

# From Mystery to Match

## How DNA Revealed James Heath's True Father

### Objective

This research project tests the hypothesis that **Adam Grady Sanders** (b. 25 November 1915, Cardwell, Missouri; d. 25 February 1995, Tulare, California) is the biological father of **James Harry "Doc" Heath** (b. 17 June 1938, Flint, Michigan), son of **Agnes Glenavie Sullivan**.

This conclusion is supported through autosomal DNA analysis, cluster evaluation, WATO modeling, and corroborating documentary context.

### Limitations

Privacy restrictions limited access to records for living Sanders descendants, Heath had no contact with paternal relatives because he was unaware of his biological father, and only one half-sibling tested DNA on 23andMe—allowing comparison only to Heath's daughter, as Heath's own results were available exclusively through Ancestry.

### Results Summary

Analysis of DNA matches, ethnicity patterns, and genealogical timelines confirms the hypothesis: **Adam Grady Sanders is the father of James Harry Heath**. Evidence was evaluated using Leeds Charts, DNA Painter's *What Are the Odds (WATO)* tool, and documentary records. No documentary or DNA evidence supports any alternative paternal candidate. Ethnicity was consistent with Sanders' descendants and inconsistent with the Brooks hypothesis.

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### Background

James Harry Heath was born in Flint, Michigan, to an unwed mother, Agnes Glenavie Sullivan. He was raised by maternal grandparents until age five, when adopted by his mother's first husband, Dale C. Heath. Agnes Glenavie Sullivan told the family that Harry Brooks had given her alcohol while she was babysitting, and she lost consciousness and he "had his way" with her. No one doubted her story. Family tradition held that Heath's father was "Harry Brooks," but DNA testing revealed no connection to the Brooks line.

Adam Grady Sanders, born in Missouri, migrated westward for work. Oral testimony from Sanders' descendants indicates he traveled to Flint during the 1937 labor strikes, when automotive jobs drew workers nationwide. He joined two of his brothers who were already working in the industry. Agnes' sister, Norma Josephine Sullivan, said that it was so routine that

someone from out of town would arrive at their home that they always put on an extra potato for dinner, and she never knew where she would wake up in the morning, having lost her bed to a late-night arrival. Agnes' family lived near the Buick plant, and her mother operated a cafeteria serving workers. This context makes a meeting between Agnes and Adam plausible.

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## Known Facts

### 1. Identity of the Child: James Harry Heath

James Harry Heath was born on 17 June 1938 in Flint, Genesee County, Michigan. His mother was Agnes Glenavie Sullivan. His birth record identifies his stepfather, Dale Heath, as his adoptive father; no biological father is named.<sup>1</sup> James spent his early life in Flint, Michigan (1938–1960), later residing in Newport, Rhode Island (1961), Azusa, California (1964–2002), and Vassar, Michigan (2002–2020).<sup>2</sup>

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### 2. Identity of the Hypothesized Biological Father: Adam Grady Sanders

Adam Grady Sanders was born on 25 November 1915 in Cardwell, Dunklin County, Missouri.<sup>3</sup> He married three times: first to Louise Lauer on 19 October 1935 in Cardwell, Missouri<sup>4</sup> (divorced 22 September 1936 in Greene County, Arkansas),<sup>5</sup> and second to Helen Dorothy Hunt on 12 February 1940 in Yuma, Arizona.<sup>6</sup>

Adam fathered multiple known children, who include the following:

- VL Sanders<sup>7</sup>

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<sup>1</sup> "Birth Certificate—James Heath," 17 June 1938, Flint, Genesee County, Michigan; certified copy of original, record no. 975, local file B-176.

<sup>2</sup> U.S. Phone and Address Directories, 1993–2002, Azusa, California (1993–1994) and Vassar, Michigan (2002–2020); database and images, Ancestry (<https://www.ancestry.com> : accessed [date]).

<sup>3</sup> "U.S., World War II Draft Cards Young Men, 1940–1947," Adam Grady Sanders, Dunklin County, Missouri; National Archives at St. Louis; WWII Draft Registration Cards for Missouri, 16 October 1940–31 March 1947; Records of the Selective Service System, RG 147; box 283; database and images, Ancestry (<https://www.ancestry.com> : accessed [date]).

<sup>4</sup> "Missouri, U.S., Marriage Records, 1805–2002," Adam G. Sanders and Louise Lauer, 19 October 1935, Cardwell, Dunklin County; Missouri State Archives, Jefferson City; microfilm; database and images, Ancestry (<https://www.ancestry.com> : accessed [date]).

<sup>5</sup> "Arkansas, U.S., Divorces, 1923–1974," Adam G. Sanders and Louise Lauer, 22 September 1936, Greene County; Arkansas Department of Vital Records, Little Rock; film no. 2; database and images, Ancestry (<https://www.ancestry.com> : accessed [date]).

<sup>6</sup> U.S., Find a Grave® Index, 1600s–Current, <https://www.findagrave.com/memorial/9918909/adam-grady-sanders>

<sup>7</sup> "Ancestry.com. California Birth Index, 1905-1995 [database on-line]," Provo, UT, USA: Ancestry.com Operations Inc, 2005, State of California. California Birth Index, 1905-1995. Sacramento, CA, USA: State of California Department of Health Services, Center for Health Statistics., <https://www.ancestry.com/search/collections/5247/>.

- MA Sanders,<sup>8</sup>
- SL Sanders,<sup>9</sup>
- GD Sanders,<sup>10</sup>
- DR Sanders,<sup>11</sup>
- TW Sanders,<sup>12</sup>
- Baby Sanders,
- DM Sanders,
- PH Sanders,<sup>13</sup> and
- Loyd Virgil Sanders,<sup>14</sup>

Several of these individuals—or their children—have completed DNA testing and share significant DNA with descendants of James Harry Heath.

- Adam died on 25 February 1995 in Tulare, Tulare County, California.<sup>15</sup> Family accounts indicate that he traveled to Michigan to work in the auto factories during the late 1930s. Although he does not appear in the Flint city directory for 1937–1938. Family testimony and labor migration patterns indicate Adam traveled to Michigan in the late 1930s seeking auto industry work. His later presence in Michigan (documented by the 1946 birth of a child) supports a pattern of mobility consistent with this claim.

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<sup>8</sup> “U.S., Newspapers.com™ Birth Index, 1800s–2003,” Ventura County Star-Free Press, 28 February 1942, Ventura, California; database and images, Newspapers.com (<https://www.newspapers.com> : accessed [date]).

<sup>9</sup> “U.S., Public Records Index, 1950–1993, Volume 2,” database on-line, Ancestry (<https://www.ancestry.com/search/collections/1732/> ([ancestry.com in Bing](https://www.ancestry.com)) : accessed [date]); citing voter registration lists, public record filings, and residential records.

<sup>10</sup> “Ancestry.com. 1950 United States Federal Census [database on-line],” Lehi, UT, USA: Ancestry.com Operations, Inc., 2022., 1950, Original data: Department of Commerce. Bureau of the Census. 1913-1/1/1972. Population Schedules for the 1950 Census, 1950 - 1950. Washington, DC: National Archives at Washington, DC., Ancestry.com, Noted per Citation in Source Detail. “1950 United States Federal Census,” database and images, Ancestry (<https://www.ancestry.com> : accessed [date]); citing Department of Commerce, Bureau of the Census, *Population Schedules for the 1950 Census*, Washington, D.C., National Archives (NAID 43290879), RG 29.

<sup>11</sup> “California, Death Index, 1940-1997,” Family Search, Family Search, <https://familysearch.org/ark:/61903/1:1:VPPF-RKC?lang=en>.

<sup>12</sup> 1950 United States Federal Census

<sup>13</sup> “California Birth Index, 1905–1995,” database on-line, Ancestry (<https://www.ancestry.com/search/collections/5247/> ([ancestry.com in Bing](https://www.ancestry.com)) : accessed [date]); citing State of California Department of Health Services, Center for Health Statistics, Sacramento. “California Birth Index, 1905–1995,” entry for [child’s initials], born in Tulare County; database and images, Ancestry (<https://www.ancestry.com> : accessed [date]).

<sup>14</sup> Find a Grave, database and images (<https://www.findagrave.com> : accessed [date]), memorial 9918909, Adam Grady Sanders (1915–1995), Tulare County, California.

<sup>15</sup> “California, U.S., Death Index, 1940–1997,” entry for Adam Grady Sanders, died 25 February 1995, Tulare County; database, FamilySearch (<https://familysearch.org/ark:/61903/1:1:VPPF-RKC> ([familysearch.org in Bing](https://familysearch.org)) : accessed [date]).

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### 3. Timeline of Overlap and Opportunity

During 1937–1938, the period in which James would have been conceived and born, James's mother, Agnes Glenavie Sullivan, resided in Flint, Michigan. Adam Grady Sanders was a 22-year-old unmarried man during this time and is reported to have been in Michigan seeking employment in the auto industry. Agnes was 14 years old at the time of conception. No evidence has been found to indicate that Adam was geographically unavailable during this period.

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### 4. DNA Evidence Connecting the Two Families

Multiple DNA test results link James Harry Heath's descendants to the descendants of Adam Grady Sanders. These matches include several high-level relationships consistent with half-sibling connections:

- LV Sanders (1859 cM, half brother)
- TW Sanders (1850 cM, half brother)
- MA Sanders (1700 cM, half brother)
- PH Sanders (1548 cM, half sister)
- VS (1668 cM, half sister)
- K. Sanders (1053 cM, half niece)
- HT (789 cM, half niece)
- T. Sanders (985 cM, grandnephew)
- ES (489 cM, half grandniece)
- R. Hagerman (220 cM, half great-grandniece)
- K.G. (122 cM, half grandniece)
- KO (325 cM, half grandniece)
- SH (381 cM, half grandnephew)
- TH (578 cM, half grandniece)
- KT (1037 cM, half niece)
- AT (459 cM, first cousin once removed)

Maternal-line matches also appear as expected and do not conflict with the paternal cluster:

- BLS (944 cM, first cousin)
- JB (718 cM, first cousin)
- PS (810 cM, first cousin)
- DC (878 cM, half niece)
- HC (405 cM, half grandnephew)

The paternal matches form a clear, consistent cluster descending from Adam Grady Sanders. Several of these matches also triangulate on shared segments, further supporting a common

paternal ancestor. Half-siblings typically share 1,300–2,300 cM so the values fall exactly where expected. No other relationship category fits these cM values.

The cM values fall squarely within expected ranges for half-siblings and their descendants.

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## Documentary Research

- **Census Records (1930, 1940):** Sanders living in Dunklin County, Missouri with parents James Thomas Sanders and Vera Almita Merideth.
- **Marriage Records:** Brief marriage in Paragould, Arkansas (1937); remarried in Yuma, Arizona (1940).
- **Migration:** By 1940, Sanders and wife Helen Dorothy Hunt were in Kern County, California. Later records show him as a day laborer and musician, moving throughout California's agricultural belt.
- **Selective Service (1941):** Listed residence in Dunklin County, Missouri.
- **Children:** At least 10 children born across California (6), Michigan (2), Oregon (1), and Missouri (1).
- **Death (1995):** Obituary confirms residence in Tulare County, California.

This evidence supports Sanders' mobility and presence in Flint during the relevant period, consistent with fathering James Heath. No records contradict the hypothesis. No records place Adam elsewhere during the conception window.

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## DNA Research

DNA results were available from seven children of Adam Grady Sanders, including Heath himself, three half-brothers, and three half-sisters. Additional data came from nieces, nephews, and maternal cousins of Heath. The original Brooks hypothesis was eliminated because there were no matches, no cluster, or no triangulation. The half-sibling cannot be explained by any other relationship (e.g., first cousins would share far less DNA).

## Tools Applied

- **Ancestry ThruLines:** Confirmed shared DNA segments among descendants of Sanders.
- **McGuire Charts:** Constructed to visualize relationships and centimorgan ranges. See Appendix A.
- **DNAGEDCOM:** Gathered data from **Ancestry, 23andMe, MyHeritage, and GEDmatch** and organized it into spreadsheets and clusters to do deeper analysis than the testing sites allow.
- **Shared DNA Tool:** Graphed closest matches. See Appendix A.

- **Ethnicity Heat Maps:** Showed consistent inheritance patterns across siblings, with strong signals in Southeastern England, Northwestern Europe, and Central Scotland. See Appendix A.
- **WATO Analysis:** Matches averaged 1390 cM. All closest matches aligned with the half-sibling hypothesis.

## WATO Results

Match Name	Shared cM	Hypothesis Result
LV Sanders	1859	Half Sibling (100%)
TW Sanders	1850	Half Sibling (100%)
MA Sanders	1700	Half Sibling (100%)
VS	1668	Half Sibling (100%)
PH Sanders	1548	Half Sibling (100%)
HT.	789	Half Aunt/Uncle (92.28%)
CT	314	Half First Cousin (38.97%)

The combined odds ratio strongly supports the hypothesis.

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## Conclusion

No documentary or DNA evidence has been found that contradicts the conclusion that Adam Grady Sanders is the biological father of James Harry Heath. The convergence of DNA evidence, genealogical documentation, and historical context demonstrates that **James Harry Heath is the biological son of Adam Grady Sanders and grandson of James Thomas Sanders**. No alternative hypothesis is supported by the data.

This conclusion meets the Genealogical Proof Standard: the evidence is reasonably exhaustive, conflicts are resolved, and the conclusion is well-supported and coherent.

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## Future Research Suggestions

Although the evidence strongly supports the conclusion that Adam Grady Sanders is the biological father of James Harry Heath, additional avenues of research could further strengthen and expand this case:

- **Additional DNA Testing**  
Encourage more descendants of Adam Grady Sanders (particularly those not yet tested or tested on different platforms) to participate in DNA analysis. Cross-platform comparisons

(Ancestry, 23andMe, MyHeritage, FamilyTreeDNA) would provide broader triangulation.

- **Y-DNA and mtDNA Studies**  
Explore targeted Y-DNA testing among male descendants of Adam Grady Sanders to confirm paternal line inheritance. mtDNA testing of maternal descendants could also help clarify maternal line connections.
  - **Expanded Documentary Research**  
Investigate employment records, union membership lists, and city directories from Flint, Michigan during the 1937–1938 labor strike period to corroborate Sanders’ presence in the area.
  - **Oral Histories**  
Collect additional family testimonies from Sanders’ descendants and Sullivan relatives. Oral accounts may provide context about travel patterns, relationships, and community ties.
  - **Contextual Social History**  
Examine migration patterns of Missouri farm workers to Michigan auto plants during the late 1930s. This broader historical lens could situate Sanders’ movements within a larger labor migration narrative.
  - **Verification of Altered Records**  
Pursue certified copies of James Heath’s birth record and adoption papers to document the changes in paternal attribution and strengthen the legal record trail.
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## Appendixes

1. **Appendix A – Charts & Graphs**
  - Leeds Chart
  - McGuire Chart (descendants and siblings)
  - Ethnicity heat map
  - Shared DNA graphs
2. **Appendix B – Migration & Timeline Visuals**
  - Migration Graph (showing Adam Grady Sanders’ movements from Missouri → Arkansas → Michigan → California)
  - Timeline chart of marriages, census records, and children’s birthplaces

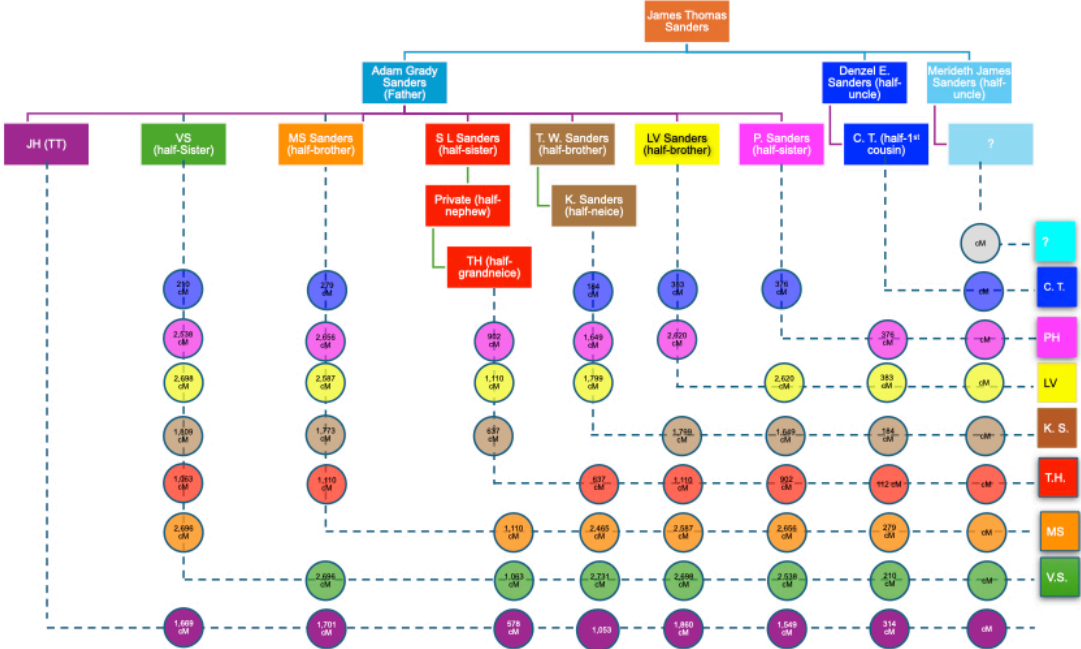
# Appendix A

## Leeds Chart (Paternal Only)

Paternal – Sanders (Sanders line)	Paternal – Merideth (Merideth line)
S.H.*	J.S.
R.H. Managed by S. R.	K.A.
T.B.	A. P.
H.S. Managed by C.H.	L.S. Managed by J. B.
1 T.S.	M. F.
N.B.	J.T.
K.L.	K.F.
K.P.	P.M. Managed by AMD
(Blank?)	T. P.
L_B	C.O. Managed by B. S.
J.N.	R. S.
A. I.	S. C.
J.J.	B.C
L.P.	T.B. Managed by T_B
C.M.	W. E.
J.C.	
J. B.	
C. M.	
S.A. Managed by J. D.	
M. H. Managed by L. P.	
S.H.A.	
R.B. Managed by W. B.	
S.A 2	
S. S.	
R.D.	
B99	
R. C.	
C. M.	
H. D.	
H. P.	
A. S.	
S. F. Managed by S.F.	
C. H. Managed by M. L.	

K.
L.S. Managed by J. B.
L.T. Managed by W. B. T.
M.F.
L. R.
J. N.
J. S.
Md
P. A.
M.S.
M.M.
Unnamed
L. S.
D. C.

McGuire Chart

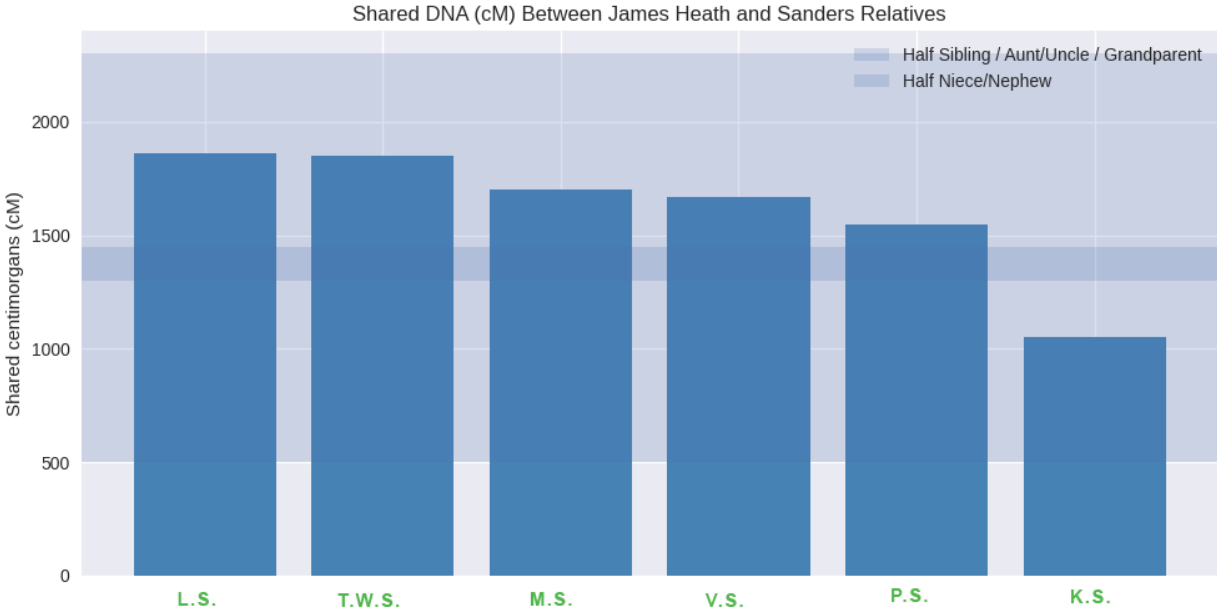


# Clustered Ethnicity Heatmap



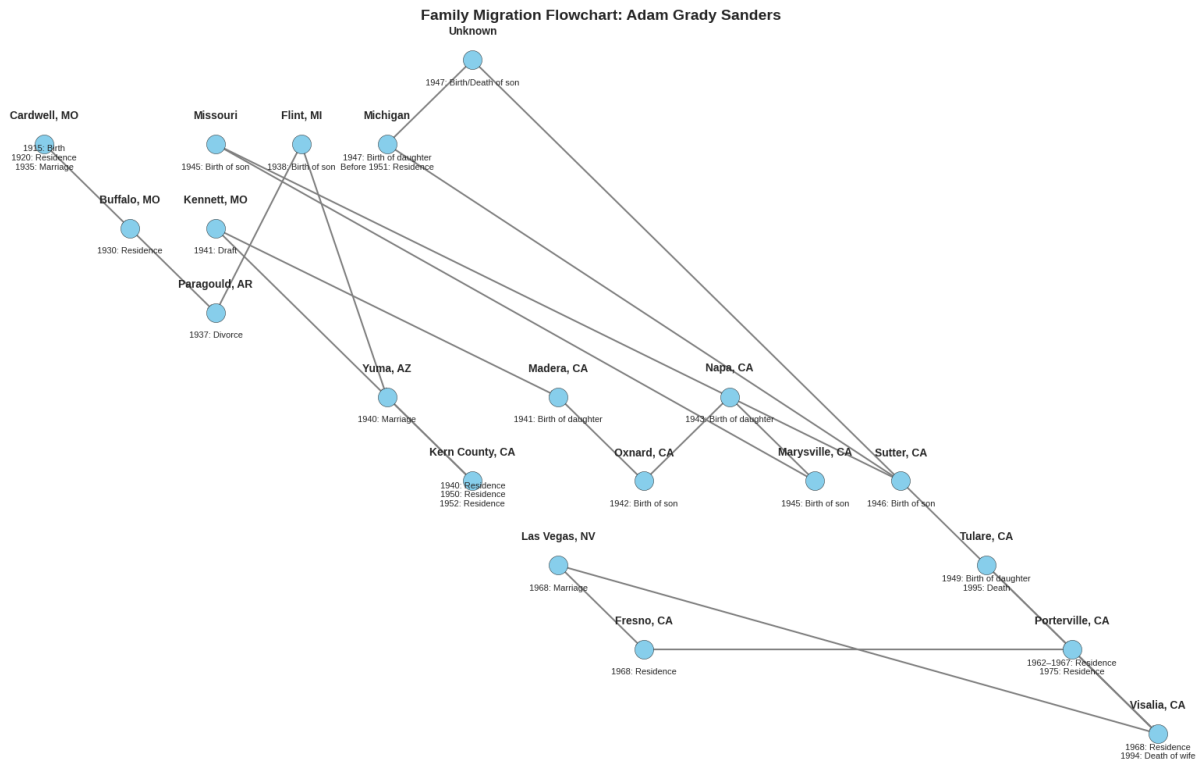
Figure 1. Clustered Ethnicity Heatmap for paternal matches (names masked for privacy).

# Shared DNA (cM) Between James Heath and Sanders Relatives



# Appendix B – Migration & Timeline Visuals

## Migration Flow Chart



## Timeline events

