

FILED
SANTA BARBARA
SUPERIOR COURT

APR 18 2000

GARY M. BLAIR
Executive Officer

By Janeite Frynter
JANEITE FRYNTER, Deputy Clerk

SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA BARBARA
ANACAPA DIVISION

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5 THE PEOPLE OF THE STATE OF
6 CALIFORNIA,
7 Plaintiffs,
8 vs.
9 JONATHAN LAMONTE HILL,
10 Defendant.

Case No.: 232982

RULING ON MOTION FOR KELLY-FRYE
HEARING REGARDING ACCEPTANCE
AND ADMISSIBILITY OF DNA TESTS

[Evid. C. § 402]

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12 Defendant, by his counsel the Public Defender, has moved to compel the People to respond at a
13 full evidentiary hearing, to establish the foundational facts of general acceptance and reliability of the
14 principles underlying certain DNA tests, which discovery furnished by the People to the defendant
15 indicates were performed in this case, and which will be offered at trial as circumstantial evidence that
16 defendant perpetrated certain of the offenses charged. In support of this motion, defendant called and
17 examined an expert in DNA testing, whose conclusions are discussed more fully below. The motion
18 having been briefed, argued and submitted, and the court having considered the relevant authorities and
19 the evidence produced on the issue, now rules as more fully explained below that the defendant's motion
20 is DENIED, without prejudice to examination of the specific laboratory techniques and procedures
21 employed, pursuant to Evidence Code § 402, et seq., at the time the test results are offered at trial.

22 **The Kelly standard:**

23 The Kelly-Frye line of cases rests in California on the seminal decision of the state supreme
24 court in People v. Kelly (1976) 17 Cal.3d 24, 130 Cal.Rptr. 144, 549 P.2d 1240. The issue there was the
25 necessary foundation to admit evidence of voiceprint analysis on the issue of identity of a criminal
26 suspect. The Supreme Court reversed the decision of the trial court, which admitted the evidence,
27 holding that evidence derived from a novel scientific technique or discovery is not admissible in court
28 until the principles on which the evidence rests have been generally accepted in the relevant scientific

1 community. The court said: "[A]dmissibility of expert testimony based upon the application of a new
2 scientific technique traditionally involves a two-step process: (1) the reliability of the method must be
3 established, usually by expert testimony, and (2) the witness furnishing such testimony must be properly
4 qualified as an expert to give an opinion on the subject." (17 Cal.3d 24, 30.) Since the expert called on
5 this motion was a defense expert on DNA testing methods, not the expert who performed the tests in
6 question here, the qualifications of the People's experts under point (2) of Kelly, supra, must await
7 determination at a foundational hearing in trial (or on People's motion in limine). Point (1) of the Kelly
8 test is the issue to be resolved under this motion.

9 There is also what has come to be known as 'prong 3' of the Kelly rule, namely, that the expert
10 who testifies to the test results can lay a proper foundation that the tests were correctly carried out,
11 according to the accepted protocol for such tests. "Additionally, the proponent of the evidence must
12 demonstrate that correct scientific procedures were used in the particular case." (Kelly, supra, at p. 29;
13 see also People v. Adams (1975) 53 Cal.App.3d 109, 115-116 [125 Cal.Rptr. 518].) Defendant is of
14 course entitled to challenge this showing at trial, both by testimony out of the presence of the jury, as
15 well as evidence before the jury to cast doubt on the accuracy of the particular test procedures.

16 On the first 'prong' of the Kelly test, the general acceptance of the principles involved in the
17 relevant scientific community, it is necessary to first define what 'principles' must have reached general
18 acceptance under Kelly. It is worth noting that Kelly rested upon the much earlier decision in Frye v.
19 United States (D.C.Cir. 1923) 293 F. 1013, 1014, involving the admissibility of polygraph tests: "Just
20 when a scientific principle or discovery crosses the line between the experimental and demonstrable
21 stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be
22 recognized, and while courts will go a long way in admitting expert testimony deduced from a well-
23 recognized scientific principle or discovery, the thing from which the deduction is made must be
24 sufficiently established to have gained general acceptance in the particular field in which it belongs."

25 The Frye test has been criticized by several courts and commentators as too conservative, in that
26 it deprives the jury of relevant and reliable evidence in some cases, which would be used by the
27 scientific community, but is rejected for admission in court simply because controversy among scientists
28 over the issue has not been put entirely to rest: "Some criticism has been directed at the Frye standard.

1 primarily on the ground that the test is too conservative, often resulting in the prevention of the
2 admission of relevant evidence." (17 Cal.3d 24, 30.) It was on these very grounds that the United States
3 Supreme Court not long ago overruled Frye in favor of a standard under the Federal Rules of Evidence
4 that leaves the admission of scientific evidence largely in the discretion of the trial court, with objections
5 by the party opponent as to the unreliability of the science involved being treated as considerations
6 going to the weight of the evidence, rather than to its admissibility. (Daubert v. Merrell Dow (1993) 509
7 U.S. 579, 588-589, 113 S.Ct. 2786, 2794, 125 L.Ed.2d 469.) The provisions of the Federal Rules of
8 Evidence, which the United States Supreme Court construed as incompatible with the Frye rule, are
9 effectively identical with the relevant provisions of California evidence law, and it may be that on that
10 ground the state supreme court will eventually replace the rule, are effectively identical with the
11 relevant provisions of California evidence law, and it may be that on that ground the state supreme court
12 will eventually replace the Kelly standard with one derived from Daubert. However, for today's
13 purposes, Kelly remains the law of California, even though its parent, Frye, is deceased.

14 According to the testimony and offers of proof at the hearing of this motion, the DNA tests in
15 question here were obtained by the PCR method of DNA replication, to which was applied the STR
16 method of discrimination. PCR is the accepted shorthand for 'polymerase chain reaction' technology,
17 which takes a minute fragment of organic material and multiplies it enormously, with great fidelity, so
18 that a sample of testable size can be developed from an almost infinitesimal residue. STR refers to 'short
19 tandem repeat' testing, which takes the DNA produced from the original trace by the PCR replication
20 process, and subjects it to testing which discriminates between samples by examining 'short tandem
21 repeats' in the reference sample and the unknown sample, which in turn are short segments of DNA
22 which are found at various locations ("loci") on the human DNA molecule, and are found to be
23 exceptionally useful and discriminating for this type of testing.

24 Neither the acceptance of PCR technology, nor the general validity of STR testing based upon
25 PCR amplification of samples, is directly attacked by this motion. Defendant concedes that PCR
26 amplification has been found generally accepted by the relevant scientific community. (People v. Wright
27 (1998) 62 Cal.App.4th 31, 40-41; People v. Morganti (1996) 43 Cal.App.4th 643, 670, 50 Cal.Rptr.2d
28 837, 855.) The Wright Court stated: "The PCR method has obviously acquired general acceptance in the

1 scientific community. It is a valuable method for determining the genetic similarity of individuals, and is
2 an important forensic tool in cases of rape or child abuse such as this one. The PCR method should be
3 used by prosecutors in bringing criminals to justice, and by juries and the courts in determining
4 questions of fact." (Excerpt from page 62 Cal.App.4th 31, 41.)

5 The question remains whether the specific test kit used here, a proprietary product of Perkin-
6 Elmer Corporation, requires separate validation under Kelly before its results may be brought before the
7 jury. The testimony of the defense expert, Dr. Davis, at the hearing on this motion indicates to the
8 contrary. The expert opined that the PCR process, and the STR testing method, are reliable and
9 appropriate tests to use in this type of suspect identification testing, so long as certain conditions are
10 met, such as only one source of sample DNA being present at the crime scene, and that neither too much
11 nor too little DNA is presented for testing. These concerns about specific facts affecting the reliability of
12 results in one specific instance are appropriate for exploration at trial, but they do not require a Kelly
13 hearing, because they do not implicate the reliability or general scientific acceptance of the principles on
14 which the tests are based. The defense expert essentially admitted that both PCR and STR processes are
15 generally accepted in the scientific community, and that the principles on which those testing modes are
16 based are accepted for many scientific purposes, among which, inter alia, are forensic uses such as
17 comparison and identification of criminal suspects from samples left at crime scenes.

18 The concerns about proper test protocol and possible sources of error in the results, as suggested
19 by both the defense expert and the defense counsel on the motion, fall within the observation on this
20 subject made by the court in Wright, where the court said: "Appellant's objections to the use of such
21 evidence in the trial of this case are not truly Kelly-Frye issues, and simply go to the weight, not the
22 admissibility, of such evidence." (Excerpt from page 62 Cal.App.4th 31, 41.)

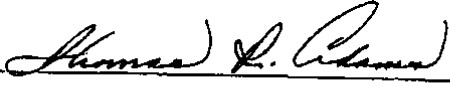
23 The defense relies on People v. Venegas (1998) 18 Cal.4th 47, 954 P.2d 525, 74 Cal.Rptr.2d 262
24 to argue that despite the other favorable cases cited above, this particular application of PCR/STR
25 testing requires full Kelly-Frye clearance and scrutiny before being admitted before a jury. In Venegas,
26 the Supreme Court reversed convictions for rape and other offenses because faulty DNA test evidence
27 was admitted. The fault was in the method by which the statistical likelihood of a match by random
28 chance was calculated; the court upheld the admissibility of DNA tests in general, and approved the tests

1 at issue there, but found that the FBI had deviated from the approved test protocols in material respects
2 which undermined the reliability of the tests, and placed the results in a false light before the jury.
3 Therefore, the admission into evidence of those results was prejudicial error. (18 Cal.4th 47, 91-92.)

4 The erroneous nature of the statistical methods used in Venegas does not cast doubt generally on
5 PCR/STR testing of DNA samples. To the contrary, Venegas itself stressed that it was a 'prong three'
6 case, in the terminology adopted for analysis of Kelly issues, not a 'prong one' case; that is to say, the
7 methods and test principles were assumed to be reliable and accepted, but the methods applied in that
8 particular case were fatally flawed. As the court observed, such issues about particular tests may always
9 be raised, because 'prong three' under Kelly is nothing more than the specific test procedures, which
10 may be challenged as improperly performed in any case. However, that does not require the elaborate
11 validation hearings required for a 'prong one' determination, as to general acceptance and validity of the
12 principles on which the testing procedure is ultimately based.

13 Therefore, the court finds that the principles underlying PCR/STR testing, as used in this case
14 according to the testimony and offers of proof, is reliable and generally accepted as such in the relevant
15 scientific community. The specific details of any possible sources of error specific to these particular
16 tests may be explored by the defense when such evidence is offered at the trial. The motion for a Kelly-
17 Frye validation hearing under 'prong one' of the Kelly doctrine is denied. It is so ordered.

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22 Dated: 4-18-2000


THOMAS R. ADAMS, JUDGE

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