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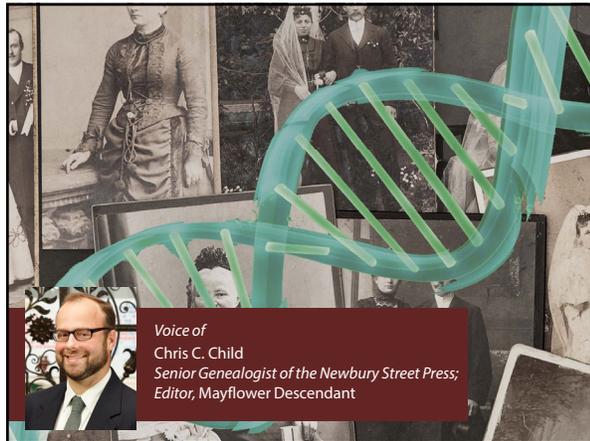
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### Basics of Y-DNA

- YDNA is inherited from a person's father
- Patrilineal-related people (even several generations back) share the same mtDNA markers
- People who do not share the same markers are not patrilineally related within recorded history (a few centuries)
- Most cases involve the solicitation of many people and existing descendants who have already participated

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### STR/SNP tests

- Y-STR (short tandem repeat) have high mutation rates
- Y-SNPs (single nucleotide polymorphisms) have low mutability

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### Current prices

- 12 markers (not currently offered)
- 25 markers (not currently offered)
- 37 markers (\$119)
- 67 markers (not currently offered)
- 111 markers (\$249)
- Big Y-700 (\$449)

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### FTDNA Tip at 12 markers

In comparing Y-DNA 12 marker results, the probability that Gerald Linwood Childs and William Chapin Child II shared a common ancestor within the last...

Generations	Percentage
4	33.57%
8	55.88%
12	70.69%
16	80.53%
20	87.07%
24	91.41%

**Refine your results with paper trail input**

If traditional genealogical records indicate that a common ancestor between you and your match could not have lived in a certain number of past generations, your TIP results can be refined. Note, if you are not sure of this information, you should not change the value of "1" below.  
 Note: "0" or negative values are not accepted in the generations field.

Gerald Linwood Childs and William Chapin Child II did not share a common ancestor in the last  generation(s).

Markers:  Display every 4 generations.

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### FTDNA Tip at 25 markers

In comparing Y-DNA 25 marker results, the probability that Gerald Linwood Childs and William Chapin Child II shared a common ancestor within the last...

Generations	Percentage
4	61.17%
8	84.92%
12	94.15%
16	97.73%
20	99.12%
24	99.66%

**Refine your results with paper trail input**

If traditional genealogical records indicate that a common ancestor between you and your match could not have lived in a certain number of past generations, your TIP results can be refined. Note, if you are not sure of this information, you should not change the value of "1" below.  
 Note: "0" or negative values are not accepted in the generations field.

Gerald Linwood Childs and William Chapin Child II did not share a common ancestor in the last  generation(s).

Markers:  Display every 4 generations.

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## Big Y Shared Variants

Named Variants Private Variants Matching

Match Name	Non-Matching Variants	Shared Variants	Match Date
<input type="text" value="Name Search"/> Gerald Linnwood Childs <a href="#">Link on Family Tree</a>	<input type="text" value="SNP Name Search"/> 5428238, 5620705, 15047234, 15691757, 7304134	<input type="text" value="Match Date Search"/> 1041374	1/25/2022

**Understanding Your Terminal SNP Matches**  
 Our Big Y Block Tree uses a block diagram of the Y-DNA Haplotree to show the relationship between you and other Big Y testers. View the Block Tree to view more information about how you and other testers match and to potentially find more matches.

[View Big Y Block Tree](#)

**About Analyzed Variants**  
 Total # of variants considered for matching = 1,245,476  
 Number of matching, nonmatching, and no call variants will total up to 1,245,476 for each pair of samples

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## BIG Y Block Tree

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## Less shared DNA for known kinship

**Child Cousins**

```

    graph TD
      E[Ephraim Child (1683-1756)] --> EJ[Ephraim Child, Jr.]
      E --> H[Henry Child]
      EJ --> I[Inesse Child]
      H --> W[Willard Child]
      I --> MA[Mark Anthony Child]
      W --> L[Luther Child]
      MA --> AB[Alfred Bosworth Child]
      L --> AT[Asa Thurston Child]
      AB --> OR[Orville Rensselaer Child]
      AT --> HT[Henry Thurston Child]
      OR --> WA[William Alfred Child]
      HT --> WC[William Chapin Child]
      WA --> WW[William Warren Child]
      WC --> HTH[Henry Thurston Child II]
      WW --> KW[Kenneth William Child]
      HTH --> WCH2[William Chapin Child II]
      KW --> RB[Rex Brown Child]
      WCH2 --> CC[Christopher C. Child]
      RB --> KB[Kelly Boisen Child]
    
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## Pat's matches

Genetic Distance	Name	Earliest Known Ancestor	Y-DNA Haplogroup	Terminal SNP	Match Date
2	Christopher Challenger Child	Christopher Child	R-M269		4/4/2006

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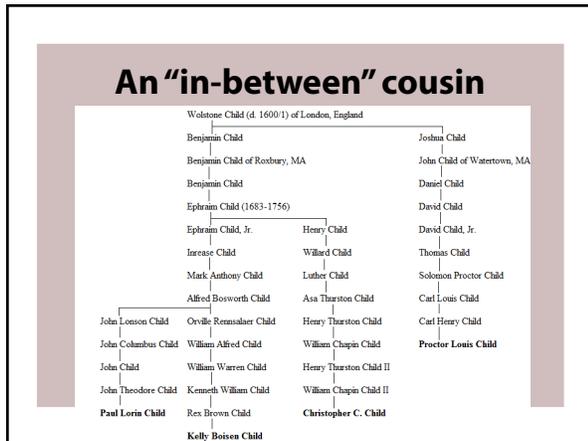
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## Paul's matches

Genetic Distance	Name	Earliest Known Ancestor	Y-DNA Haplogroup	Terminal SNP	Match Date
1	Proctor Louis Child		R-M269	M269	5/8/2007
3	Christopher Challenger Child	Christopher Child	R-M269		5/8/2007
4	Mr. Kelly Boisen Child		R-M269		5/8/2007

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### A riddle!

- Kelly does not match Chris or Pat
- Chris and Pat match each other
- Paul matches, Chris, Pat, and Kelly!

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### Looking at the Markers



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### Look at the Markers

- Chris and Pat (9<sup>th</sup> cousins 2x rem) 35/37
- Paul and Pat (9<sup>th</sup> cousins 3x rem) 36/37
- Paul and Chris (8<sup>th</sup> cousins) 34/37
- Paul and Kelly (4<sup>th</sup> cousins 1x rem) 33/37
- Kelly and Chris (8<sup>th</sup> cousins 1x rem) 30/37
- Kelly and Pat (9<sup>th</sup> cousins 4x rem) 32/37

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# "Traditional" Y-DNA Studies

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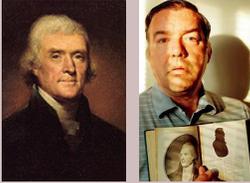
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## Thomas Jefferson & Sally Hemings

- First reported in the tabloid press in 1802
- Denied by Jefferson's white family with factually inaccurate claims
- DNA testing done in 1998



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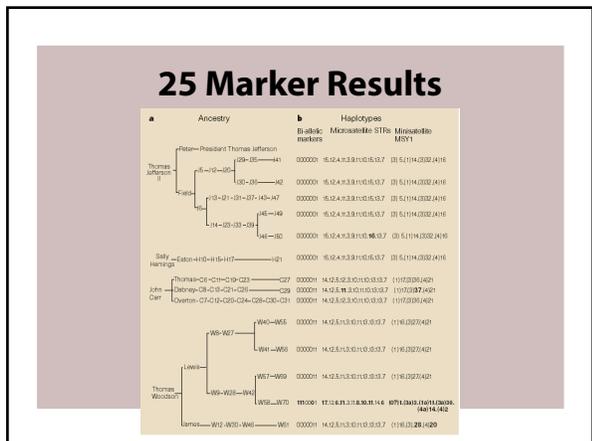
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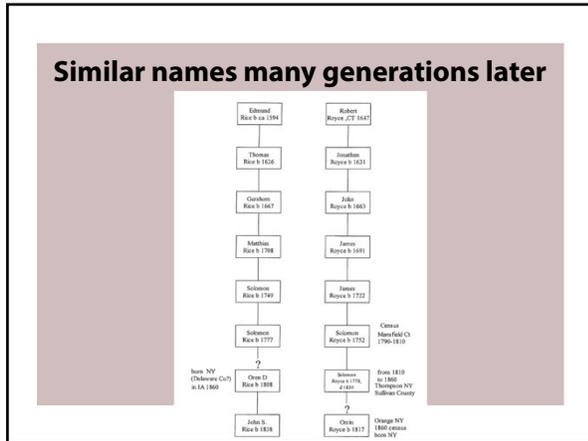
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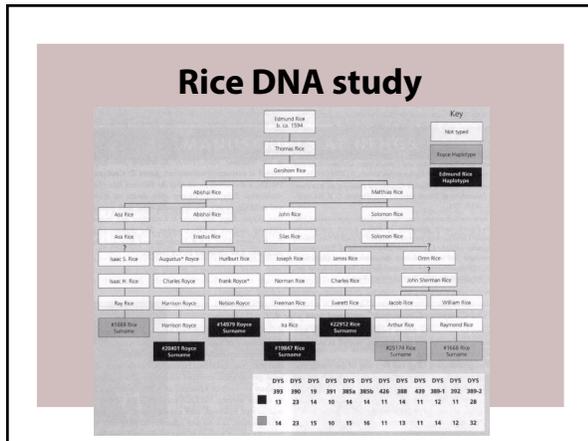
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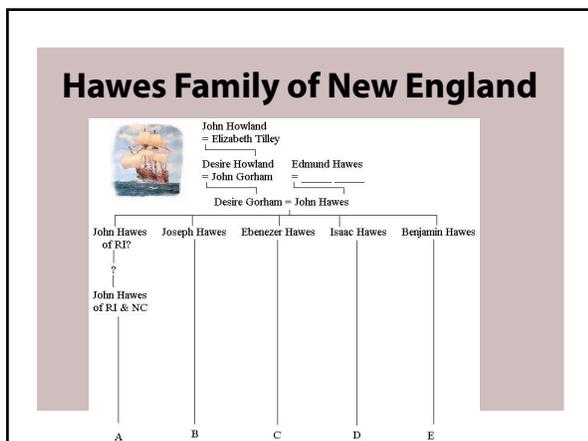
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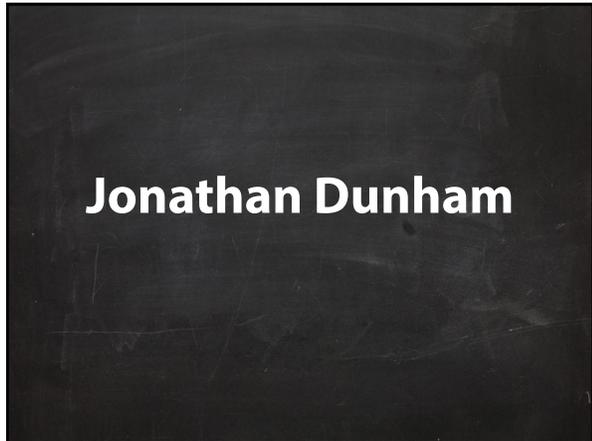
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### Which Dunham family?

Richard Singletary (d. 1687)  
of Salisbury and Haverhill, Mass.  
= \_\_\_\_\_  
|  
Jonathan Singletary *alias* Dunham  
= Mary Bloomfield  
|  
Benjamin Dunham  
= Mary \_\_\_\_\_  
|  
Jonathan Dunham of Woodbridge, N.J.  
= Mary Smith

\*Samuel Dunham (d. 1824) of Frederick Co., Va. (now Berkeley Co., W.V.)  
= Hannah \_\_\_\_\_  
|  
Jacob Dunham  
= Catherine Goodnight  
|  
Jacob Mackey Dunham  
= Louisa Eliza Stroup

Jacob Wilham Dunham  
= Mary Ann Kearney  
|  
Ralph Wade Emerson Dunham  
= Ruth Lucile Armour  
|  
Stanley Armour Dunham  
= Madelyn Lee Payne  
|  
Stanley Ann Dunham  
= Barack Hussein Obama  
|  
Barack Hussein Obama, Jr. (b. 1961)  
44th U.S. President

John Dunham (d. 1669)  
of Plymouth, Mass.  
= Abigail Parker  
|  
Benjamin Dunham  
= Elizabeth Tison  
|  
Elihu Dunham  
= Mary Brodham  
|  
Jonathan Dunham  
= Jane Platt  
|  
Samuel Dunham of Pocomoke, N.J.  
= Mary Lucas

Samuel Linnel Dunham  
= Carrie Hancock  
|  
Harvey Samuel Dunham  
= Virginia Abner Mifford  
|  
David Lee Dunham (b. 1937)  
FTDNA #1766  
author of multi-volume  
Dunham and Goodnight  
genealogies

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### The Singletary Dunham

Richard Singletary (d. 1687)  
of Salisbury and Haverhill, Mass.  
= \_\_\_\_\_  
|  
Jonathan Singletary *alias* Dunham  
= Mary Bloomfield  
|  
Benjamin Dunham  
= Mary \_\_\_\_\_  
|  
Jonathan Dunham of Woodbridge, N.J.  
= Mary Smith

\*Samuel Dunham (d. 1824) of Frederick Co., Va. (now Berkeley Co., W.V.)  
= Hannah \_\_\_\_\_  
|  
Jacob Dunham  
= Catherine Goodnight  
|  
Jacob Mackey Dunham  
= Louisa Eliza Stroup

Jacob Wilham Dunham  
= Mary Ann Kearney  
|  
Ralph Wade Emerson Dunham  
= Ruth Lucile Armour  
|  
Stanley Armour Dunham  
= Madelyn Lee Payne  
|  
Stanley Ann Dunham  
= Barack Hussein Obama  
|  
Barack Hussein Obama, Jr. (b. 1961)  
44th U.S. President

Samuel Linnel Dunham  
= Carrie Hancock  
|  
Harvey Samuel Dunham  
= Virginia Abner Mifford  
|  
David Lee Dunham (b. 1937)  
FTDNA #1766  
author of multi-volume  
Dunham and Goodnight  
genealogies

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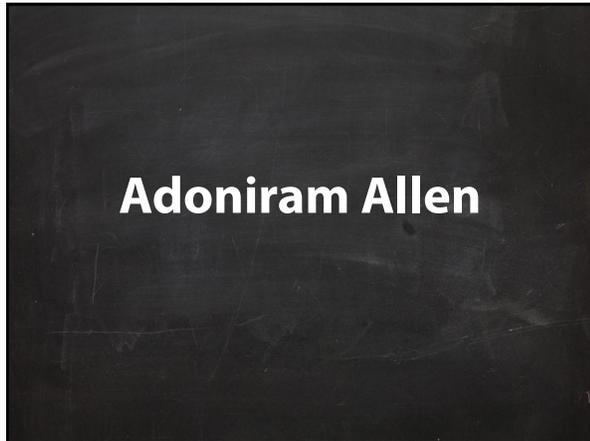
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### Adoniram Allen (ca. 1751-aft. 1830)

- Lived in North and South Carolina and Kentucky
- David Allen (b. 1712/3), born Suffield, Conn., later of Hanover, N.J., had a brother Adoniram that died young
- A David Allen, from New Jersey, was in Surry County, North Carolina by 1771, with two other Allen men of age to be his sons

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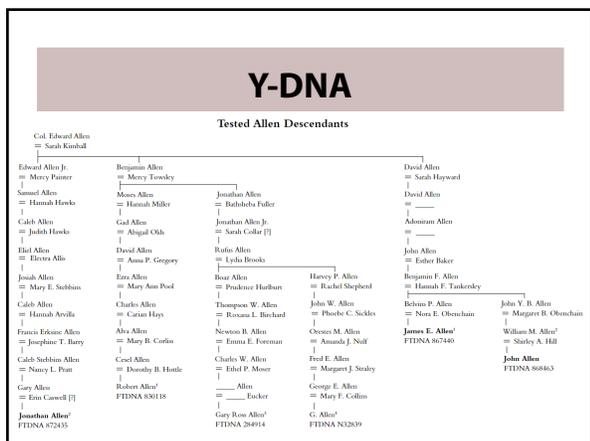
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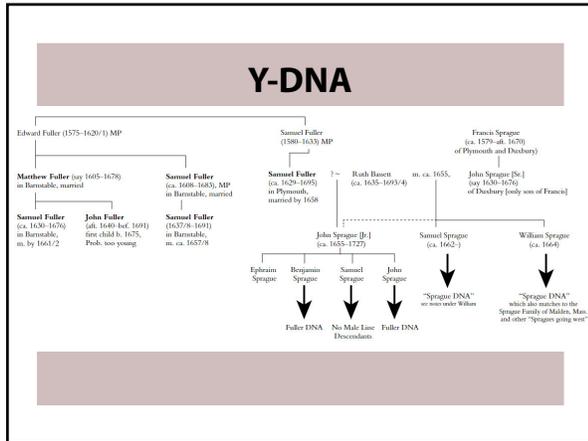
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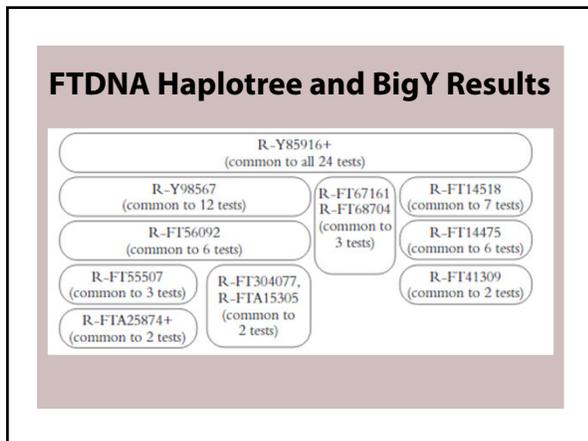
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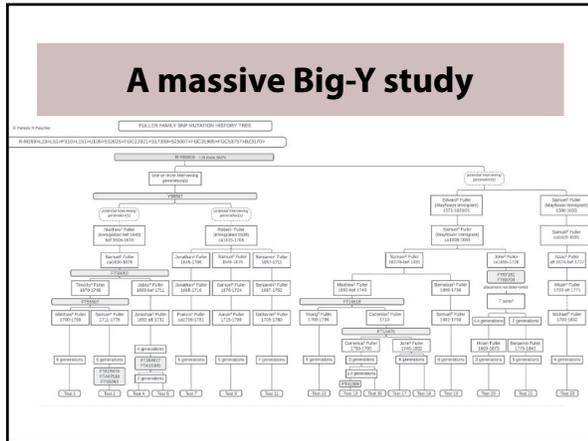
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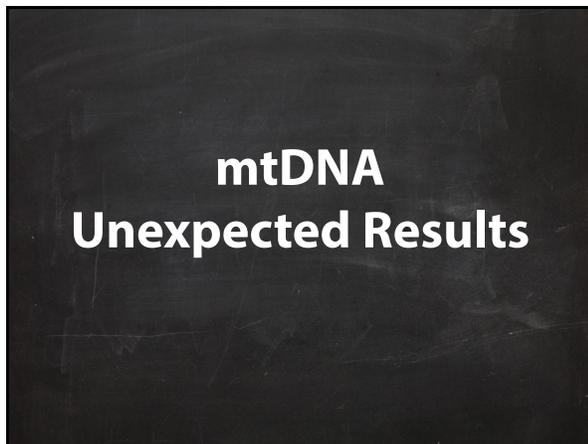
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## Basics of mtDNA

- mtDNA is inherited from a person's mother
- Matrilineal-related people (even several generations back) share the same mtDNA markers
- People who do not share the same markers are not matrilineally related within recorded history (a few centuries)
- Most cases involve the solicitation of many people and existing descendants who have already participated

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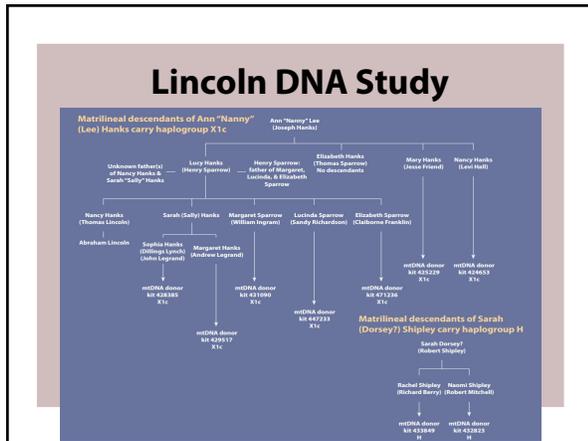
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## When something might be off . . .

- Known, tested kin not showing up as a match
- Haplogroups of a different region than your research indicates (could be pre-1492)

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## X Chromosome

- Not viewable on Ancestry.com
- Viewable for matches on 23andme, familytreedna (planned for MyHeritage)
- Ethnicity estimates only available on 23andme

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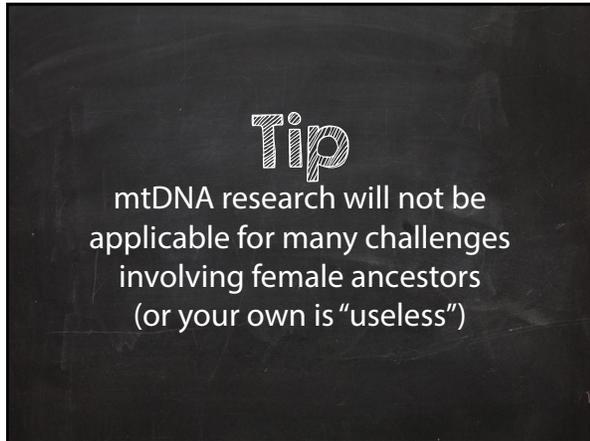
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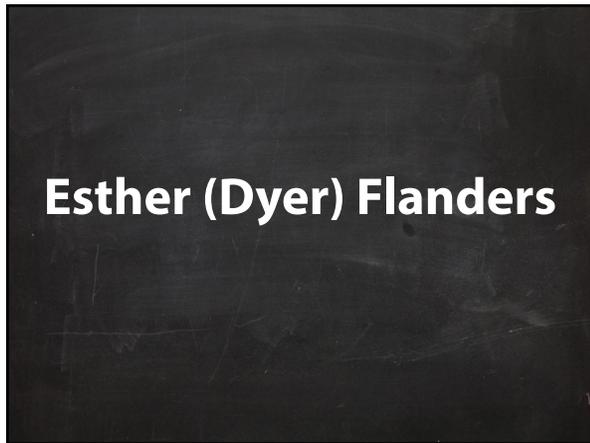
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**Esther Dyer of Braintree, Vermont**

- Born Vermont, about 1790
- Married Braintree, Vermont, 1814, George Flanders, and moved to New York
- In later censuses, Esther lived with Tarrant Dyer, a grandson of Ichabod Dyer, Sr. of Braintree, Vermont
- Based on the 1800 censuses, Esther could be a daughter of Ichabod Dyer, Jr., or his eldest son Ichabod Dyer, Jr.

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### Which family does Esther belong to?

Ichabod Dyer, Sr. (1745-1828)  
= Mary Jones (1746-1820)

Ichabod Dyer, Jr. (ca. 1766-1856/7)  
= Pheba Nichols (1772-1814)

Samuel Dyer (1774-bef. 1870)  
= Betsey Gleason (ca. 1783-bef. 1865)

Esther Dyer (ca. 1790-1876)  
= George Flanders

Tarrant King Dyer (1799-1881)

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### Matrilineal descendants

Margaret \_\_\_\_\_  
= William Nichols

Priscilla Mullins of the *Mayflower*  
= John Alden

3 generations

3 generations

Pheba Nichols = Ichabod Dyer, Jr.  
(1772-1814) (ca. 1766-1856/7)

Mary Jones (1746-1820)  
= Ichabod Dyer, Sr. (1745-1828)

Esther Dyer (ca. 1790-1876)  
= George Flanders

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### Matrilineal descendants

Margaret \_\_\_\_\_  
= William Nichols

Priscilla Mullins of the *Mayflower*  
= John Alden

Mary Nichols Hannah Nichols

Ruth Alden Elizabeth Sarah Rebecca

Haplogroup H27a

3 generations

2 generations

mtDNA participants haplo - H6a1a9

Pheba Nichols = Ichabod Dyer, Jr.  
(1772-1814) (ca. 1766-1856/7)

Mary Dyer

Esther Dyer = George Flanders

Polly Dyer

5 generations

6 generations

5 generations

Pheba Nichols mtDNA

Mary Jones mtDNA

Esther Dyer mtDNA

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### Expected Conclusions

- Matrilineal descendants of Phebe Nichols should match descendants of Margaret (\_\_\_\_\_) Nichols
- Matrilineal descendants of Mary Jones should match descendants of Priscilla Mullins
- Matrilineal descendants of Esther Dyer should match one of these two groups
- If Esther's descendants match the Nichols bunch, she was a daughter of Phebe Nichols and Ichabod Dyer, Jr.
- If Esther's descendants match the Mullins/Alden bunch, she was a daughter of Mary Jones & Ichabod Dyer, Sr.

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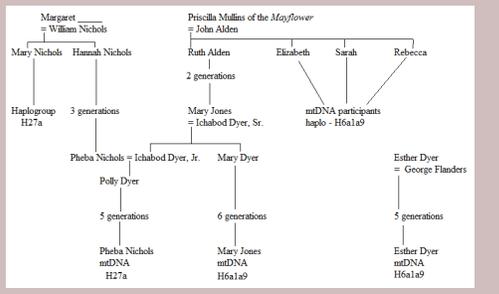
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### Results!




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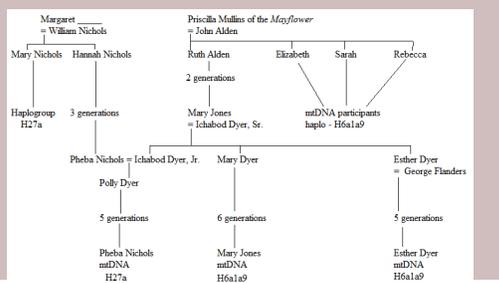
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### Esther Dyer is a daughter of Ichabod Dyer, Sr. and Molly Jones




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**Tip**

Be aware of "recent surprises" that may be learned when soliciting living people

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**Mrs. Daniel Doane ("Constant Snow")**

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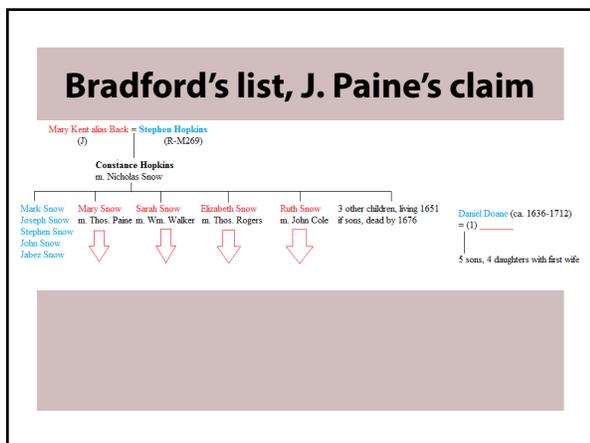
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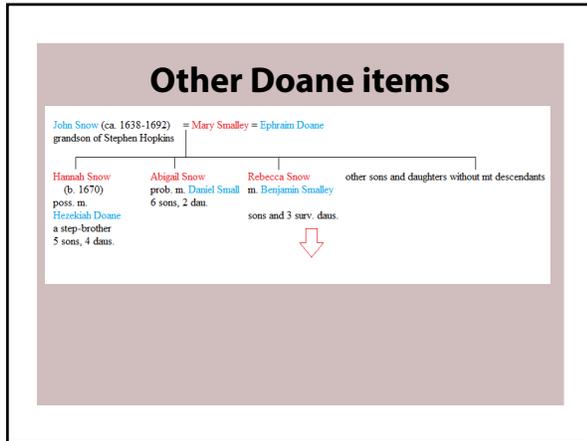
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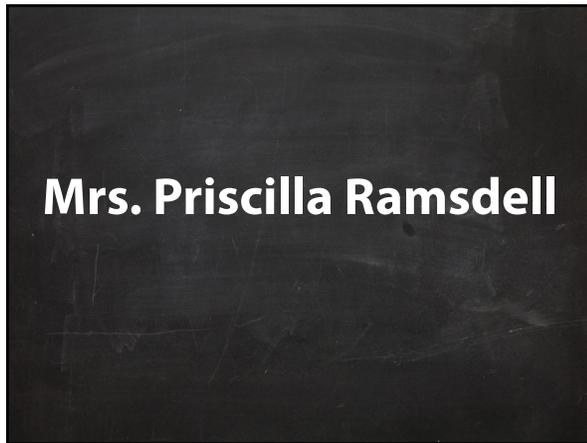
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### Priscilla ( \_\_\_\_\_ ?) Ramsdell

- Married possibly by 1648 to John Ramsdell of Lynn, MA
- Names son Aquila
- Some interactions with the family of Oliver Purchase of Lynn (son of Aquila)
- Could Priscilla be Oliver's sister?

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### Tracing matrilineal descendants

Matrilineal descents from Ann (Squire) Purchase and Priscilla (\_\_\_\_\_) Ramsdell

<p>Ann Squire = Aquila Purchase          ↓          Sarah Purchase = Gamaliel Phippen          ↓          Mehitable Phippen = Samuel Clark          ↓          Hannah Clark = Thomas Tousey          ↓          Amaryllis Tousey = Abel Prindle          ↓          Currence Prindle = Nathan Preston          ↓          Polly Preston = David Nichols          ↓          Lemira Nichols = Hiram Marsh          ↓          Lois, Cousa Margaret Marsh = Lyman Asa Cooper          ↓          Lenora Cooper = George Betterly Heath          ↓          NAME WITHHELD          KIT #555418 (U3b2b)</p>	<p>Priscilla _____ = John Ramsdell          ↓          Priscilla Ramsdell = James Adams          ↓          Hanna Adams = William Russell          ↓          Tabitha Russell = Ephraim Warren          ↓          Priscilla Warren = Peter Adams          ↓          Phoebe Adams = Daniel Tiffany          ↓          Lucinda Tiffany = Beman Stedman          ↓          Evelina Stedman = Eivan Hutchins Malbone          ↓          Ellen Frances Malbone = Benjamin John Dodge          ↓          Florence Dodge = Frank L. Gilbert          ↓          NAME WITHHELD          KIT #536511 (U5a1b)</p>
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## Going Fishing!

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### Mrs. Hester Daniels of Sherborn, MA

- Hester marries Robert Daniel(s), about 1693
- Matrilineal descendant take mtDNA test on FamilyTreeDNA
- Until this point, only theory on Hester's maiden name has been shown to be demonstrably false.

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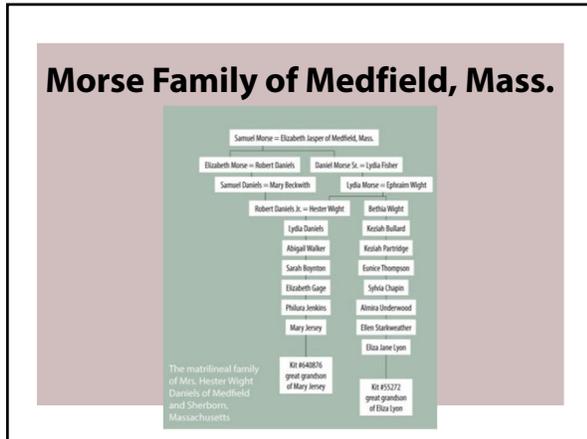
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### Review

1. YDNA results are most effective when there is a plausible candidate or other candidates are not patrilineally related. Big Y Studies offer more “open ended” possibilities if in-between generations are unknown
2. mtDNA studies in certain situations, can be more specific at which point a surname enters a generation, to corroborate or dismiss competing theories

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## QUESTIONS?

**Hire Research Services**  
*research@nehgs.org*

**Chat with a Genealogist**  
*AmericanAncestors.org/chat*

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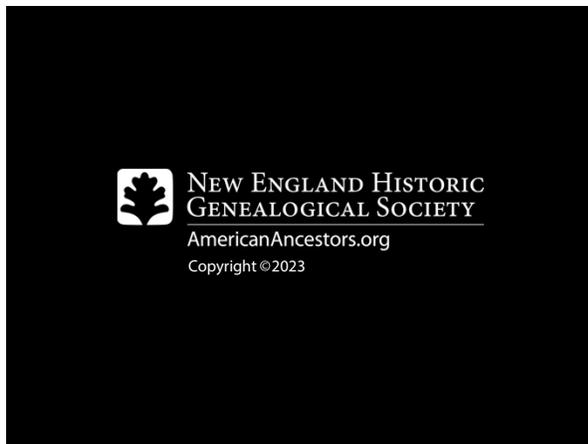
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