

Using DNA to Solve Property Crimes: Results of an Experimental Study

John K. Roman

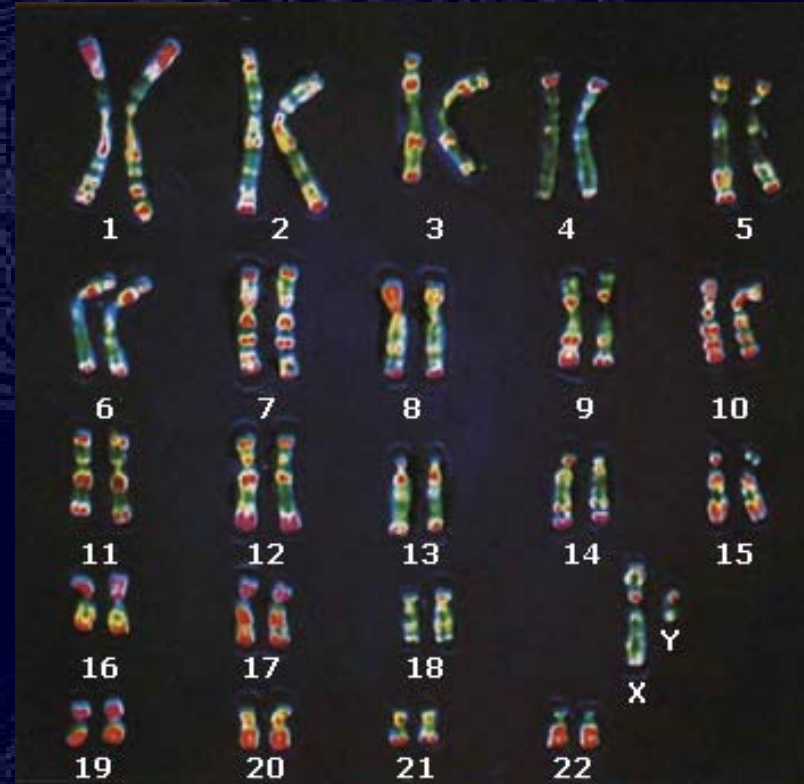


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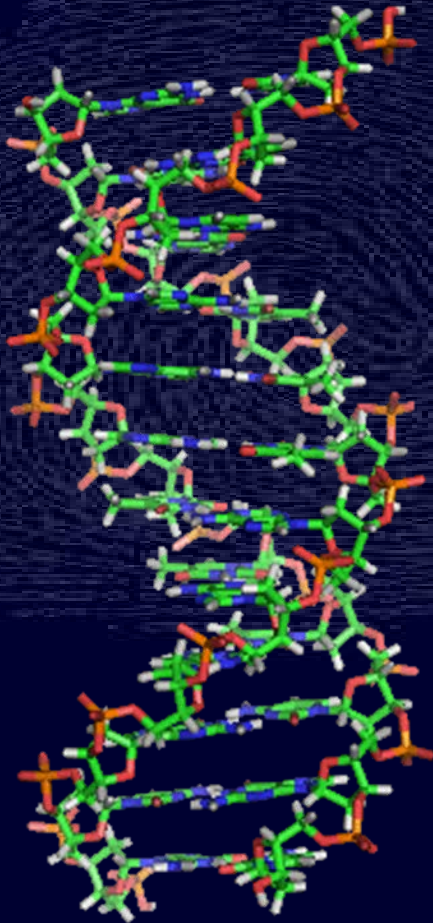
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A Randomized Study...

- Studies the cost-effectiveness of DNA compared to traditional crime-solving strategies in property crime – mainly residential burglaries;



...in Five Communities in Four States



Police in LA, OC,
Phoenix, Denver, and
Topeka:

Submit data for 500
property cases where
biological evidence
(i.e., saliva, blood, etc.)
is present.

Cases are Randomly Assigned

DNA in 500 cases:

Test Cases (250):

- Traditional Investigation & DNA Testing;

Control Cases (250) -
Traditional Investigation only



Cases Enrolled in the Experiment

Site Location	Total Test Cases	Total Control Cases	Total Cases
Topeka, KS	131	129	260
Los Angeles, CA	193	198	391
Denver, CO	255	255	510
Orange County, CA	250	251	501
Phoenix, AZ	251	249	500
Total	1080	1082	2162

Study Conclusions - ID

- Suspects identified in 31% of cases where DNA evidence is tested.
- Suspects identified in 12% w/ traditional inv. only;



Study Conclusions - Arrest



- Suspects arrested in 16% of cases where DNA evidence is tested (n=173).
- Suspects arrested in 8% w/ traditional inv. only (n=86);

Study Conclusions – Value of DNA

Suspect identification

- Fingerprints, Eyewitness ID suspect in 12% of cases for both cohorts.

Additionally, in DNA cases:

- 16% ID by offender hit;
- 3% ID by forensic hit.



Who is being arrested?

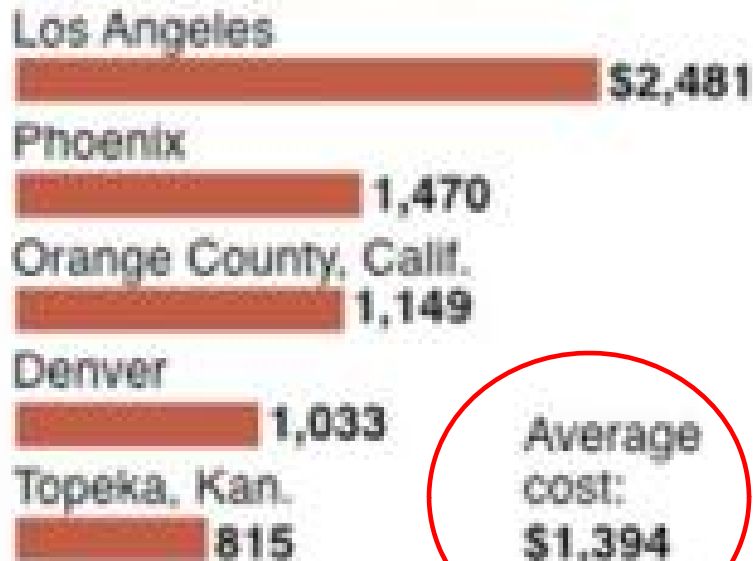
- DNA Suspects have more (and more serious) priors
- DNA arrestees had 2.9 prior felony convictions and 5.6 prior felony arrests.
 - Arrestees identified by traditional investigation had 0.9 prior felony convictions and 1.7 prior felony arrests.



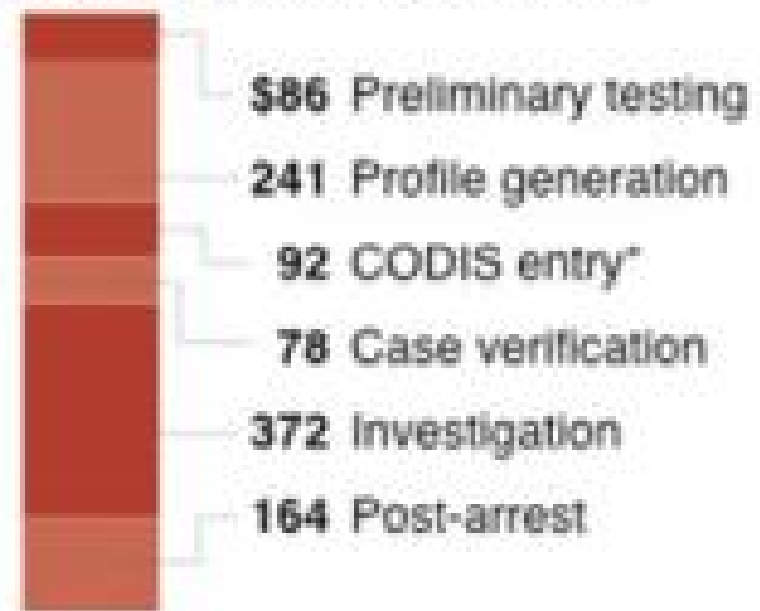
Affordable DNA test increases use

Lower costs of DNA testing and a faster turnaround has increased its use in a multitude of criminal cases.

Cost of processing a case with DNA evidence



Denver's cost breakdown



* DNA profile computer program that operates local, state and national databases

What Does it Cost to Add DNA?



Cost to ID a new suspect: \$4,514

Cost of a new arrest: \$14,178

Cost of a new case that was accepted for prosecution: \$6,913.

