

Challenges: DNA Databases, Dragnets, & Race



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Proportionality

The state has a duty to protect privacy and other human rights, and it has a duty to protect citizens from criminal harm.

Principle of Proportionality (Justice):

- Any interference with legally enforceable rights (esp. 4th amendment rights) must be justified as being *proportionate* to the need to detect and prosecute offenders effectively;
- In other words, a balance of risks/benefits of state duties with the presumption that citizens' rights have priority unless evidence that interference is needed and will be effective.

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Fourth Amendment

Guards against unreasonable search and seizures especially when there is a reasonable expectation of privacy; requires search and arrest warrants be judicially sanctioned, supported by probable cause and be limited in scope according to specific information supplied by a person (law enforcement officer) who has sworn by it and is therefore accountable to the issuing court:

“The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.”

To Complicate Matters

- **Genetic Exceptionalism**
 - Genetic information is not like a fingerprint; includes sensitive information about the individual and his/her relatives.
- **Moral Expressivism**
 - History of eugenics and meaning of genetics.
 - Lack of trust in a legal system?
- **Function Creep**
 - Establishing a database for one purpose “inevitably” leads to adopting that database for other purposes.



- FBI Laboratory's **Combined DNA Index System**
 - Collects profiles consisting of 13 STR loci (12 plus sex)
 - Mostly from convicted felons, violent crimes, sex offenders but is expanding...
- Contains several indexes:
 - Convicted Offender
 - Forensic
 - Arrestees (if state law permits)
 - Missing Persons
 - Unidentified Human Remains
- Integrates National (NDIS), State, and Local Indexes

<http://www.fbi.gov/hq/lab/html/codis1.htm>

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- Piloted by FBI in 1990 covering 14 states
- DNA Identification Act of 1994 established National DNA Index System (NDIS)
- **Number of Profiles**
 - By 2002 contained over 1 million DNA profiles
 - By 2007 (Oct.) contains over 5.2 million DNA profiles

<http://www.dna.gov/>

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DNA Evidence Backlog

- Homicide/Rape: >221,000
- Property: >264,000
- Unanalyzed DNA cases: >264,000
- Cases still at local: >542,700

>1.29 Million

- 1997-2000 DNA labs 73% increase in casework and 135% increase in case backlogs.

<http://www.dna.gov/>

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“Through the combination of increased federal funding and expanded database laws, such as the DNA Fingerprint Act of 2005, the number of profiles in NDIS has and will continue to dramatically increase resulting in a need to re-architect the CODIS software. A considerable focus during this time will be to enhance kinship analysis software for use in the identification of missing persons. This next generation of CODIS will utilize STR and mtDNA information as well as meta data (such as sex, date of last sighting, age, etc.) to help in the identification of missing persons. The re-architecture will also enable CODIS to include additional DNA technologies such as Y Short Tandem Repeat (Y-STR) and mini-Short Tandem Repeat (miniSTR).”

FBI: <http://www.fbi.gov/hq/lab/html/codis4.htm>

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Is CODIS a good idea?

Yes

- Improve law enforcement finding & eliminating suspects
- Cold case hits
- Post-conviction exoneration
- Generally improve justice system

No

- Assumes a fair justice system...but it is not fair; mistrust of system?
- Risk for abuse is high, exacerbate existing disparities
- Violations of 4th Amendment rights (protects against unlawful search and seizure)

Discussion

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Other Risks?

- We leave DNA everywhere, likely to have DNA at crime scene, or similarity to suspect DNA, so may be involved in criminal investigation: distressing and possibly tainted with suspicion.
- Stigma: Database intended to represent criminal population, so being in database implies being a criminal.
- Sensitive Info: Databases includes info about family relations and other sensitive information. Research on genetic information in database without consent.

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CODIS Expansions

- **1990s** - reserved for people convicted of serious and violent felonies, and sex offenses.
- **2004** - “Justice for All Act” expand to include “federally qualifying offenses” which included violent and property crimes.
- **Since 2003** - 18 states amended statutes to include all or part: “all felons, all criminals, misdemeanants, prostitutes, terrorists, those serving community service, immigration violators and arrestees.” (42 U.S.C. sec. 14135(a) (2006))
 - Arrestees: TX, LA, VA, CA, NM, KS (also... IL, NC, NJ, NY, PA)
- **2006** - “Violence Against Woman Act” amended to require Feds to collect DNA samples from persons arrested or non-US persons detained under federal authority
 - Fed arrest/year: ~250,000
 - Detained for immigration violations: ~1.3 Million

Jenny Rushlow, Rapid DNA Expansion and Disparate Minority Impact - Gene-Watch.org, 2007

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U.S. Set to Begin a Vast Expansion of DNA Sampling

New York Times, February 5, 2007

Justice Dept plans expansion of DNA gathering that will include hundreds of thousands of illegal immigrants, by far largest group affected; officials say goal is to make practice of DNA sampling as routine as fingerprinting for anyone detained by federal agents; new forensic DNA sampling was authorized by Congress in little-noticed amendment to Jan 2006 renewal of Violence Against Women Act; amendment permits DNA collecting from anyone under criminal arrest by federal authorities, and also from illegal immigrants detained by federal agents; Peter Neufeld, lawyer and co-director of Innocence Project, which has exonerated dozens of prison inmates using DNA evidence, says government is overreaching; notes DNA profiles have potential to reveal physical diseases and mental disorders, allowing government to mine most intimate matters; immigration lawyers voice dismay at sweeping scope of measure; they note most immigration violations are civil, not criminal offenses

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Is this expansion appropriate?

- **Who** should be included or excluded from DNA databases like CODIS?
 - Should only convicted criminals or those detained or arrested have their DNA profiled?
 - Should non-violent, non-felony crimes be included?
 - Should visitors and immigrants be profiled?

Discussion

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Other Expansions?

- **What** should be included in DNA profiles?
 - Should DNA profiles include kinship relations?
 - Expand DNA profile to include markers for physical traits, including hair or eye color, skin color, ethnic background, etc.?

Discussion

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Family Profiling?

- DNA evidence identifies relative of suspect
 - DNA evidence from a triple rape/murder in 1973 in South Wales was prepared but found no matches in National DNA Database. Rather than looking for match, forensic experts looked for near-matches, hoping to track down the suspect via relatives. Eventually led to Joe Kappen, then dead of cancer in 1991. Kappen's body exhumed and profiled resulting in a match.

(See p. 276 in *DNA*)

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DNA Dragnet, 2002-03

Melba Newsome, The Inconvenient Science of Racial DNA Profiling, Winter/Summer 5, 2007

- **July 2002:** body of Pam Kinamore found in Louisiana on banks of Mississippi river. First of several deaths from a serial killer.
 - FBI profile and eye witness pointed to a "young white man who drove a white pick-up truck."
- **December 2002:** After fourth death, Louisiana State Police set up a DNA dragnet, collecting DNA samples from 1200 white men associated with FBI profile...
- **March 2003:** contacted Tony Frudakis (*DNAPrint*) who looked at 176 loci and told police: "Your guy has substantial African ancestry. He could be Afro-Caribbean or African American but there is no chance that this is a Caucasian. No chance at all."
 - 85% Sub-Saharan African and 15% native American
- **May 2003:** Lead to capture of Derrick Todd Lee, a 34 year-old black man with criminal record. DNA connected him to seven murder/rapes in Louisiana, possibly more.

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Proportionality in Louisiana Case

Melba Newsome, The Inconvenient Science of Racial DNA Profiling, Winter/Summer 5, 2007

- DNA success story?
- 4th amendment violations?
 - DNA dragnet: some resistance to collecting DNA samples... 4th amendment violations?
- Racial DNA profiling?
 - CODIS profiles don't include "racial" markers, but Frudakis included 176 loci meant to capture ancestry and other physical characteristics.

Discussion

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Race Profiling?

- Should race, ancestry or other physical features be traceable via DNA profiling?
- Consider some consequences (justice):
 - Existing racial disparities in Justice system
 - Thus, overrepresentation in CODIS
 - Thus, greater risk to minorities

	%W	%B	%O
Offenders	66.9	31.1	2
Census (2005)	~75	~12	~13

Jenny Rudstow, Rapid DNA Expansion and Disparate Minority Impact, Gene-Watch.org, 2007

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