Illinois Official Reports

Appellate Court

***People v. Richmond*, 2017 IL App (1st) 150642**

Appellate Court Caption	THE PEOPLE OF THE STATE OF ILLINOIS, Plaintiff-Appellee, v. DARNELL RICHMOND, Defendant-Appellant.
District & No.	First District, Second Division Docket No. 1-15-0642
Filed	June 30, 2017
Decision Under Review	Appeal from the Circuit Court of Cook County, Nos. 07-CR-14502, 07-CR-12014; the Hon. Timothy Joseph Joyce, Judge, presiding.
Judgment	Affirmed.
Counsel on Appeal	Michael J. Pelletier, Patricia Mysza, and Tomas G. Gonzalez, of State Appellate Defender's Office, of Chicago, for appellant. Kimberly M. Foxx, State's Attorney, of Chicago (Alan J. Spellberg and Brian K. Hodes, Assistant State's Attorneys, of counsel), for the People.
Panel	JUSTICE NEVILLE delivered the judgment of the court, with opinion. Justices Pierce and Mason concurred in the judgment and opinion.

OPINION

¶ 1 A jury found Darnell Richmond guilty of aggravated criminal sexual assault, based largely on DNA evidence. Richmond now appeals from the dismissal of his postconviction petition as patently without merit. He argues that his attorney should have sought in discovery the number of nine-locus matches in the Illinois DNA database to challenge the use of the product rule to estimate the probability that a person at random would match the DNA of the sperm found in the victim at the nine loci where Richmond's DNA matched the sperm. We find that, because a prior analysis of the number of matches actually found in the Illinois database broadly supported the use of the product rule, the failure to request an update of the data in discovery does not show ineffective assistance of counsel. Accordingly, we affirm the Cook County circuit court's dismissal of the postconviction petition.

¶ 2 BACKGROUND

¶ 3 On April 9, 2007, around 8:30 p.m., a black man about 6 feet tall, wearing a puffy black jacket with a fur-lined hood, grabbed the arm of Lia Skalkos as she stood near the intersection of 56th Street and Lake Park Avenue in Chicago's Hyde Park neighborhood. Skalkos screamed and ran off, and then she called police.

¶ 4 Around 9 p.m. that night, a black man in a puffy black jacket with a fur-lined hood came up behind C.L. near the corner of 55th Street and South Everett Street in Hyde Park, about 4 blocks from 56th and Lake Park. The man prevented C.L. from seeing his face. He forced C.L. to perform oral sex on him, and he made contact between his penis and C.L.'s vagina and anus. He robbed her of more than $50 and ran off. C.L. told a man passing by that she had been raped and robbed. The man drove C.L. to a hospital, where a nurse swabbed C.L.'s mouth, vagina, and anus.

¶ 5 Later that same night, a black man about 6 feet tall, wearing a black coat with a fur-lined hood, came up behind Erin Luboff as she walked into her apartment building near 54th Street and South Kimbark Avenue in Hyde Park, about 1 mile from 55th and Everett. The man grabbed Luboff's hips and pushed her into a wall. She slid to the floor. The man punched Luboff in the face and stole her phone.

¶ 6 A police laboratory analyzed the DNA found on the anal swab taken from C.L. One court explained: "DNA is composed of the familiar double-helix strand of nucleotide base pairs ***. *** Markers used for human identity testing are found in the DNA either between the genes or within genes and simply do not code for genetic variation. The location of 'markers' in these highly polymorphic or variable regions is called a 'locus' (plural 'loci'), and a variant of the DNA sequence at a given locus on a chromosome is called an 'allele.' " *In re Jessica M.*, 399 Ill. App. 3d 730, 743 (2010). The alleles found at 13 standard loci form the DNA profile of an individual. *People v. Watson*, 2012 IL App (2d) 091328, ¶ 7.

¶ 7 The laboratory's analysis of the anal swab here produced two DNA profiles. One matched C.L. The DNA for the second profile produced an unambiguous reading at 9 of the 13 loci usually tested to create a complete DNA profile for purposes of identification. At the other 4 loci, the analyst found some ambiguity about the reading. Police searched the Illinois DNA database using the 9 loci where the analyst found a clear reading. Police found that

Richmond's DNA had the identified alleles at all 9 loci. The ambiguous data from the other tested loci did not rule Richmond out.

¶ 8 On May 23, 2007, Luboff viewed a lineup. She positively identified Richmond as the man who attacked her. C.L. also viewed a lineup, but she could not identify anyone in the lineup as the man who attacked her. Skalkos viewed a photo array that included Richmond's picture, but made no identification. Skalkos viewed a lineup in person on May 23, 2007. She tentatively identified Richmond as the man who grabbed her, but she said she felt unsure of the identification.

¶ 9 Prosecutors charged Richmond with three counts of aggravated criminal sexual assault of C.L. and one count of robbery. At the jury trial, C.L., Skalkos, and Luboff described the incidents of April 9, 2007. None of them identified Richmond in court as the man who attacked them. A police officer who conducted the lineups testified that at the lineups held on May 23, 2007, Luboff had identified Richmond as the man who attacked her and Skalkos tentatively identified Richmond as the man who attacked her.

¶ 10 The prosecution presented a DNA expert who estimated the probability of a random match at the nine loci where Richmond's DNA matched the DNA on the anal swab from C.L. For the estimate, the expert used the "product rule." She took the proportion of profiles in the database with the alleles found in the sample at the first locus, multiplied that by the proportion of profiles in the database with the alleles found in the sample at the second locus, then multiplied that product by the proportion of profiles in the database with the alleles found in the sample at the third locus, and so on through all nine loci for which the sample provided an unambiguous reading. The expert said approximately 1 in 3.9 trillion black persons, 1 in 750 trillion white persons, and 1 in 1.8 quadrillion Hispanic persons would match the DNA profile at the nine loci.

¶ 11 The jury found Richmond guilty on three counts of aggravated criminal sexual assault and one count of robbery. The trial court sentenced Richmond to three terms of 18 years each for aggravated criminal sexual assault, to be served consecutively, and to a term of 7 years for robbery, to be served concurrently with the sexual assault sentences. This court affirmed Richmond's convictions and sentences for sexual assault, but we vacated as void the concurrent sentence for robbery and remanded for resentencing. *People v. Richmond*, 2012 IL App (1st) 100125-U. On remand, on March 20, 2013, the trial court imposed a three-year sentence for robbery, to be served consecutively to the sexual assault sentences.

¶ 12 Postconviction Petition

¶ 13 On September 12, 2014, Richmond filed his *pro se* postconviction petition, in which he raised several issues regarding his trial. In support of his claim that he received ineffective assistance of trial counsel and appellate counsel, he attached to the petition several articles that challenged the use of the product rule to compute the likelihood that any person other than the defendant would have the same alleles as those found at the crime scene. According to one of the articles, a search of Arizona's DNA database uncovered more than 120 nine-locus matches in a database of fewer than 66,000 profiles, and Illinois's DNA database revealed 903 pairs that matched at nine loci, out of a database of about 220,000 DNA profiles. Jason Felch & Maura Dolan, *FBI Resists Scrutiny of 'Matches'*, http://articles.latimes.com/2008/jul/20/local/me-dna20 (last accessed May 26, 2017). To phrase the findings from the Illinois database another way, the DNA of more than 1800 of the profiled persons matched the DNA of

another profiled person at nine loci, in a database of only 220,000 profiles. Richmond appended a printout of a blog post in which a mathematician opined that the use of the product rule for estimating the probability of matches was "no better than alchemy," "total nonsense," and "a damned lie." The mathematician said that admitting this testimony in court is "disgraceful" and that courts "may as well admit alchemy and astrology." (Internal quotation marks omitted.) *People v. Watson*, 2012 IL App (2d) 091328, ¶ 28 (quoting David H. Kaye, *Trawling DNA Databases for Partial Matches: What Is the FBI Afraid Of?*, 19 Cornell J.L. & Pub. Pol'y 145, 148 (2009), quoting Keith Devlin, *Damned Lies* (Oct. 2006), http://www.maa.org/external_archive/ devlin/devlin_10_06.html).

¶ 14 The trial court entered a written order, dated November 21, 2014, addressing all of the issues Richmond raised. The court dismissed the petition as frivolous and patently without merit. Richmond now appeals.

¶ 15 ANALYSIS

¶ 16 In this appeal, Richmond addresses only two of the issues raised in his postconviction petition. He contends that his trial counsel provided ineffective assistance because counsel failed to request that the State determine the number of nine-locus matches in the Illinois DNA database, and he contends that his appellate counsel provided ineffective assistance by failing to raise the failure to request the DNA data as proof of ineffective assistance of trial counsel.

¶ 17 "To prevail on a claim of ineffective assistance *** a defendant must show both that counsel's performance fell below an objective standard of reasonableness and that the deficient performance prejudiced the defense. [Citation.] At the first stage of postconviction proceedings under the Act, a petition alleging ineffective assistance may not be summarily dismissed if (i) it is arguable that counsel's performance fell below an objective standard of reasonableness and (ii) it is arguable that the defendant was prejudiced." (Internal quotation marks omitted.) *People v. Hodges*, 234 Ill. 2d 1, 17 (2009).

¶ 18 The DNA analyst who testified for the prosecution used the product rule to support the assertion that only one in 3.9 trillion black persons would have the same nine alleles that appeared on the swab of C.L., and Richmond has those nine alleles. According to the product rule, "the probability of the joint occurrence of a number of independent events is equal to the product of the individual probability of the occurrence of each event." *People v. Harbold*, 124 Ill. App. 3d 363, 382 (1984). But when two events do not occur independently, if they have a positive correlation, "the product rule would inevitably yield a wholly erroneous and exaggerated result even if all of the individual components had been determined with precision." (Internal quotation marks omitted.) *People v. Collins*, 438 P.2d 33, 39 (Cal. 1968) (*en banc*).

¶ 19 Our supreme court observed that when DNA evidence first came into use in court proceedings, some controversy arose over the use of the product rule. *People v. Miller*, 173 Ill. 2d 167, 188 (1996). The *Miller* court said, "Some members of the scientific community originally argued that the product rule is flawed because it assumes that DNA fragments revealed by the DNA processing occur independently and that members of the racial groups represented by a database intermix within their groups at random without regard to religion, ethnicity or geography." *Miller*, 173 Ill. 2d at 189. But the *Miller* court found that scientists had reached a consensus. "The concerns [about the use of the product rule] appear not to have been borne out by empirical studies. [Citation.] The most recent courts to consider the use of the

product rule have concluded that it is a generally accepted statistical method for estimating the frequency of a DNA match." *Miller*, 173 Ill. 2d at 189.

¶ 20 In the wake of *Miller*, Illinois courts have permitted DNA analysts to use the product rule to estimate the probability of a random match, without any further evidence as to whether a specific allele at a tested location actually occurs independently of the occurrence of another allele at a second tested location. Richmond contends that, at least arguably, counsel should have known about the nine-locus matches found in the Arizona database and counsel should have sought similar information about nine-locus matches in the Illinois database to cast doubt on the astronomical odds of a random match asserted by the DNA analyst.

¶ 21 Richmond appended to his postconviction petition an article that explains that the occurrence of more than 120 nine-locus matches in the Arizona database broadly comports with the use of the product rule to estimate the frequency of random matches. Kaye, *supra*, at 157. Kaye notes that when one compares every profile in a large database with all of the other profiles in the database, one makes such a large number of comparisons that even if the probability of a random match is less than one in a billion, the researcher should expect to find far more than 100 matches. Because Arizona's database held 65,493 profiles, comparing each profile to all the other profiles amounted to "65,493 x 65,492/2 = 2,144,633,778" comparisons. Kaye, *supra*, at 157. The researcher looking for matches at 9 loci, when the database included readings on 13 loci for all profiles, could find a 9-locus match in "(13!)/(9!)(4!) = 715 distinct combinations of nine items out of thirteen" for each pair of profiles. Kaye, *supra*, at 157. Thus, the Arizona database produced "715 x 2,144,633,778 comparisons, which gives us more than 1.53×10^{12} opportunities to find some nine-locus matches." Kaye, *supra*, at 157. If a nine-locus match occurs randomly only once in 8 billion comparisons, one would expect (1.53×10^{12})/8,000,000,000 matches, or about 200 matches. Since the Arizona search produced only 120 nine-locus matches, the odds predicted by the product rule appear generally in line with the data. Kaye reported that studies of databases in Australia and New Zealand showed that the product rule fit the observed numbers of matches reasonably well. Kaye, *supra*, at 163. The finding of 900 nine-locus matches in the Illinois database of more than 220,000 profiles also comports reasonably well with the product rule.

¶ 22 Richmond relies primarily on *People v. Wright*, 2012 IL App (1st) 073106, as authority showing that his counsel arguably provided ineffective assistance. Before representing Wright, Wright's attorney had, for a different client, requested the search Richmond requests here. A search of the Illinois database showed that out of more than 220,000 profiles, 1806 matched another profile in the database at 9 loci. *Wright*, 2012 IL App (1st) 073106, ¶¶ 51, 110. The director of the Illinois database had said, in another context, that nine-locus comparisons are "not true matches" and that "[i]t's misleading to call them matches." *Wright*, 2012 IL App (1st) 073106, ¶ 109. The *Wright* court found no strategic reason to withhold the evidence of the matches found in the database and held that "[i]f the trial court had in front of it the information that a 9-loci search of the Illinois database had already been done, that it had revealed that close to 2,000 individuals had matched at 9 loci, and that the state's own director of that database had concluded that 9-loci 'matches' were not, in fact, matches, there is a reasonable probability that it would have granted the defense's motion to exclude the 9-loci analysis, which was the primary evidence against defendant." *Wright*, 2012 IL App (1st) 073106, ¶ 114.

¶ 23 In light of Kaye's persuasive analysis, we find ourselves constrained to disagree with the *Wright* court. The evidence counsel failed to elicit in *Wright*, as here, showed that the 220,000

profiles in the Illinois database included 1806 that matched another profile at 9 loci. The database allowed for 220,000 x 220,000/2 = 2.4 x 10,000,000,000 comparisons, each of which could match another profile at 9 loci in 715 ways, giving 17 x 10^{12} chances for a nine-locus match. Finding only 900 such matches, or only about 1 match for every 20 billioncomparisons, generally supports the use of the product rule.

¶ 24 We find that competent counsel could decide that evidence of the nine-locus matches in Illinois's DNA database should not help his client, and introducing evidence of those matches might require the introduction of complex statistical calculations that could confuse jurors. Defense counsel at trial capably emphasized that the DNA analyst did not consider the sample a match for Richmond's DNA because the sample did not produce a clear reading at all 13 locations. We hold that, in light of Kaye's explanation, the failure to request another search of Illinois's database for nine-locus matches does not arguably show that counsel failed to meet an objective standard of reasonableness in his representation or that the failure to request another search of Illinois's database prejudiced Richmond. Accordingly, we affirm the dismissal of Richmond's postconviction petition as patently without merit.

¶ 25 CONCLUSION

¶ 26 The evidence concerning nine-locus matches in the Illinois DNA database did not show that the product rule grossly misleads jurors about the likelihood of a random match. While researchers should continue searching databases for evidence concerning the dependence or independence of specific alleles at the tested loci, defense counsel's failure to request another search of the Illinois database to challenge the use of the product rule does not, even arguably, show ineffective assistance of counsel. Accordingly, we affirm the dismissal of Richmond's postconviction petition.

¶ 27 Affirmed.