

# Native American DNA? Issues of Identity and Governance

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Deshaies 04 — Neo-ruprestrian DNA double helix (ocre)  
with *Mammut americanum*  
([www.jacquesdeshaies.com](http://www.jacquesdeshaies.com))



# The DNA profile (the test tribes use)

- Also known as a “DNA fingerprint” or a “paternity test.” Also used in criminal cases (e.g. to tie strand of hair or skin cells found at crime to suspects/victims).
- Gauges relatedness (mother, father, siblings, etc.) with very high degrees of probability.
- The DNA profile does NOT analyze markers judged to inform one’s continental or “ethnic” ancestry.
- Tribes are interested in proving biological ties between applicants and already enrolled or enrollment eligible individuals.
- Examines repeated sequences of nucleotides called “short tandem repeats” or STRs that we inherit from both parents. But in recombination—as we are formed genetically from the gametes of both parents—our total individual STR pattern becomes unique.



# Advantages & Disadvantages of DNA profile for tribal governments



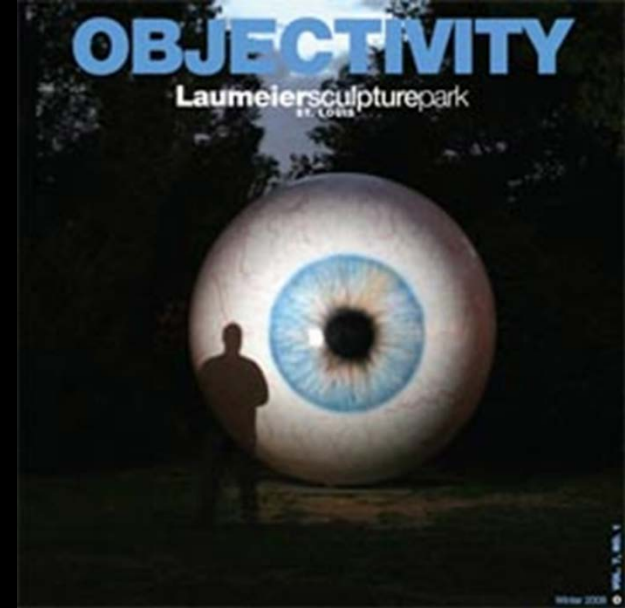
- **Documentary ease.**
  - Less paperwork, used in conjunction with blood rules (both LD and BQ).
- **Doesn't address big controversies in enrollment**
  - Historical inaccuracy of rolls (absences from rez, prejudicial construction of rolls, blood quantum v. lineal descent rules, blood v. freedman rolls)
- **Finds “false biological parentage”**
- **When used across the membership (as opposed to a case-by-case basis) provides redundant knowledge at substantial cost**
  - @ \$500 2-3 people (applicant + one/both parents)

# DNA profile & the myth of “objectivity” (neutrality)

One DNA testing spokesperson claims that in using the DNA fingerprint for tribal enrollment:

*there is “no possibility of incorporating a subjective decision into whether someone becomes a member or not.”*

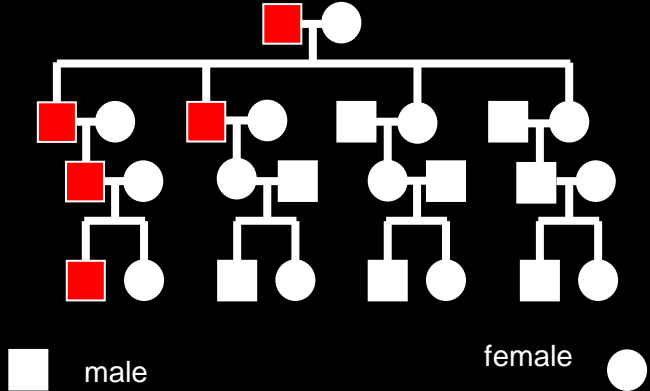
But it’s a political decision to use a genetic technique instead of a legal technique (affidavit) in the service of a regulation. This prioritizes techno-scientific knowledge of certain kinship relations over other types of knowledge and relationships.



# “Genetic Ancestry tests”

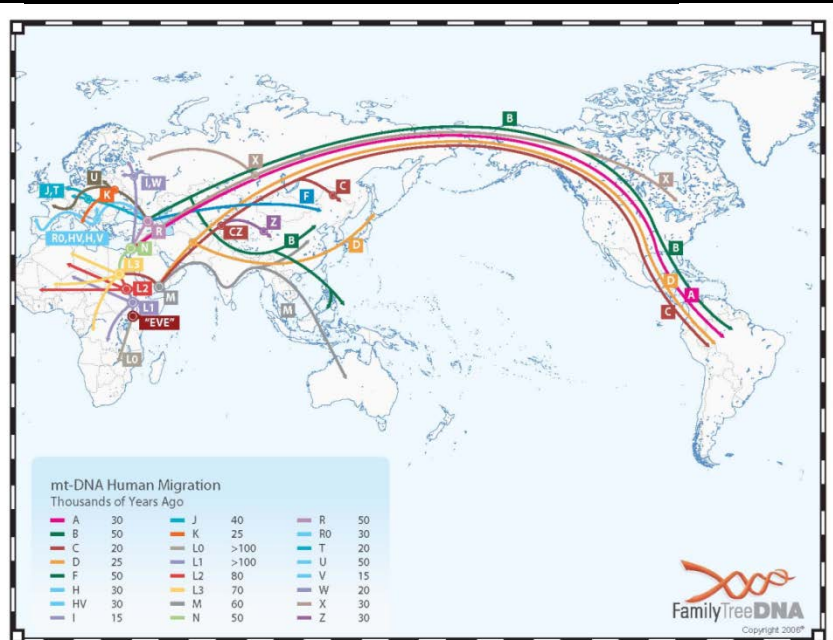
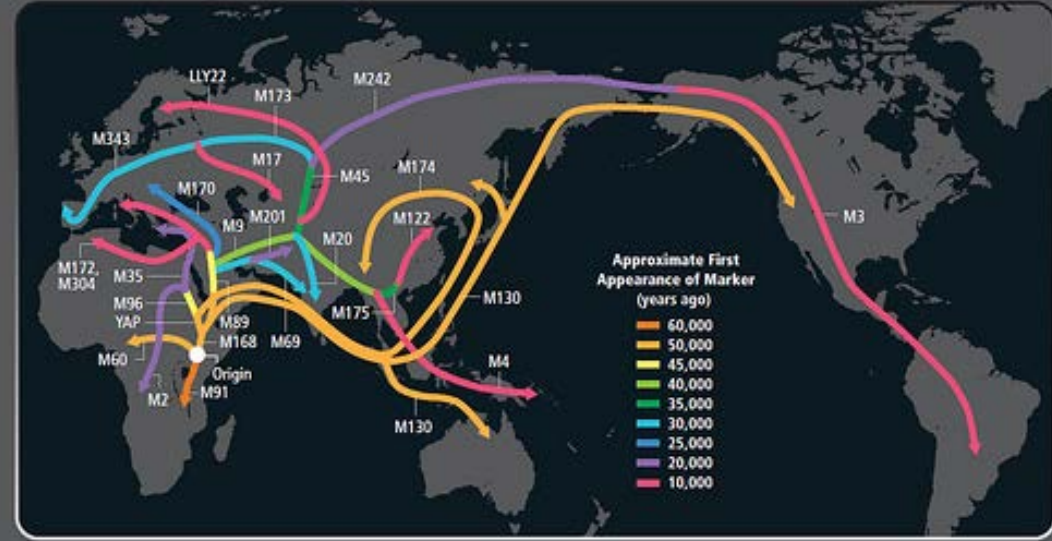
## Lineages are NOT tribe-specific

### Y-Chromosome Inheritance Pattern Pedigree

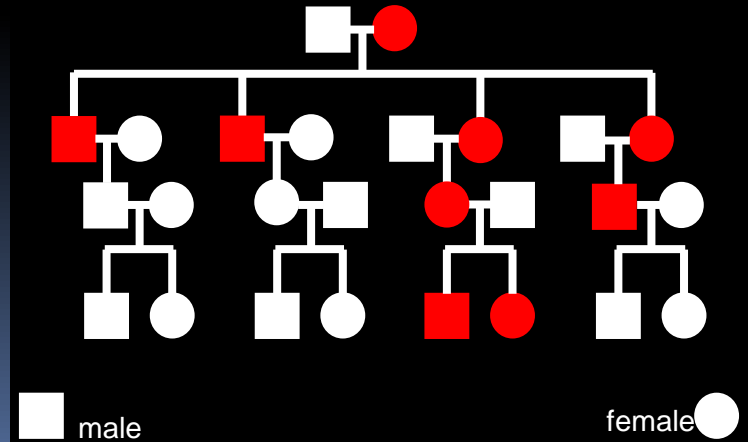


### [ROUTE MAPS] TRACKING Y CHROMOSOMES THROUGH TIME

Geneticists can track the path of ancient migrations by examining genetic markers in Y chromosomes from men who hail from different parts of the world. Each marker, such as M168 or M89, identifies a lineage of men and where the lineage originated. By building an evolutionary tree based on observing many living people with the markers, investigators can determine the approximate ages of the lineages.



### mtDNA Inheritance Pattern Pedigree



# Shifting racializations

## Blood to DNA, race to tribe, back to race

In the 20<sup>th</sup> century there was a shift from blood talk to gene talk in the dominant U.S. society.

Among tribes, who come to gene talk later, there was a shift from “Indian blood” (race) to “tribal blood.”

In the 20<sup>th</sup> century, following dominant gene-discourses we see a shift among U.S. tribes & Canadian First Nations rising use of DNA tests as new genetic racial mechanisms.

**CAUTION:** DNA is not simply an updated version of older blood talk and mechanisms.



# New racialization post-WWII

“new genealogic  
tribalism” (Kirsty Gover 2008)

- Pre-1940: 44% of tribes had blood rules (37% “Indian blood.”)
- Today 70% use BO (40% use “Indian blood”)
- But tribes increasingly adopt **tribe-specific** blood rules (33% now use)
- Pre-1970s (pre relocation, termination, WWII) tribes used reservation residency, adoption, parental enrollment. In 1940 5% of Indians lived in cities. By 1970, 50% were urban.
- Tribe specific blood attempts to repair discontinuity wrought by federal policy & demographic change.
- Lineal descent coupled + tribal-descent enabled continuity (urbans enrolled) & imposes limits on number enrolled post-1970s as tribes got wealthier.

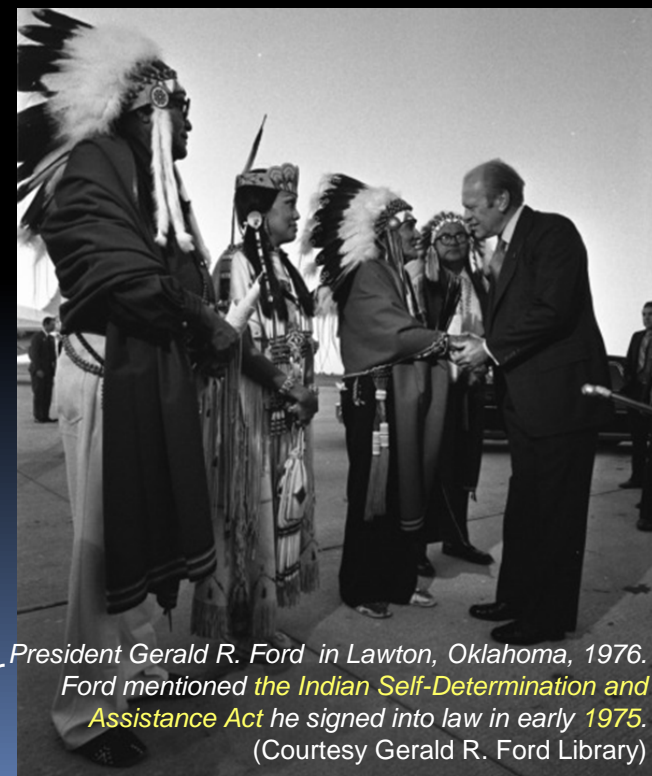


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Nursing, Office Work, Watchmaking  
Adult Education  
Evening High School, Arts and Crafts  
Job Improvement, Home-making



President Gerald R. Ford in Lawton, Oklahoma, 1976. Ford mentioned *the Indian Self-Determination and Assistance Act* he signed into law in early 1975. (Courtesy Gerald R. Ford Library)



# Genetic racialization of “tribe”

19<sup>th</sup> c. racial ideas persist + 20<sup>th</sup> c. multi-culturalist property claims to indigenous DNA

Ideally, they would be living in the same place as their ancestors did centuries ago. They should have been relatively isolated from immigration from surrounding groups who have moved into the region recently. They also should retain some of their ancestors' ways of life, be it language, marriage patterns, or other cultural attributes. In other words, what we want are *indigenous* people .

Spencer Wells (2007),  
Geneticist and Genographic Project Director



“Knowledge is power.  
And the more one  
knows, the better off  
one is from a research  
perspective.”

—THE—  
**GENOGRAPHIC**  
PROJECT



Supai Village

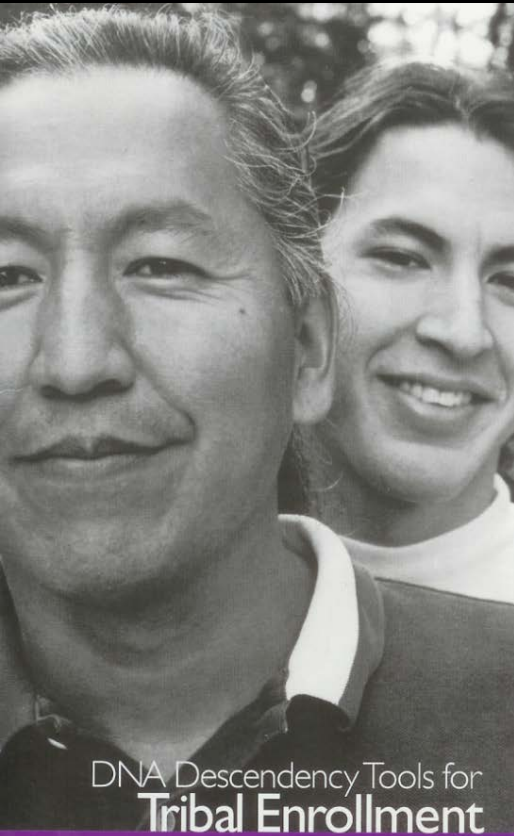
Therese Markow  
Previously of ASU  
In *Hart Report* 2003

# DNA trails as “European Songlines”



What I'd like you to think about with the DNA stories we're telling is that they are that. They are DNA stories. It's our version as Europeans of how the world was populated, and where we all trace back to. That's our songline. We use science to tell us about that because we don't have the sense of direct continuity. Our ancestors didn't pass down the stories. We've lost them, and we have to go out and find them. We use science, which is a European way of looking at the world to do that. You guys don't need that.

# Selling DNA fingerprint to tribal & First Nation governments: Replacing blood with gene metaphors?



DNA Descent Tools for  
**Tribal Enrollment**

 ORCHIDCELLMARK



Brochure distributed at the National Congress of American Indians (NCAI) annual meeting (November 2005)

**More modern, but still phenotypically satisfying**

## The truth is in the DNA.

With an Orchid DNA test, determining Native American lineage for tribal enrollment is fast, simple and non-invasive. Orchid provides irrefutable results through scientific assessment of alleged biological relationships. Contact Orchid for information on routine paternity tests or more complex patrilineage, matrilineage and kinship analyses.

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Monthly advertisement in national news magazine, *American Indian Report* (May - Dec 2005 issues)



ORCHID

# Re-cap: Blood v. DNA

- Blood is not the substance of inheritance, but a carrier of mechanisms of inheritance (DNA).
- BQ based on documentation that counts Native American /tribal ancestors.
- BQ foregrounds genealogical links between individuals and *group* via biological links to a multiplicity of *named* and *tribally-affiliated* ancestors.
- Stands for probabilistic social links between individual & land-based group, e.g. the higher the blood quantum, the more NA/tribal relatives one has, and the greater the probability of group affiliation?

## Analyzing DNA in lab is different than counting relatives via documents

- Case-by-case DNA testing aids the counting of relatives (genetic kinship one piece of bigger process)
- But across membership risks portraying genetics as a baseline. Centers genetics symbolically & reconfigures perceptions of NA as a genetic status.

# Centering genetics may risk foundations of tribal governance

Will centering DNA markers transform expectations that tribal enrollment should be a “rigorous scientific identity”?

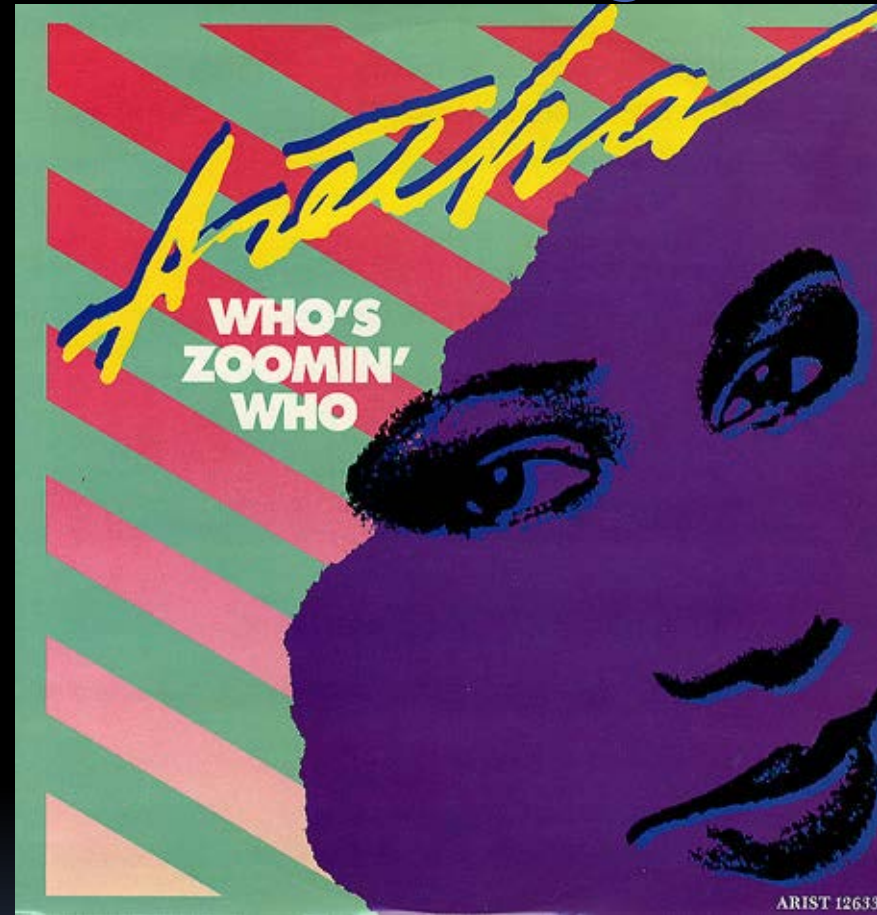
As genetic concepts influence enrollment & identity, we risk undermining treaties, laws, and obligations that are foundational to contemporary tribal sovereignty.

- Erases why legal and historical/moral obligations exist in the first place.
- Anti-tribal interests can read genetics as “race” and further argue that tribal rights are not based on sovereignty but that they are “special,” or race-based rights.



# Who's a subject? Who's an object?

- of resource extraction
- of development
- civilization
- categorization
- regulation
- research
- of desire
- to belong or to find one's origins?



(You came to catch)  
You thought I'd be naive and tame (You met your match)  
But I beat you at your own game,  
oh (Who's zoomin' who?)  
Take another look and tell me, baby (Who's zoomin  
who?) Now the fish jumped off the hook, didn't I, baby?