y	Y	Ν

* All 3 companies use the Illumina chip for autosomal testing

** FDA currently has hold on 23andMe medical testing



Genetic Genealogy Testing Companies

		23andMe	AncestryDNA	FamilyTreeDNA
mt-DNA	HVR 1 & 2	-	\$179	\$59
	Full mt-DNA	-	-	\$199
Y-DNA	12 Markers	-		\$59
	33 Markers	-	\$149	
	37 Markers	-		\$169
	46 Markers	-	\$179	
	67 Markers	-		\$268
	111 Markers	-		\$359
at-DNA	682K SNPs		\$99	
	709K SNPs			\$99
	976K SNPs	\$99		

(Prices are from company websites as of 21 Feb 2014)



How to Save Money on DNA Tests

- Join a Surname Project or Haplogroup / Location Project first.
- Look for promotions at conferences (like this one!!)
- Remember 'DNA Day'
- Ancestry.com gives discounts to members
- Watch company websites for random offers
- Don't over-test (eg. 111 STR markers at the start)



DNA Tests & Test Kits

FamilyTreeDNA





DNA Tests & Test Kits

AncestryDNA & 23andMe



Get your kit with easy-to-follow instructions.



Send in your kit with a small saliva sample.



Turn-Around Time for DNA Tests

Receiving kits		2 weeks ^{1,2}
Completion time	Y-DNA	3-4 weeks ¹
	mt-DNA	6-8 weeks ¹
	Autosomal DNA	3-4 weeks ² 3-8 weeks ¹

¹ FamilyTreeDNA

² Ancestry DNA



Advice and Warnings

- Migration Maps & Ethnicity Percentages are speculative
- Some results provide too many matches (common haplotype)
- Some results provide too few matches (rare DNA or too few testers)
- Using these tools requires more work than advertised
 - sending in the kit is the easy part
- The key is having a good hypothesis to evaluate
- Be prepared for NPEs or don't test



Upcoming Classes

Date	Торіс	Speaker
01 Feb	Beginning Genealogy	Sheila Morris
08 Feb	New Tools at our VTGENLIB Website	Ed McGuire
15 Feb	Going Professional: Education & Preparation	Joanne Polanshek
22 Feb	Genetic Genealogy – Part 1	Ed McGuire
01 Mar	Genetic Genealogy – Part 2	Ed McGuire
08 Mar	VTs Irish in the Civil War	Bill McKone
29 Mar	Early New England Records at AmericanAncestors.org	Ed McGuire
05 Apr	Locating Irish Immigrants in Quebec & Canada	Gary Schroder
12 Apr	Acadian Research	Mike Sevigny
19 Apr	EASTER HOLIDAY	
26 Apr	Quebec Genealogy Records	D. Beaugrand-Champlain
03 May	Obituary Records – How to Use Them	Lynn Johnson
10 May	Finding Francis: A Search for my Scottish Ancestors	Bill Craig

12 Mar Irish Genealogy Talk & Ancestors Roadshow

Cathi Desmarais & Ed McGuire



<u>Tuesday Genealogy Study Groups</u> (6:30 - 8:00 PM)

Interest Group	Week of the Month
English & Scottish	1 st Tuesday
New York Research	2 nd Tuesday
lrish	3 rd Tuesday
Genetic Genealogy	4 th Tuesday

- Examine resources & demo products
- · Discuss what's worked for you
- · Learn what tools others use & how they like them
- Go online and tackle someone's problem each week





Understand Y-chromosome & mitochondrial DNA tests

- The problems they can address
- Best companies
- Costs
- Interpreting the results



Genetic Genealogy At Our Library

- 4th Tuesday is 'DNA Night'
- DNA Forums for discussions, questions and answers
- A focus on French-Canadian genetic patterns & diseases

"We're Here To Help"



Thank You!

Any Questions??

Vermont Genealogy Library

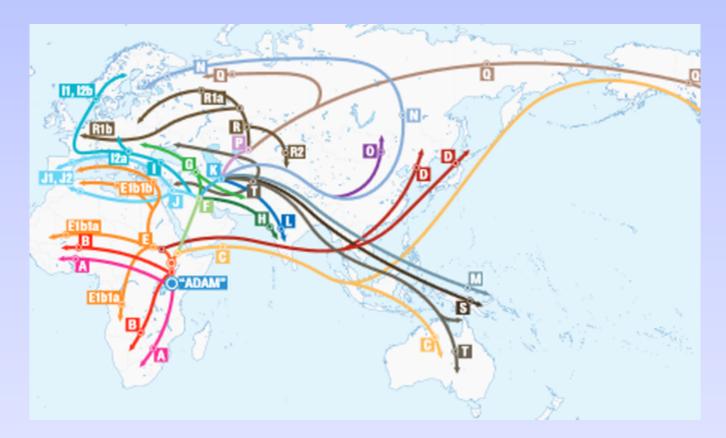
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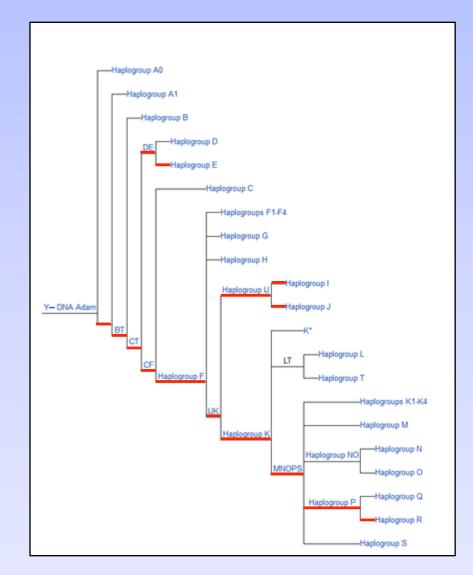


Y-DNA Haplogroup Migration



Source: FamilyTreeDNA.com







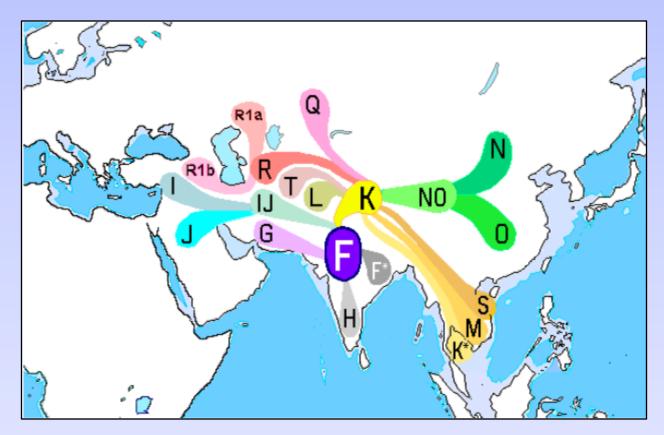
Chronological development of haplogroups in Europe

Haplogroup	Possible time of origin (years ago)	Possible place of origin	Highest frequencies
к	40,000	South Asia or West Asia	
т	30,000	West Asia	
J	30,000	Middle East	
R	28,000	Central Asia	
E1b1b-M35	26,000	East Africa	
I	25,000	Balkans	
R1a1	21,000	Southern Russia	
R1b	20,000	Around the Caspian Sea or Central Asia	
E1b1b-M78	18,000	Egypt/Libya	
G	17,000	Between India and the Caucasus	
12	17,000	Balkans	
J2	15,000	Northern Mesopotamia	
l2b	13,000	Central Europe	
N1c1	12,000	Siberia	
l2a	11,000	Balkans	
R1b1b2	10,000	North or south of the Caucasus	
J1	10,000	Arabian peninsula	
E1b1b-V13	10,000	Balkans	Albania
I2b1	9,000	Central Europe	Germany
l2a1	8,000	Pyrenees ^[16]	
l2a2	7,500	Dinaric Alps	
E1b1b-M81	5,500	Maghreb	Berbers
11	5,000	Scandinavia	
R1b-L21	4,000	Central or Eastern Europe	
R1b-S28	3,500	around the Alps	
R1b-S21	3,000	Frisia or Central Europe	
l2b1a	< 3,000	Britain	

Source: http://en.wikipedia.org/wiki/Human_Y-chromosome_DNA_haplogroup

THE STA

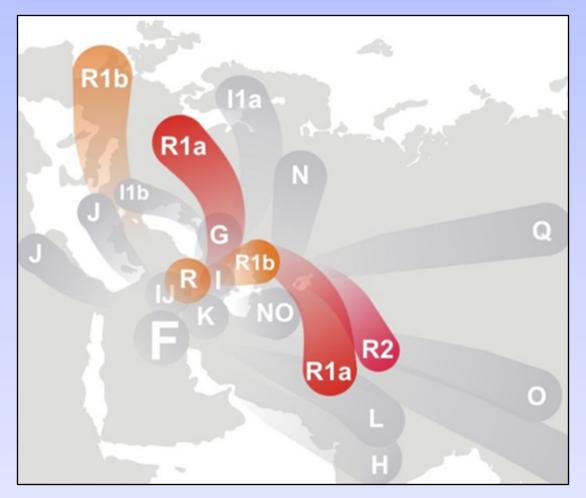
The Spread of Haplogroup F



Source: Wikimedia Commons (http://en.wikipedia.org/wiki/File:Haplogroup_F_%28Y-DNA%29.PNG)



Haplogroup R's Dispersion



Source: Wikimedia Commons (http://en.wikipedia.org/wiki/File:Haplogroup_R_%28Y-DNA%29.jpg)