

Four person DNA mixture

State of Indiana v. Dugniqio Dishay Forest
June, 2016
Evansville, IN

Clear plastic baggie containing
a white rock-like substance

21 grams of crack cocaine

Level 2 Dealing in Cocaine



Validation axes

Sensitivity. The extent to which interpretation identifies the correct person.
Truly include, don't falsely exclude.

Specificity. The extent to which interpretation does not misidentify the wrong person.
Truly exclude, don't falsely include.

Reproducibility. The extent to which interpretation gives the same answer to the same question.
Concordant independent computer runs.

Widespread acceptance

Admitted after Frye or Daubert challenge in:
California, Indiana, Louisiana, Massachusetts, New York, Ohio, Pennsylvania, South Carolina, Virginia, Australia & United Kingdom

Crime labs use TrueAllele system in California, Louisiana, Maryland, South Carolina & Virginia

Used in five hundred criminal cases in 35 of the 50 United States, for both prosecution and defense

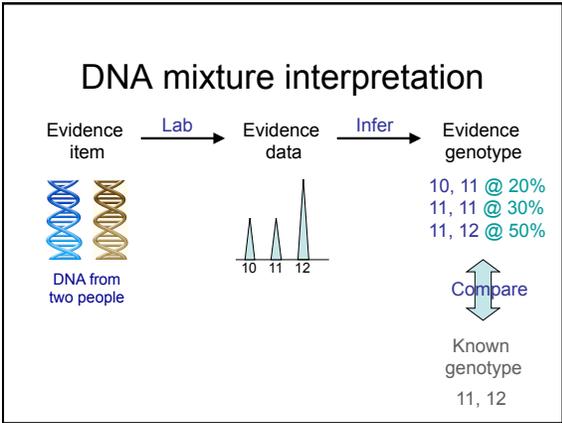
Reanalyzed World Trade Center DNA samples identifying 18,000 victim remains for 2,700 missing

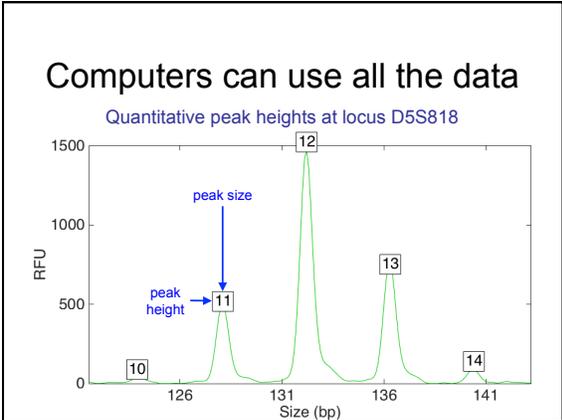
STATE OF INDIANA
 COUNTY OF VANDERBURGH

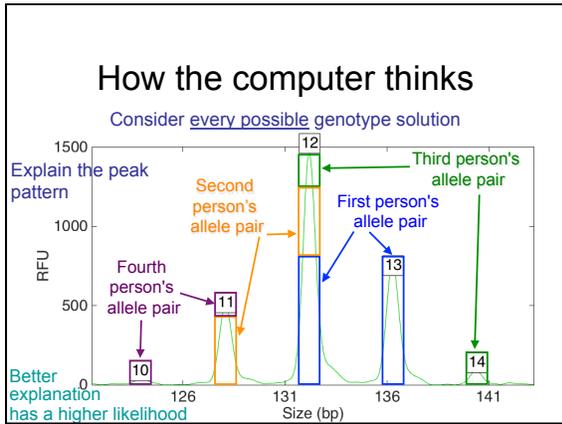
STATE OF INDIANA V DUGNIQIO DISHAY FOREST
 CAUSE NO. 82D02-1501-F2-00566

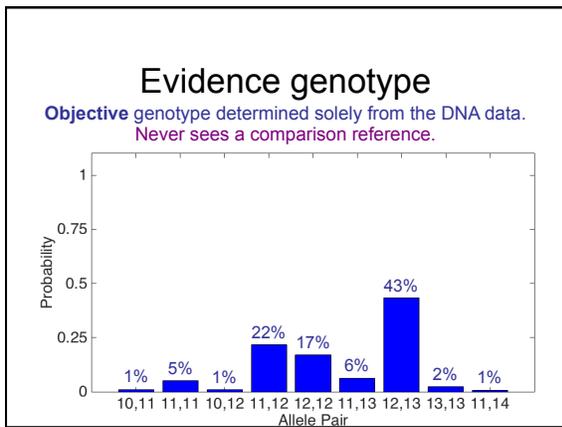
(Daubert hearing proceeds)

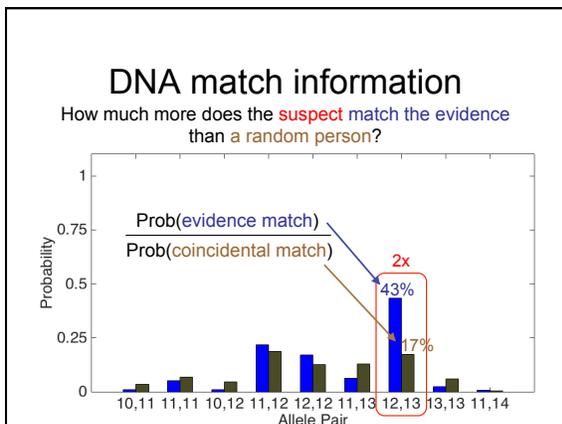
BY THE COURT: At this time the Court will find that Doctor Perlin will be qualified as an expert witness in this matter. Court also finds that the TrueAllele computer software to be a scientifically reliable method of DNA evidence interpretation in likelihood analysis.

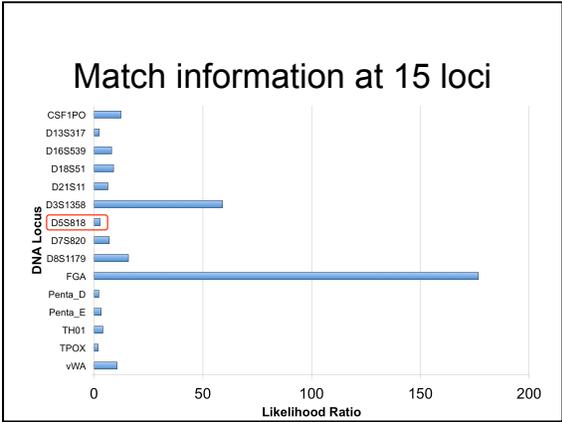












Is the suspect in the evidence?

A match between the bag
and Dugniqio Dishay Forest is:

24.9 trillion times more probable than
a coincidental match to an unrelated African-American person

132 trillion times more probable than
a coincidental match to an unrelated Caucasian person

161 trillion times more probable than
a coincidental match to an unrelated Hispanic person

Match statistics

Item	Description	003A	004A	006A	ISP
		Dugniqio Dishay Forest	Skye Terhune	Jason Greenlee	Indiana State Police Analyst
001A1	Bag	24.9 trillion			1.29 thousand
002A2	Foil package	708 quintillion			

Match statistics

Item	Description	003A	004A	006A	ISP
		Dugnqiqo Dishay Forest	Skye Terhune	Jason Greenlee	Indiana State Police Analyst
001A1	Bag	13.40			3.11
002A2	Foil package	20.85			

Number of zeros in match statistic
"logarithm" expresses information

Forest convicted

Found guilty at trial

Level 4 Possession of Cocaine
With aggravating factors

Sentenced to 11 years in prison