STATE OF MICHIGAN

IN THE SUPREME COURT

PEOPLE OF THE STATE OF MICHIGAN

Plaintiff-Appellee

-vs-

JAMES DAVID URBAN

Defendant-Appellant.
_____/

Supreme Court No. 156458

Court of Appeals No. 332734

Lower Court No. 15-020176 FH

EATON COUNTY PROSECUTOR
Attorney for Plaintiff-Appellee
_____

PETER JON VAN HOEK (P26615)
Attorney for Defendant-Appellant
_____

DEFENDANT-APPELLANT'S SUPPPLEMENTAL BRIEF

STATE APPELLATE DEFENDER OFFICE

BY: PETER JON VAN HOEK (P26615)
Assistant Defender
3300 Penobscot Building
645 Griswold
Detroit, Michigan 48226
(313) 256-9833

TABLE OF CONTENTS

PVH*Supreme Court brief II 8-17-18.docx*29471
James David Urban

TABLE OF AUTHORITIES

CASES

Constitutions, Statutes and Court Rules,

STATEMENT OF JURISDICTION

Defendant-Appellant was convicted in the Eaton County Circuit Court by jury trial, and a Judgment of Sentence was entered on March 31, 2016. A Claim of Appeal was filed on April 27, 2016, by the trial court pursuant to the indigent defendant's request for the appointment of appellate counsel dated April 6, 2016, as authorized by MCR 6.425(F)(3). This Court has jurisdiction in this appeal as of right provided for by Mich Const 1963, art 1, §20, pursuant to MCL 600.308(1); MCL 770.3; MCR 7.203(A), MCR 7.204(A)(2).

STATEMENT OF QUESTIONS PRESENTED

I. DID THE TRIAL COURT'S ADMISSION OF DNA EVIDENCE FOR WHICH THE STATE FAILED TO PROVIDE ANY STATISTICAL INTERPRETATION CONSTITUTES A CLEAR ERROR—OR, AT A MINIMUM, DOES DEFENSE COUNSEL'S FAILURE TO OBJECT CONSTITUTES INEFFECTIVE ASSISTANCE OF COUNSEL—THAT RESULTED I PREJUDICE AND WARRANTS THE GRANT OF A NEW TRIAL?

Court of Appeals answers, "No".
Defendant-Appellant answers, "Yes".

STATEMENT OF FACTS

Defendant-Appellant James ("Jimi") Urban was convicted at a jury trial in Eaton County Circuit Court, the Hon. Janice K. Cunningham presiding, of one count of unlawful imprisonment, MCL 750.349B; one count of assault with a dangerous weapon, MCL 750.82; and one count of domestic violence, MCL 750.812. The trial took place from February 8, 2016, to February 11, 2016. On March 31, 2016, Judge Cunningham sentenced Mr. Urban to concurrent prison terms of 7 to 15 years and 2 to 4 years, and to a jail term of 93 days. He appealed as of right.

Mr. Urban was a father and self-made businessman in Delta Township: he raised three children, and he owned a small plumbing company. Following an altercation with his then-girlfriend, Monica Hammond, Mr. Urban was arrested on May 28, 2015. He was charged with five counts of criminal activity: (1) unlawful imprisonment; (2)–(3) assault with a dangerous weapon (two counts); (4) felony firearm; and (5) aggravated domestic violence.

At trial the defense did not deny there had been an altercation between Mr. Urban and Ms. Hammond, but disputed several of her allegations of conduct she attributed to Mr. Urban.

The relevant trial testimony will be briefly summarized here to give context to the issue before this Court.

During her direct examination, the prosecutor asked Ms. Hammond to recount her version of the events of the altercation. She testified that after a night spent between Mr. Urban's house and her mother's house, during which both parties had been drinking, the altercation occurred when they were back at his house. Ms. Hammond acknowledged she was "annoyed" that Mr. Urban left her to sleep in his own room, and then went upstairs to get dressed and return

to her mother's. She claimed Mr. Urban followed her into the bedroom, continued to drink the bottle of rum, told her she could not leave, and became physical with her, breaking a mirror with a bottle.

Ms. Hammond claimed that, among other things, Mr. Urban "hit [her] with the bottle [of Captain Morgan]," kicked her and caused her to cough up "phlegm," and retrieved "a handgun and a shotgun." Ms. Hammond asserted Mr. Urban threatened to kill both of them, he repeatedly kicked her, punched her, and hit her with the bottle of rum on her "legs," "shoulders," "arms," and "head." She claimed Mr. Urban struck her across the back of the head with the handgun, opening a "gash" in the back of her head, and forced the handgun into her mouth. Ms. Hammond testified she held Mr. Urban's shirt to the back of her head to stop her bleeding.

Ms. Hammond testified that at one point, Mr. Urban got "tangled" in his clothes, stumbled, and placed the handgun down, at which point she grabbed it, left the house, and threw the loaded gun across the front porch. She went to a neighbor's house, who then drove her to a police station. She was interviewed by police, and then went to Sparrow Hospital and spoke with another police officer.

During her cross-examination, Ms. Hammond acknowledged a number of falsehoods: she admitted she led the police to believe Mr. Urban had rigged his home with "bombs" and "boob-traps," and conceded that at both the police station and hospital she lied to the interviewing officers, pretending that she had not consumed any alcohol. Ms. Hammond also acknowledged she was never admitted to the hospital for the alleged "gash" on her head—instead, the hospital sent her home and told her to take a pain reliever.

Police testimony showed that when they were dispatched to Mr. Urban's home after Ms. Hammond's interview, Mr. Urban was "cooperative" and complied fully with law enforcement.

In discussing the evidence collection process, an officer conceded the police were unable to locate any shotgun in the house, despite Ms. Hammond's testimony and an extensive search of every room of the house.

The officer who interviewed Ms. Hammond at the hospital discussed photos he took of Ms. Hammond's alleged injuries, noting that he could not see any cut on the back of her head. He described photographs he took of Mr. Urban, which documented bruises and scratches on Mr. Urban's neck, arms, and wrists.

The physician who examined Ms. Hammond found the injury to her head was like an abrasion or something had rubbed hard against her head, and some redness, but no visible bruising in the area where Ms. Hammond claimed to have been struck with the handgun. The doctor found no additional injuries anywhere on Ms. Hammond's body, other than a mark and some bruising on her forearm. He instructed Ms. Hammond to take a pain reliever similar to Advil or Motrin. The doctor testified that had Ms. Hammond not come to the hospital, her abrasion would have healed itself. Ms. Hammond was not admitted to the hospital, and was released within a matter of hours.

Katie Urka, a forensic scientist with the Michigan State Police, testified for the State. As the DNA analyst assigned to this case, she processed various articles collected from Mr. Urban's home for DNA analysis. (6a). At the State's request, Ms. Urka briefly discussed DNA, chromosomes, and the general mechanics of DNA analysis. (6a-9a). She then testified as to how she handled the DNA samples and testing process. (10a-23a).

Ms. Urka concluded that a swab taken from the handgun found at the house contained a partial mix DNA profile. (13a). On cross-examination, Ms. Urka ultimately conceded she could

not identify whose saliva was on the gun. (33a). Ms. Urka testified Ms. Hammond "matched" the DNA profile from a shirt, and Mr. Urban was "excluded as a donor." (18a-19a). She explained that DNA collected from the bedroom door was another "mixed" profile—Ms. Hammond "matched" the major donor, Mr. Urban was "excluded" as the major donor, and the minor donor was "not suitable for comparisons." (19a). She reached the same conclusions with respect to a mixed profile of DNA collected from Ms. Hammond's black leggings. (21a-22a). Finally, she described the DNA profile from a pillowcase, which she testified that Mr. Urban "matched," and from which Ms. Hammond was "excluded." (22a-23a). At no point did the prosecution ask Ms. Urka discuss the statistics behind any of her findings, and defense counsel did not object to the absence of any statistical testimony.

The parties stipulated to the admission of the laboratory report Ms. Urka prepared which summarized these findings. (9a-10a, 59a-61a).

The jury found Mr. Urban guilty of (1) unlawful imprisonment; (2) assault with a dangerous weapon (the liquor bottle); and (3) misdemeanor domestic violence. The original felony domestic violence charge was for "aggravated domestic assault," but the jury convicted only on the lesser included misdemeanor count. The jury returned a verdict of not guilty for (1) assault with a dangerous weapon (a handgun or shotgun); and (2) felony firearm.

On July 18, 2017, the Court of Appeals affirmed the convictions and sentences. The Court published the opinion on August 31, 2017. (62a-73a).

I. THE TRIAL COURT'S ADMISSION OF DNA EVIDENCE FOR WHICH THE STATE FAILED TO PROVIDE ANY STATISTICAL INTERPRETATION CONSTITUTES A CLEAR ERROR—OR, AT A MINIMUM, DEFENSE COUNSEL'S FAILURE TO OBJECT CONSTITUTES INEFFECTIVE ASSISTANCE OF COUNSEL—THAT RESULTED IN PREJUDICE AND WARRANTS THE GRANT OF A NEW TRIAL.

Standard of Review:

An appellate court looks for plain error in reviewing a trial court's admission of purported DNA matches for which the State failed to provide any statistical evidence. Although defense counsel did not object to the lack of interpretation, the omission affected the defendant's substantial rights, making the clear-error standard appropriate. *People v Carines*, 460 Mich 750, 763–64; 597 NW3d 130 (1999).

A claim of ineffective assistance of counsel "presents a mixed question of fact and law" when first raised on appeal. *People v Armstrong*, 490 Mich 281, 289; 806 NW2d 676 (2011). Questions of law are reviewed *de novo*, and the trial court's findings of fact are reviewed for clear error. *People v Chenault*, 495 Mich 142, 159; 845 NW2d 731 (2014).

Argument:

In *People v Coy*, 243 Mich App 283, 302; 620 NW2d 888 (2000), the Court of Appeals held, as a matter of first impression in Michigan, that "some qualitative or quantitative interpretation **must** accompany evidence of [a] potential [DNA] match." (emphasis added). The Court recognized that statistical analysis is "essential for the evidence to have relevance or meaning to the trier of fact." *Id.* at 298. Because the evidence of a potential DNA match in the case lacked **any** statistical interpretation, the *Coy* Court deemed it inadmissible. *Id.* at 301.

As in *Coy*, the State provided no such interpretation here. Ms. Urka's testimony regarding partial and full DNA matches included **no** "qualitative or quantitative" analysis—she simply recited her findings of full or partial matches. While Ms. Urka did not personally testify that "in the absence of identical twins or close relatives, it can be concluded to a reasonable degree of scientific certainty" that she found matches to the individuals at issue, that phrase is stated as applicable to all six of her substantive findings on the laboratory report that was submitted to the jury as an exhibit. (59a-61a). The laboratory report does not contain any statistical analysis of the DNA testing performed by Ms. Urka.

On appeal, Mr. Urban argued that the admission of Ms. Urka's testimony as to the conclusions she reached regarding the DNA testing was plain error in that the prosecution did not satisfy the *Coy* foundational standard for admission of DNA match evidence. In the alternative, Mr. Urban argued he was denied his Sixth Amendment right to the effective assistance of counsel due to his trial attorney's failure to object to the admission of this evidence in the absence of any statistical analysis of the purported DNA matches.

The Court of Appeals found no reversible error in the admission of Ms. Urka's testimony. The Court, while recognizing the controlling *Coy* standard for admissibility, held:

> We conclude that the scientist's report constitutes "some analytic or interpretive evidence concerning the likelihood or significance of a DNA profile match." *Coy*, 243 Mich App at 301-302. Unlike the expert witness in *Coy*, who explicitly testified that no statistical interpretation was performed on the samples in question, *id.* at 294, the scientist's report in this case indicates that she analyzed and interpreted the samples that were suitable for analysis and concluded "to a reasonable degree of scientific certainty" that they matched samples taken from defendant and the victim. We are satisfied that there was no plain error in the admission of this evidence. (64a).

This Court has asked the parties to brief three questions: 1) whether the Court of Appeals in *Coy* set out the proper foundational standard for admission of DNA match evidence; 2) if not, what should be the proper standard for admission of this type of evidence; and 3) whether, under the appropriate standard, was the evidence in this case properly admitted where Ms. Urka's report states that her conclusions of a DNA match are supported to a "reasonable degree of scientific certainty."

Mr. Urban submits that the *Coy* opinion must be read to require the proponent of DNA match evidence, in order to have that evidence admitted, to present evidence of a statistical analysis of the likelihood of a match, and that that is the proper foundational standard for such evidence. While the *Coy* Court used the phrase that "some qualitative or quantitative interpretation must accompany evidence of the potential match," in the contest of the full opinion that statement can only be reasonably interpreted as requiring some variant of statistical analysis of the likelihood of a match. That standard is consistent with the majority of states which have established foundational requirements for the admission of purported DNA match evidence, and provides the best and most meaningful standard to allow lay juries to fully understand the substantive value of this highly complex and evolving scientific evidence. Under that standard, Ms. Urka's statements in her report that her conclusions of DNA matches are accurate to a "reasonable degree of scientific certainty" did not satisfy the requirement that the evidence of a purported match must be accompanied by a statistical analysis of the likelihood of a match.

A. The *Coy* standard:

In *Coy, supra,* the prosecution sought to prove the defendant guilty of a homicide by showing that his blood was on a doorknob of the decedent's apartment and a broken knife blade,

as the body was found with numerous stab wounds. The defendant admitted that he had previously engaged in sexual relations with the decedent, but denied any involvement in her death. At the autopsy evidence of sperm cells were found in the victim's vagina, and there was evidence that several days after the offense Mr. Coy was seen to have cuts on his hands.

At the trial the prosecution presented evidence from experts as to DNA testing of both the sperm cells and of the blood found on the doorknob and knife blade. The expert testified the sperm cells matched Mr. Coy's DNA, and provided a statistical analysis of that match, stating there was a 1 in 543 million chance that the sperm cells came from someone other than Mr. Coy. 243 Mich App at 304. However, as to the blood, the expert stated that the testing showed it was a mixed sample – that two or more persons had contributed DNA material to the sample – and that under the expert's laboratory protocols no statistical analysis was possible, but that Mr. Coy could not be excluded as a possible source of some of that DNA. The Court of Appeals noted the testimony that the presence of Mr. Coy's sperm cells in the victim was not clear proof that he committed the homicide, as expert testimony showed those cells could have been deposited days prior to the date of death.

In closing argument, however, the prosecution sought to persuade the jury they had scientifically proven Mr. Coy's blood was on the doorknob and broken knife blade just as definitively as they had proven he was the source of the sperm cells. 243 Mich App at 309-311.

Even though there had been no objection from the defense to the admission of the evidence of the purported DNA of Mr. Coy to the mixed blood sample, the Court of Appeals found plain error prejudicial enough to require reversal and a new trial. The Court began with an exhaustive review of the science of DNA analysis, and of the evolving status of differing testing procedures. 243 Mich App at 293. The Court noted that prior Michigan cases had ruled that

DNA analysis had found acceptance within the general scientific community. See, for example, *People v Lee*, 212 Mich App 228; 537 NW2d 233 (1995).

The *Coy* Court then turned to the issue of whether an expert's statement of a conclusion that a DNA sample matched the known DNA of a person is sufficient, standing alone, to permit that conclusion to be presented to the jury. The Court surveyed the rulings on this issue among other states and within the scientific community. The Court noted the majority of states that had already ruled on the issue had held that DNA match evidence is inadmissible in the absence of some statistical analysis testimony demonstrating the likelihood of a match occurring within the relevant demographic communities. The Court relied primarily on two sources – the opinion of the Delaware Supreme Court in *Nelson v State*, 628 A2d 69 (Del, 1993), and the report of the National Research Council, The Evaluation of Forensic DNA Evidence, (1996).

In *Nelson, supra* at 75-76 (quoted in *Coy*), the Delaware Supreme Court wrote:

> DNA typing produces two distinct, but interrelated, items of information: 1) whether a match exists between the samples; and 2) if a match exists, the ratio expressing the statistical likelihood that "the crime scene samples came from a third party who had the same DNA pattern as the suspect." The latter correlation is necessary because, even though two human genomes may vary at approximately three million sites, the DNA typing analysis currently employed examines only a few sites for variation in the DNA sequence. The theory is that, besides identical twins, no two individuals will have entire DNA sequences which are identical. The DNA prints which result from the current FBI procedure may not be unique since the entire DNA molecule is not analyzed. Since two unrelated individuals may have identical DNA patterns from the fragments examined in a particular analysis, the potential exists for a match to be mistakenly found. For this reason, statistical interpretation regarding the probability of a coincidental match or the likelihood that two unrelated individuals have the same DNA type **is necessary.** (Emphasis added).

The *Coy* Court went on to discuss how other jurisdictions had dealt with this admissibility issue:

> It appears that the majority of other states' courts share the view that evidence of a DNA match without accompanying statistical interpretation **is meaningless and inadmissible**. For example, the Delaware Supreme Court in *Nelson, supra*, discussed as follows the minimal value of a potential DNA match alone:
>
> > The Committee on DNA Technology in Forensic Science has stated:
> >
> > > "To say that two patterns match, without providing any scientifically valid estimate ... of the frequency with which such matches might occur by chance, is meaningless."
>
> [Committee on DNA Technology in Forensic Science, National Research Council, DNA Technology in Forensic Science (National Academy Press April 1992), p.] 74 (emphasis added).
>
> Several courts consider the statistical calculation (third) step as the more important of the two pieces of information which constitute DNA evidence. See, e.g., [*United States v] Porter*, 618 A2d [629,] 640 [(DCApp, 1992)] (statistics are an "integral part" of DNA evidence and "essential"); [*People v] Barney*, [8 Cal App 4th 798;] 10 Cal Rptr 2d [731,] 742;[8 Cal App 4th 798, 10 Cal Rptr 2d 731,] 742 [(1 Dist, 1992)] (statistical calculation is "pivotal element of DNA analysis"). Whether the statistical evidence is labeled "integral" or "pivotal," **the statistical calculation is essential for the evidence to have relevance or meaning to the trier of fact**.
>
> Since the issuance of the DNA Committee Report, an overwhelming majority of courts have excluded the evidence of a match after finding the corresponding statistical calculation to be inadmissible because not scientifically reliable. See [*State v] Cauthron*, [120 Wash 2d 879;] 846 P2d [502,] 516 [(1993)]10 (citing *Commonwealth v Curnin*, 409 Mass 218; 565 NE2d 440, 442, n 7 (1991) and *Ex parte Perry*, 586 So 2d 242, 254 ([Ala], 1991)); [*State v] Vandebogart*, [136 NH 365] 616 A 2d 483, 494 [(1992)] (evidence of match not admissible if not accompanied by scientifically reliable population frequency estimate); [*Commonwealth v] Lanigan*, [413 Mass 154] 596 NE2d [311,] 314 [(1992)] (match evidence "cannot be admitted without appropriate statistical support"); *Barney*, 10 Cal Rptr 2d at 745; but see [*State v]*

> *Pierce*, [64 Ohio St 3d 490] 597 NE2d [107,] 115 [(1992)] (statistical calculations go to the weight, not admissibility of DNA evidence). **We adopt this view and hold that DNA evidence is only admissible when both the evidence of a match and the statistical significance of the match are admissible**. Thus, we reject the State's overly simplistic argument that statistics go simply to the weight, not the admissibility of the DNA matching evidence.

243 Mich App at 297-299. (Emphasis added).

The *Nelson* Court noted that the majority of courts have rejected the argument that the jury should only be told of the expert's opinion there is a match, and should not be informed of the results of any statistical significance of the purported match. *Id.* at 299. The Court cited to the opinion of the Washington Supreme Court in *State v Cauthron*, 120 WASh 2d 879; 846 P2d 502 (1993):

> "Without the probability assessment, the jury does not know what to make of the fact that the patterns match: the jury does not know whether the patterns are as common as pictures with two eyes, or as unique as the Mona Lisa." *US v Yee*, 134 FRD 161, 181 (ND Ohio, 1991). The court in *People v Barney*, 8 Cal App 4th 798, 10 Cal Rptr 2d 731 (1992), found that a declared DNA match means nothing without the statistical component. Similarly, the Washington Supreme Court found that "[t]estimony of a match in DNA samples, without the statistical background or probability estimates, is neither based on a generally accepted scientific theory nor helpful to the trier of fact." *State v Cauthron*, 120 Wash 2d 879, 907, 846 P2d 502, 516 (1993). See, also, *State v Anderson*, 115 NM 433, 853 P2d 135 (NM App, 1993); *State v Vandebogart* [136 NH 365, 616 A2d 483 (1992)]; *Commonwealth v Curnin*, 409 Mass 218, 565 NE2d 440 (1991).
>
> See also *State v Brown*, 470 NW2d 30, 33 (Iowa, 1991) (rejecting the defendant's challenge to the admission of expert testimony regarding statistical probabilities because "it is doubtful that jurors could take the probabilities of the four separate segments, combine them, and arrive at an answer with any degree of certainty as to its correctness"; and finding that "[f]urnishing statistical analysis would assist the trier of fact in such a case and that is the heart of admissibility under [Iowa R]ule [of Evidence] 702. Without statistical evidence, the ultimate results of DNA testing would become a matter of speculation.")

243 Mich App at 300.

Finally, the *Coy* Court returned to the conclusion of the National Resource Council's report:

> "The insistence on quantitative estimation has been fueled by the observation in the 1992 NRC report (page 74) that "[t]o say that two patterns match, without providing any scientifically valid estimate (or, at least, an upper bound) of the frequency with which such matches might occur by chance, is meaningless."
>
> **Certainly, a judge's or juror's untutored impression of how unusual a DNA profile is could be very wrong. This possibility militates in favor of going beyond a simple statement of a match, to give the trier of fact some expert guidance about its probative value**. [National Resource Council, supra at 193 (citations omitted; emphasis added).]

243 Mich App at 301.

Having reviewed both this scientific paper and the decisions from the majority of states, the *Coy* Court stated their agreement with the majority rule that some evidence of statistical analysis of the likelihood of a match must be presented in addition to the expert's conclusions:

> We conclude that absent some analytic or interpretive evidence concerning the likelihood or significance of a DNA profile match, Matthews' testimony concerning the potential match between defendant's DNA and the DNA contained in the mixed blood samples found on the knife blade and the doorknob was insufficient to assist the jury in determining whether defendant contributed DNA to the mixed sample. MRE 702; *Smith, supra*. We emphasize that we do not now declare or delineate the appropriate articulations for expressing the extent or meaning of a potential match, but merely hold that some qualitative or quantitative interpretation must accompany evidence of the potential match.

243 Mich App at 301-302.

In a footnote to this section of the opinion, the Court stated that other cases which held that expert testimony as to DNA matches was admissible in the absence of any statistical analysis was admissible were distinguishable because those courts found that in their case the

admission of the evidence was harmless error under the specific facts of the case, but even if not distinguishable or dictum, the *Coy* Court expressly disagreed with their foundational standard:

> To the extent that *Watley* [*People v Watley*, 245 AD2d 323, 667 NYS2d 376 (1997] and *Brodine* [*Brodine v State*, 936 P2d 545 (Alas App 1997)]stand for the proposition that evidence of a DNA match is properly admitted without accompanying statistical interpretation evidence, we disagree and decline to follow these nonbinding precedents.

243 Mich App at 302, fn. 12

The context of this discussion in the *Coy* opinion shows that when the Court used the phrase "some qualitative or quantitative interpretation" the Court was specifically referring to the necessity for the proponent of the DNA match evidence to present some statistical analysis evidence regarding the frequency or likelihood of a match. None of the cases discussed in *Coy* in which other states adopted a foundational standard for DNA match evidence, and with which the *Coy* Court agreed, referred to any different type of interpretative evidence other than statistics. The Court explained they did not want to require a particular or unique variant of statistical analysis, as the science in this area was rapidly changing, and in a footnote to that phrase noted the National Resource Council report contains a discussion of the "pros and cons of the various manners of expressing the meanings of a potential match." 4243 Mich App at 302, Fn. 13. Accordingly, the requirement in *Coy* of "some qualitative or quantitative interpretation" to accompany the expert's opinion testimony was not intended to expand the permissible grounds for admission to methods other than the various statistical manners in which those interpretations can be expressed.

B. The *Coy* standard is the appropriate standard for admission of DNA match evidence:

In the 18 years since the issuance of the *Coy* decision from the Michigan Court of Appeals, a number of additional states have adopted or reiterated the same standard of requiring some evidence of a statistical analysis of the likelihood of a match before DNA matching evidence can be admitted. A review of those decisions show these jurisdictions have relied upon the same rationale for the decisions in *Coy, Nelson, Cauthron, Barney*, and the other cites cited therein – that testimony from a DNA expert that a sample matches the known DNA profile of a particular person is "meaningless" to lay jurors in the absence of the related statistical analysis.

For example, the Supreme Judicial Court of Massachusetts in *Commonwealth v Mattel*, 455 Mass 840, 846, 850-851; 920 NE2d 845 (2010), wrote:

> The defendant argues that it was error to admit expert testimony that the defendant could not be excluded as a potential source of DNA found on the interior doorknob of the victim's apartment, and that the victim could not be excluded as a potential source of DNA found on the defendant's sweatpants, **without accompanying testimony explaining the statistical relevance of those nonexclusion results.** For the reasons that follow, we agree.
>
> * * *
>
> We have also held that in a criminal trial we will "not permit the admission of test results showing a DNA match (a positive result) without telling the jury anything about the likelihood of that match occurring." *Commonwealth v. Curnin*, 409 Mass. 218, 222 n. 7, 565 N.E.2d 440 (1991).24 See *Commonwealth v. Daggett*, 416 Mass. 347, 357, 622 N.E.2d 272 (1993) (Abrams, J., concurring) ("expert testimony concerning a DNA match must be accompanied by some background information indicating the probability that the match in question might have occurred by chance"); *Commonwealth v. Thad T.*, 59 Mass.App.Ct. 497, 505–506, 796 N.E.2d 869 (2003) (same). We have explained our approach by stating that "[e]vidence of a match based on correctly used testing systems is of little or no value without reliable evidence indicating the significance of the match, that is, 'evidence of the probability of a random match of [the victim's or] the defendant's DNA in the general population.' " *Commonwealth v. Rosier*, 425 Mass. 807, 813, 685 N.E.2d 739 (1997), quoting *Commonwealth v. Lanigan*, 419 Mass. 15, 20, 641

> N.E.2d 1342 (1994). See *Commonwealth v. Curnin*, *supra* at 230, 565 N.E.2d 440 (Appendix) ("The fact that two DNA samples produce the same DNA prints, and therefore contain the same alleles, is of little probative value in a criminal prosecution until it is determined how often that combination of alleles occurs in a given population").
>
> The same reasoning applies to evidence that a DNA test, although resulting in less than a complete "match," could not exclude a particular individual as a potential contributor. Without reliable accompanying evidence as to the likelihood that the test could not exclude other individuals in a given population, the jury have no way to evaluate the meaning of the result.

(Emphasis added). (Footnotes omitted).

Similarly, the Vermont Supreme Court in *State v Tester*, 968 A2d 895, 906-908 (2009), held that evidence of the statistical analysis of a purported DNA match is a requisite for admission of the match evidence:

> Defendant argues that the expert testimony presented by the State-that defendant could not be excluded or that his DNA was consistent with the 05-2-1 sample-is not reliable or relevant under Rule 702 and *Daubert*. In *Streich*, [*State v Streich*, 163 Vt 331; 658 A2d 38 (1995)] we stated that we agreed "with the courts that have held that evidence about the fact of one or more allele matches is not helpful without some evidence about the probability of a match in the population as a whole." 163 Vt. at 345, 658 A.2d at 48. While we did not directly hold that Rule 702 barred such evidence in *Streich*, we take that step now.
>
> * * *
>
> The courts are divided on the issue, although the majority appears to favor requiring a qualitative or quantitative assessment of the significance of the match. The most thorough analysis of the case law is in *People v. Coy*, 620 N.W.2d at 896-99. The court in *Coy* concluded that "absent some analytic or interpretive evidence concerning the likelihood or significance of a DNA profile match, [the expert's] testimony concerning the potential match between defendant's DNA and the DNA contained in the mixed blood samples found [at the crime scene] was insufficient to assist the jury in determining whether defendant contributed DNA to the mixed sample." *Id*. at 898. The decision that best expresses our concerns, in line with our analysis in *Streich* and *Brochu*, is *Peters v. State*, 18 P.3d 1224, 1227-28 (Alaska Ct.App.2001):

Admitting a DNA profile match without evidence that properly interprets the significance of the DNA match could be very misleading. It is generally well known that DNA testing often allows scientists to identify a particular individual from among millions. Because the potential precision of DNA testing is so well known, a jury might assume that any DNA profile match is extremely unlikely and therefore extremely probative. But as explained above, this is not always true. A jury might therefore give undue weight to a DNA profile match in a case where no evidence has been presented showing the significance of the match.

Furthermore, admitting a DNA profile match with improper interpretive evidence may be misleading.

* * *

... The state argues that evidence of physical characteristics such as eye color and hair color are routinely admitted in courts without any evidence of their frequency within the general population. But there is a fundamental difference between these physical characteristics and evidence of a DNA profile match. Because jurors can readily observe hair color and eye color within the general population, the jury is presumed to have a grasp of the frequency of these characteristics within the general population. DNA evidence is different. Because a juror is unable to observe a person's DNA, the juror has no idea of the frequency of a particular DNA profile.

See also *United States v. Yee*, 134 F.R.D. 161, 181 (N.D.Ohio 1991) ("Without the probability assessment, the jury does not know what to make of the fact that the patterns match: the jury does not know whether the patterns are as common as pictures with two eyes, or as unique as the Mona Lisa."); *State v. Carter*, 246 Neb. 953, 524 N.W.2d 763, 783 (1994) (holding that "evidence of a DNA match will not be admissible if it has not been accompanied by statistical probability evidence that has been calculated from a generally accepted method"), overruled on other grounds by *State v. Freeman*, 253 Neb. 385, 571 N.W.2d 276, 293 (1997); *State v. Cauthron*, 120 Wash.2d 879, 846 P.2d 502, 516 (1993) ("Testimony of a match in DNA samples, without the statistical background or probability estimates, is neither

> based on a generally accepted scientific theory nor helpful to the trier of fact."), overruled on other grounds by *State v. Buckner*, 133 Wash.2d 63, 941 P.2d 667, 668 (1997). We endorse the analysis of *Coy* and *Peters*.

In *State v Johnson*, 290 Neb 862, 879-880; 862 NW2d 757 (2015), the Nebraska Supreme Court ruled that under their state precedent, DNA match evidence must be accompanied by statistical evidence or probability assessments:

> But our case law generally requires that DNA testing results be accompanied by statistical evidence or a probability assessment that explains whether the results tend to include or exclude the individual as a potential source.
>
> For example, in *State v. Bauldwin*, [283 Neb 678; 811 NW2d 267 (2012)] we stated that if a DNA profile from a mixed-source sample matches an individual's known DNA profile, the analyst calculates the probability that someone other than the individual in question could have contributed DNA to the sample. In rejecting the defendant's argument that these probabilities confuse jurors, we stated the following:
>
> > This is essentially a claim that a jury is not smart enough to understand and give weight to the statistical analysis that accompanies DNA evidence. *Bauldwin* offers no authority for this argument, and we reject it out of hand—juries are asked to analyze complex topics and evidence in many cases, and that is what the jury was asked to do here. Furthermore, DNA evidence without the accompanying probability assessment would be inadmissible because it would not aid the trier of fact. **We have specifically held that DNA evidence is inadmissible without the probability assessment for that very reason. We are not persuaded to reconsider that position today.**
>
> Other courts have reached the same conclusion.

In a footnote to this section, the *Johnson* Court cited to the opinions in *Coy, Peters, and Nelson.* 290 Neb at 880, fn 31. See also *Deloney v State*, 938 NE2d 724 (Ind, 2010).

These decisions shows that the rationale and scientific underpinnings of the *Coy* decision remain valid and appropriate, even with the evolution of different methods of DNA testing. In

all of these cases the reviewing courts have understood that the complexity of the science involved is beyond the common knowledge of lay jurors, and thus a statistical analysis in support of the testimony of an expert as to a "match" between a sample obtained from the scene of a crime and a known sample of a person is necessary for the jurors to fully and fairly comprehend the probative value of that conclusion.

It is reasonable to assume that the proponent of DNA evidence at a trial will welcome, rather than object to, a foundational requirement that statistical analysis of the likelihood of a match must accompany the expert's conclusion.[1] DNA technology has reached a point where, if the samples are able to be tested at a significant number of locations on the molecule (loci), the statistical analysis in connection with the frequencies found in the relevant populations regularly result in astronomical numbers – the chance that the sample obtained from the crime evidence did not come from the known sample of the person in interest often is stated as one in trillions or higher numbers. Those numbers commonly demonstrate to jurors that the chance of error in the expert's conclusion there is a "match" is infinitesimal. While that is not always the case, as the opinions cited above recognize, it is critical that jurors are provided this type of quantitative interpretation of the testing results so that those results are as meaningful as possible.

In the years since the release of the published *Coy* decision, it has become very common for the proponent of DNA match evidence to present statistical analysis evidence in order to meet that standard for admission. It has not been argued in this case, nor did the Court of

[1] While most commonly evidence of a DNA match is presented by the prosecution as proof that the particular defendant was the source of DNA material found in relation to the investigation of an offense, there are situations where the defense would be the party who is seeking to present that match evidence. Although in many cases either at trial or in post-conviction efforts to exonerate a defendant the defense would seek to show that the defendant's DNA profile does not match the evidence recovered by the police, it is possible that a defendant at trial will seek to show that the DNA material recovered in fact matches the profile of a different person, consistent with the defendant's claim of innocence. In that situation, the *Coy* foundational requirement would equally apply to the defense.

Appeals below find, that compliance with the *Coy* standard is either overly burdensome, unduly expensive, or in any other way difficult to achieve. To the contrary, DNA expert witnesses have become familiar and comfortable with the mathematical means by which they compare the DNA profiles obtained in the case with the various databases which have been created for distinct populations in society, and thus expressing the statistical significance of their test results. As indicated above, prior cases have found both that the science of DNA profiling and the statistical analysis of the likelihood of a match have been accepted as reliable within the relevant scientific community. Acceptance by this Court of the *Coy* standard would not require this group of experts to be re-trained, or unfairly place any obstacles in the path of presentation of DNA match evidence.

This Court should adopt and reiterate the *Coy* Court's standard for the admissibility of DNA match testimony. The necessity of presenting statistical analysis of the likelihood of the match in relation to the known frequencies in relevant populations insures that jurors are given the information they need to properly evaluate the probative value of the expert's conclusion that there is a match.

C. Should this Court adopt a different foundational standard than the *Coy* standard;

As Mr. Urban has argued that the *Coy* standard is the correct standard, and applied by the majority of other jurisdictions, this Court should not adopt any other standard, or permit the admission of an expert's conclusion of a DNA match standing alone.

D. Did the report satisfy the appropriate foundational standard for admission:

The record in this matter is clear that Ms. Urka did not testify to any statistical analysis in support of her conclusions as to the various DNA matches in this case, and no such analysis

appears at any point of the laboratory report that was admitted into evidence. Instead, all that was presented to Mr. Urban's jury, in addition to Ms. Urka's testimony outlining her conclusions as to the various items she examined, was the language in her report that "in the absence of identical twins or close relatives, it can be concluded to a reasonable degree of scientific certainty" that the samples matched. To a lay juror that language appears to be a rote statement in such reports. No testimony was presented by Ms. Urka or any other witness defining that language, or explaining to the jurors what a "reasonable degree of scientific certainty" actually means.

In essence, this language adds nothing to the jury's knowledge that the particular witness has been qualified to testify as an expert. In this case, the jury heard the voir dire of Ms. Urka, her qualifications and educational history, and heard the trial judge agree to permit her to testify as to scientific conclusions in her area of expertise under MRE 702. (2a-6a). It must be presumed that most jurors will assume that any expert witness who testifies personally believes in the accuracy and reliability of his or her conclusions. While the jury is instructed that they are not bound to accept an expert's conclusions, that is because it is the exclusive province of the jury to determine the facts. Being told by the expert that his or her conclusion is accurate to a "reasonable degree of scientific certainty" without any other evidence, such as a statistical analysis of the accuracy of the conclusion, is effectively the witness telling the jury to believe the testimony solely because the witness is a qualified expert. The statements of scientific certainty in this case were vague, overly general, and of little help to the jurors in evaluating the significance and probative value of this highly complex evidence.

The standard adopted in *Coy* and the other cited cases seeks to assist lay jurors in understanding this scientific testimony to the furthest extent possible. If the goal of permitting

expert witnesses to testify in the form of opinions under MRE 702 is to "assist the trier of fact to understand the evidence or to determine a fact in issue," then this Court should not shy away from requiring that this recognized and accepted method of analyzing the reliability of a conclusion of a "match" be required whenever evidence of a purported match is proffered. A mere statement that the conclusion is reasonable certain does little else to assist the jurors than their knowledge that the witness is a qualified expert in that particular area of science.

If this Court accepts and reiterates the *Coy* standard, it must be held that the evidence in the case at bar failed to comply with that foundational requirement for admission.

E. Application to the case at bar:

The *Coy* ruling has been the published and controlling precedent in Michigan since 2000. Accordingly, both the trial judge and the trial prosecutor, in addition to Mr. Urban's trial counsel, should have been aware of that foundational prerequisite. Where the prosecution failed to comply with that standard, the trial judge should have denied admission of Ms. Urka's testimony, or stricken that testimony once the prosecution completed the examination of the witness without presenting any evidence of a statistical analysis of the findings. It was plain error, even in the absence of a defense objection, for the court to have admitted this evidence. That error affected Mr. Urban's substantial rights, and seriously affected the fairness, integrity, or public reputation of these judicial proceedings independent of the defendant's innocence. *People v Carines*, 460 Mich 750, 763; 597 NW2d 130 (1999).

Even if this Court does not find plain error sufficient to reverse the convictions under the *Carines* standard, the Court should find Mr. Urban was denied his Sixth Amendment right to the effective assistance of his trial counsel due to counsel's failure to object to Ms. Urka's testimony.

A defendant is entitled to a new trial when he demonstrates that his lawyer's performance was not objectively reasonable, and, but for that deficiency, a reasonable probability existed that he would not have been convicted. *Strickland v Washington*, 466 US 668, 690; 104 S Ct 2050; 80 L Ed 2d 674 (1984); *People v Pickens*, 446 Mich 298; 521 NW2d 797 (1994). While a specific strategy may satisfy the reasonableness requirement, "a court cannot insulate the review of counsel's performance by calling it trial strategy." *People v Trakhtenberg*, 493 Mich 38, 52; 826 NW2d 136 (2012). Rather, the purported strategy "must be sound, and the decisions as to it objectively reasonable." *People v Ackley*, 497 Mich 381, 389; 870 NW2d 858 (2015).

The DNA match testimony in this case was seriously prejudicial to Mr. Urban. It is clear this case essentially presented a credibility battle between Mr. Urban and Ms. Hammond. The defense did not deny there was an altercation between them that night, but did dispute her version of the events of that altercation. Ms. Hammond admitted she lied to the police as to several matters involving the incident. The medical evidence did not corroborate her allegations as to the severity of the wounds she suffered, or Mr. Urban's actions causing those wounds. The police did not locate any shotgun in the house, contrary to Ms. Hammond's allegation. The police acknowledged that Mr. Urban was cooperative when questioned in the case. Finally, and most importantly, the jury, even hearing Ms. Urka's testimony, found Mr. Urban not guilty as to several of the charges, and convicted him only on a lesser included offense under one of the charges.

In her closing argument, the trial prosecutor emphasized the DNA match evidence as corroborating much of Ms. Hammond's testimony:

> [MS. VAN LANGEVELDE] Let's talk again about serology and DNA. The white tank top found in the zebra room tested positive for blood. The blood's sent on to DNA. The blood swab for DNA

> comes back that's Monica Hammond's blood. James Urban is excluded as the donor of the blood on the tank top.
>
> The swab taken on the back of the bedroom tested positive for blood in serology. So, that blood sample was sent on to DNA. DNA says it tested - compared it to Monica's. And Monica was found to be the major donor of the blood on the door. The black leggings, again, tested positive for blood in serology. Serology takes that swab, blood swab, sends it to DNA. DNA compares it. Tests positive for Monica -- or, compares the same to Monica Hammond's blood.
>
> And the pink pillowcase, again, tested positive for blood. They send that blood swab on to DNA. It matches Mr. Urban's DNA. It's Mr. Urbans blood.
>
> **The physical evidence matches Monica's story**. He gets cut by the mirror. And guess what? His blood is on the pillow, which is by the broken mirror. She says, He hit me in the head with a gun and I put it, my head, against the back of the door. It's her blood on the back of the door. I got blood on my pants because I touched the back of my head and then rubbed my hand on my pants. Its Monica's blood on the black pants. He made me put the gun in my mouth. And what do we have on the gun? Saliva.
>
> * * *
>
> Again, we know the door is closed when Monica's head is against it, bleeding, because there's blood on the back of the door. She wasn't able to leave when her head was bleeding. And we know that it's Monica's blood.

(491-50a, 52a). (Emphasis added).

Apart from the prosecution's reliance on the DNA evidence, only Ms. Hammond's account remained—inescapably inconsistent, both internally **and** with respect to her alleged injuries. Ms. Hammond's testimony simply did not add up: she could not keep details straight and, after presenting her account of the altercation, admitted that she misled and lied to responding officers and changed her story after the hospital conducted a toxicology report.

The DNA evidence bore the load of the State's burden; in light of other inconsistencies, the State relied on the DNA evidence to persuade the jury, but did so without providing the tools by which to understand that evidence. While the facts of record differ from those in *Coy*, the effect is the same: the lack of statistical analysis posed "risks of confusion of the jury," resulting

in unfair prejudice to Mr. Urban, see *id.* at 302–03, particularly in light of the evidence's centrality to the State's case. Had the jury not been permitted to consider Ms Urka's testimony, they may have acquitted Mr. Urban on all or less than the remaining charges. The clear error and resulting prejudice of its admission, given the State's failure to supplement its DNA evidence with any statistical interpretation, warrants the grant of a new trial.

RELIEF SOUGHT

Defendant-Appellant asks this Honorable Court to either grant this application for leave to appeal, or any appropriate peremptory relief.

Respectfully submitted,

STATE APPELLATE DEFENDER OFFICE

BY: /s/ Peter Jon Van Hoek
_____
PETER JON VAN HOEK (P26615)
Assistant Defender

3300 Penobscot Building
645 Griswold
Detroit, Michigan 48226
(313) 256-9833

Date: August 17, 2018