



WHAT GENETIC ANCESTRY TESTS MEAN (AND WHAT THEY DON'T)

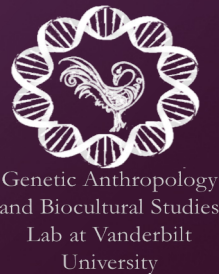
EXPLORING DIFFERENCE IN THE BIOLOGY CLASSROOM

PERSONAL GENETICS EDUCATION PROJECT & CENTER FOR ETHICAL, LEGAL AND SOCIAL IMPLICATIONS (ELSI) RESOURCES AND ANALYSIS (CERA)

APRIL 11, 2023

Jada Benn Torres, Ph.D.
Department of Anthropology

Genetic Anthropology and Biocultural Studies Laboratory



TODAY'S TOPICS



What are the **benefits & dangers** of genetic ancestry testing?

What are the **interpretive limitations** of genetic ancestry testing?

Can genetic ancestry tests tell us about our race/ethnicity ?

WHO ARE YOU? THE PROMISES OF ANCESTRY TESTING



MyHeritage
Discover your family story [Start free trial](#)

Amaze yourself

The simple MyHeritage DNA test will reveal your unique ethnic background, and match you with newfound relatives. Discover the specific groups you descend from among **2,114 geographic regions**, and take family history to the next level with the most affordable DNA test on the market.

[Learn more](#)

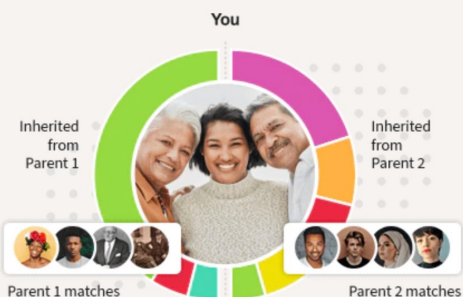
2,114

GEOGRAPHIC
REGIONS

● English	50%
England (Yorkshire)	
andnavian	20%
orway (Viken)	
ian	15%
aly (Abruzzo)	
rth African	10%
more	5%

Accessed 15 Feb. 2023

<https://www.ancestry.com/dna/>



NEW FEATURE: MATCHES BY PARENT*

View both your ethnicities and matches by parental side.

Now you can explore which side of the family your matches and ethnicities come from, without your parents even taking a DNA test. This is all made possible by SideView™, a specialized technology that will soon also include your communities and more!

*Some users will not be able to access this feature until February 2023.

WHAT CAN WE LEARN FROM GENETIC ANCESTRY TESTS?

INDIVIDUAL PERSPECTIVE:

- Geographic origins of your ancestors
- Find biological kin
- Fill in gaps in genealogical records



WHAT CAN WE LEARN FROM GENETIC ANCESTRY TESTS?

Population Perspective:

- Migratory history of a population
- Common ancestry of all people



MORE TO CONSIDER ABOUT THE BENEFITS & DANGERS OF ANCESTRY TESTING...

- Privacy and 3rd party applications
- Law enforcement public data bases
- Familial searches
- DNA Phenotyping



The screenshot displays the Parabon Snapshot website, which offers advanced DNA analysis services. The main navigation bar includes links for Snapshot Home, How It Works, Featured Cases, Request Info, and Account. The primary heading is "Parabon Snapshot Advanced DNA Analysis" with subtext "Genetic Genealogy, Phenotyping, Ancestry & Kinship Analysis". A call to action button says "Learn How You Can Help Solve Crimes".

Below the header, there are several sections:

- Solve Your Toughest Cases — FAST!**: A section describing the service as a cutting-edge forensic DNA analysis tool for solving hard cases quickly. It lists three key services: Genetic Genealogy (searching for relatives in public databases), DNA Phenotyping (predicting physical appearance and ancestry), and Kinship Inference (determining kinship between DNA samples).
- Get Started**: A section with a "Schedule a Free Consultation" button. It explains that the service starts with extracted DNA or biological evidence to predict unknown ancestry and pigmentation, then performs genetic genealogy screening to determine if such analysis would be helpful. It also mentions that a detailed phenotyping report and composite sketch can be produced to advance the investigation.
- Snapshot Prediction Results Composite Profile**: A section showing a composite profile of a person, including predicted physical characteristics like skin color, eye color, hair color, and freckles, along with predicted ancestry (Northern and Western European).



INTERPRETING GENETIC ANCESTRY TESTS

TYPES OF GENETIC ANCESTRY TESTS

I. Uniparental Tests:

a. Mitochondrial DNA:

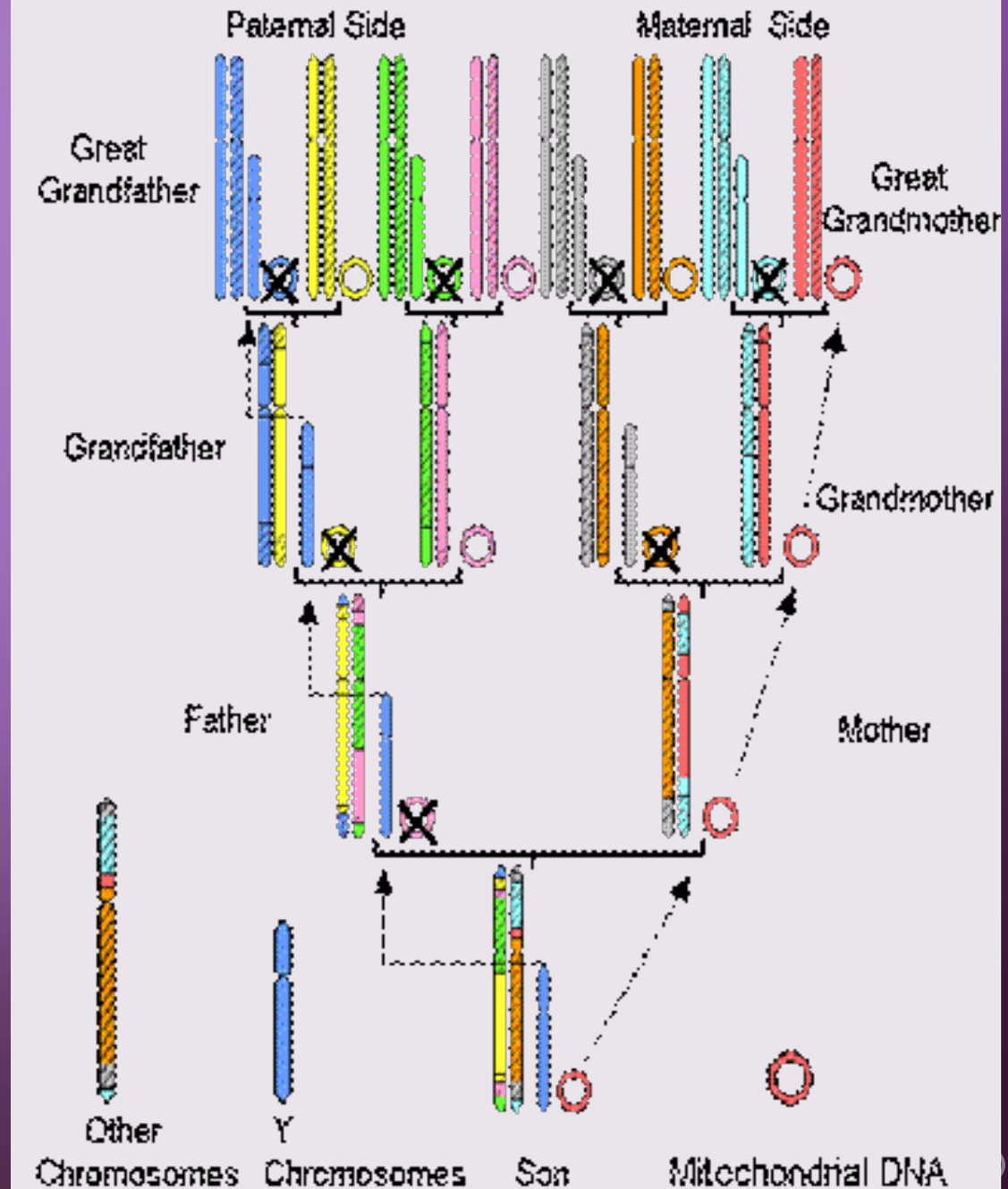
- Maternally inherited

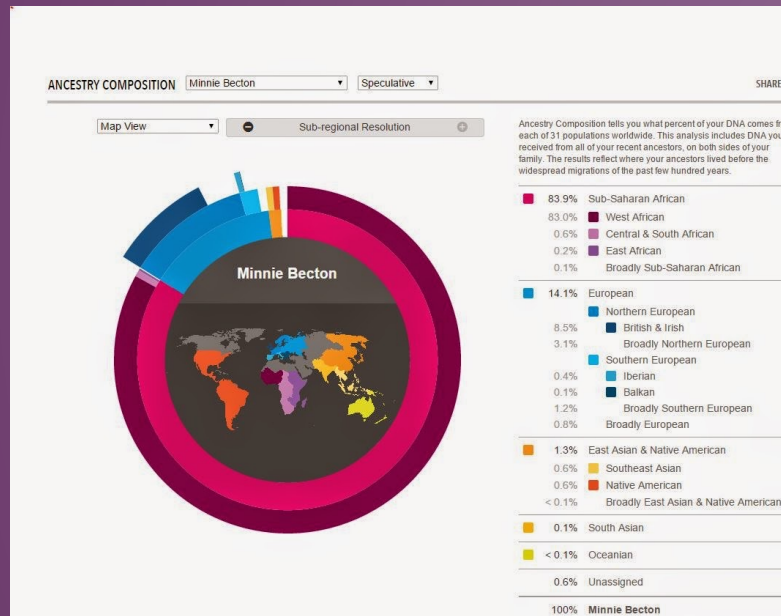
b. Y chromosome:

- Paternally inherited

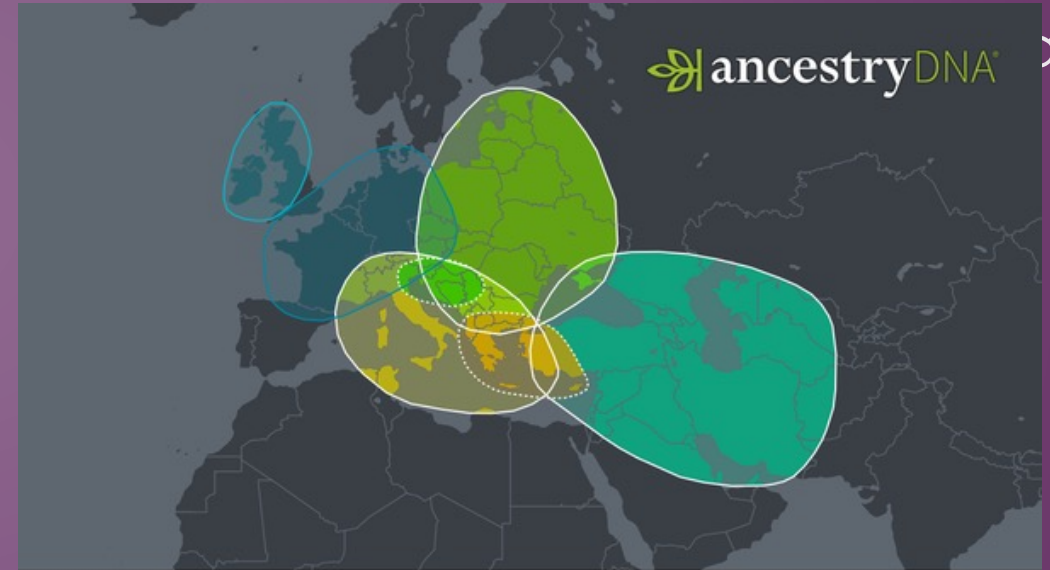
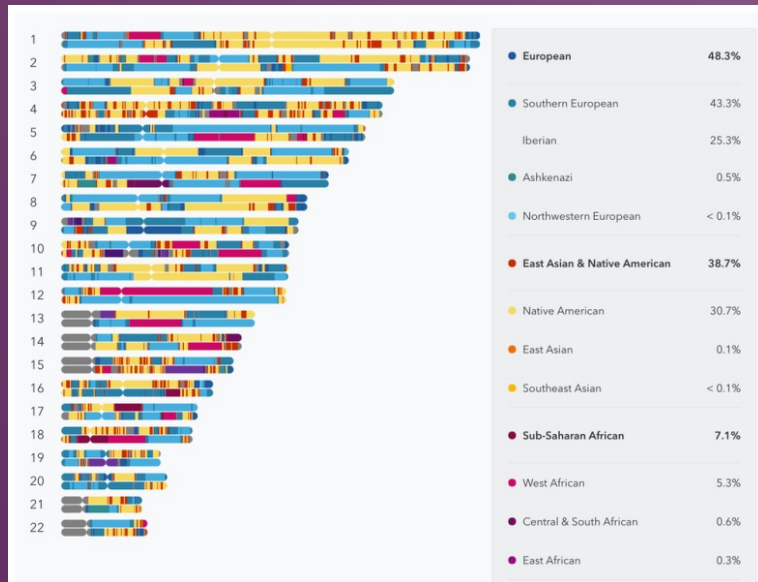
II. Autosomal Tests:

- Biparentally inherited





<https://4.bp.blogspot.com/-6tF14PeBOW/VH0M0QyNkIMI/AAAAAAAAAbA/gwg03sT23dM/s1600/Minnie's23andme.JPG>



DNA Story for Steven



<https://qph.fs.quoracdn.net/main-qimg-981e5fe557e3907291bdf3602687905e>

https://cdn.kqed.org/wp-content/uploads/sites/13/2015/10/qDZjMl9WskAOEMsDU6M2BTIV1t_13PWBQqssyie1No-785x600.png



Photo by Paul Stob

How do people understand their own genetic ancestry and how does race fit (or not) into that understanding?

White Cop Who Says He Was Taunted for Being Part Black Gets \$65K Settlement From City

By [Teddy Grant](#) on August 1, 2018



A White Michigan police officer received a \$65,000 settlement from the city of Hastings after he was taunted by other cops when he told them he was part Black, [his attorney told CNN](#).

Sgt. Cleon Brown, who has spent 19 years with the Hastings Police Department, said that in 2016 the mocking began after he took an Ancestry.com genetic test, which revealed he was 18 percent African.

His fellow police officers called him "Kunta," referencing Kunta Kinte from the novel *Roots*:

A Sergeant Who Learned He's Part Black Says He Faced Racist Taunts at Work



Sgt. Cleon Brown, left, and his father, right, in undated photographs provided by the family. via Cleon Brown Family

By [John Eligon](#)

May 12, 2017



All his life, Cleon Brown, a 47-year-old police sergeant in Hastings, Mich., had thought he was a white man with some Native American blood.

That notion came from his father, who had black, curly hair and darker skin. Sergeant Brown's father would tell him and anyone else who asked that his lineage could be traced to the Blackfeet Nation.

So Sergeant Brown stuck to that story.

1 UNITED STATES DISTRICT COURT
2 WESTERN DISTRICT OF MICHIGAN

3 CLEON BROWN,
4 Plaintiff

Hon.
Magistrate
Case No:

5 v.

6 CITY OF HASTINGS, JEFF MANSFIELD,
7 JEFF PRATT, DALE BOULTER,
8 KRIS MILLER and JOSH SENSIBA
9 Defendants

10 BOYLANLAW, P.C.

11 By: Karie H. Boylan (P55468)

Attorney for Plaintiff

12 410 W. University, Suite 201

13 Rochester, Michigan 48307

14 Phone: (855) 926-9526

15 Fax: (855) 326-9526

E-Mail: karie@boylanlaw.net

16
17 PLAINTIFF'S COMPLAINT AND JURY DEMAND

18 Plaintiff states:

- 19 1. Plaintiff is a City of Hastings Police Sergeant.



6 24. In 2016, Plaintiff took a genetic test through "Ancestry.com". The test
7
8 revealed Plaintiff is 18% African American. Plaintiff did not know that before.

9 25. In the fall of 2016, Plaintiff proudly told other Hastings employees of
10
11 the test and result (i.e., that he is 18% Africa American).

12 26. After he learned Plaintiff was African American, Chief Pratt called
13
14 Plaintiff "Kunta" in the main office in the presence of Defendants Miller and Sensiba
15 plus three subordinate police department employees.

Article

S|S|S

Genetic ancestry testing among white nationalists: From identity repair to citizen science

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Aaron Panofsky 

Institute for Society and Genetics, University of California, Los Angeles, Los Angeles, CA, USA

Joan Donovan

John F. Kennedy School of Government, Harvard University, Cambridge, MA, USA

Abstract

White nationalists have a genetic essentialist understanding of racial identity, so what happens when using genetic ancestry tests (GATs) to explore personal identities, they receive upsetting results they consider evidence of non-white or non-European ancestry? Our answer draws on qualitative analysis of posts on the white nationalist website Stormfront, interpreted by synthesizing the literatures on white nationalism and GATs and identity. We show that Stormfront posters exert much more energy repairing individuals' bad news than using it to exclude or attack them. Their repair strategies combine anti-scientific, counter-knowledge attacks on the legitimacy of GATs and quasi-scientific reinterpretations of GATs in terms of white nationalist histories. However, beyond individual identity repair they also reinterpret the racial boundaries and hierarchies of white nationalism in terms of the relationships GATs make visible. White nationalism is not simply an identity community or political movement but should be understood as bricoleurs with genetic knowledge displaying aspects of citizen science.

Keywords

genetic ancestry testing, identity, lay expertise, race and racism, white nationalism, white supremacy

Correspondence to:

Aaron Panofsky, Institute for Society and Genetics, University of California, Los Angeles, 621 Charles E. Young Dr., South, Box 957221, 3360 LSB, Los Angeles, CA 90095-7221, USA.
Email: apanofsky@ucla.edu

STAT
BIOLOGY

White Nationalists Are Flocking to Genetic Ancestry Tests--with Surprising Results

Sometimes they find they are not as "white" as they'd hoped

By Eric Boodman, STAT on August 16, 2017

<https://www.scientificamerican.com/article/white-nationalists-are-flocking-to-genetic-ancestry-tests-with-surprising-results/>

How White Nationalists See What They Want to See in DNA Tests

What happens when white supremacists on the hate site Stormfront learn that they're not as white as they thought? Two researchers investigated.

<https://www.nytimes.com/2019/07/12/us/white-nationalists-dna-tests.html>

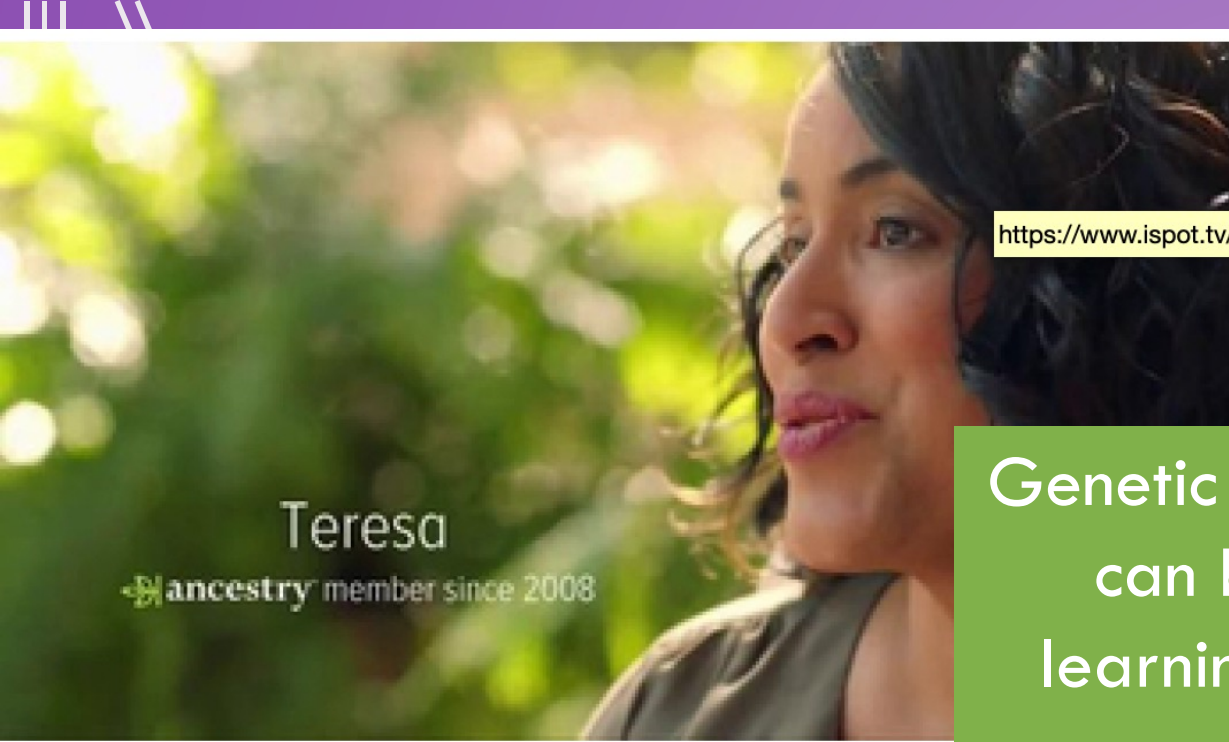
SCIENCE

When White Nationalists Get DNA Tests That Reveal African Ancestry


An analysis of Stormfront forums shows a sometimes sophisticated understanding of the limits of ancestry tests.

SARAH ZHANG AUGUST 17, 2017

<https://www.theatlantic.com/science/archive/2017/08/white-nationalists-dna-ancestry/537108/>



Teresa

 ancestry member since 2008

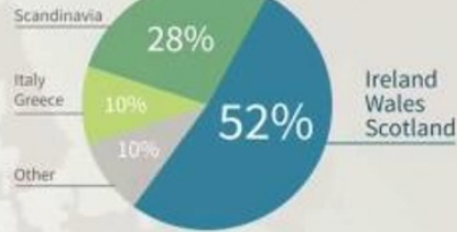


Genetic ancestry testing can be useful for learning more about your ancestors, but it doesn't tell you who you are.



100%
Nicole

23andMe.com



ancestry

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QUESTIONS?

