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**Cheryl Crowder
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**11TH JUDICIAL CIRCUIT
ST CHARLES COUNTY**

IN THE SUPREME COURT OF MISSOURI

No. SC97903

STATE ex rel. DONALD NASH,

Petitioner, v.

STANLEY PAYNE,

Respondent.

REPORT OF THE SPECIAL MASTER

**The Honorable Richard K. Zerr
Special Master of the Court**

**IN THE CIRCUIT COURT OF ST. CHARLES COUNTY
STATE OF MISSOURI**

STATE ex rel. DONALD NASH,)	
)	
Petitioner,)	Circuit Court Case No. 1911-CC00940
)	
v.)	Supreme Court Case No. SC97903
)	
STANLEY PAYNE,)	Hon. Richard K. Zerr, Special Master
)	
Respondent.)	

Special Masters Findings of Fact, Conclusions of Law

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I. SUMMARY OF ISSUES PRESENTED

Petitioner Donald Nash currently serves a sentence of life without the possibility of parole for 50 years for capital murder, R.S. Mo. § 565.001 (1978). Nash has come forward with the sworn recantation of the State's expert witness admitting that her trial testimony was scientifically incorrect and that the amount of Nash's DNA found underneath the victim's fingernails is consistent with Nash's close relationship with the victim, his girlfriend. Nash also performed new DNA testing on the victim's right shoe, whose shoelace was removed to strangle the victim. The additional DNA testing revealed the existence of previously undiscovered male DNA that does not belong to Nash.

Nash's Petition for Writ of Habeas Corpus raises five grounds for habeas corpus relief. Donald Nash made the same five claims in the Supreme Court of Missouri that the Court of Appeals already rejected. The Supreme Court of Missouri referred Counts II-V of the Petition to the undersigned Master to take evidence and issue findings of fact and conclusions of law. These Counts are: (II) that the State presented inadmissible and erroneous expert testimony at Nash's trial; (III) that the prosecution mischaracterized the scientific evidence to the jury; (IV) that the trial court's exclusion of evidence of an alternative perpetrator, as applied, violated Nash's right to a complete defense; and (V) that Nash's trial and appellate counsel were constitutionally ineffective.

In 1982, Nash's girlfriend, Judy Spencer, was tragically murdered outside Salem, Missouri. The killer strangled Spencer to death with her right shoelace and shot her in the neck with a shotgun. On the evening before the murder, Nash and Spencer had argued in

Salem about Spencer's excessive drinking, which led to Spencer leaving a friend's apartment alone, while Nash remained at their home. As she left, Spencer told her friend that she planned to drive to bars in a nearby town. A neighbor driving out of the apartment complex was the last witness to see Spencer alive.

Two ranchers found Spencer's body the following day at an abandoned schoolhouse far from town. Hours later, Spencer's car was located in a ditch, many miles away from the schoolhouse, in the opposite direction.

No witnesses or physical evidence placed Nash at either the abandoned schoolhouse or the ditch. Although the victim had been shot, no evidence was presented that Nash owned a shotgun. Within hours of the murder, Nash had learned the news from investigators and broke down crying. The investigators administered a gunshot residue test on Nash. The gunshot residue test was negative. The investigators who viewed Nash during the testing recorded no observations that Nash appeared like he had been involved in a struggle.

Investigators also identified fresh tire tracks at the abandoned schoolhouse where Spencer's body was discovered. These tire tracks did not belong to Nash's truck or Spencer's car. Today, the vehicle that left those tire tracks remains unidentified.

Miles away from the schoolhouse, investigators located two sets of fingerprints on the window of Spencer's abandoned car. The first set of fingerprints belonged to Lambert Anthony Feldman III. The second set of fingerprints belonged to Alfred John Heyer III, who lived next to the ditch where Spencer's abandoned car was found, but who lied to

investigators about his awareness of the vehicle. Nash's fingerprints were not found on the car.

For 26 years, no one was arrested. A parallel investigation was run by the Dent County Sheriff and the Missouri State Highway Patrol. All investigators who testified before the Master conceded that they did not even have probable cause to file charges against Nash during that period. Two of these investigators, former Dent County Sheriff's deputies, testified that they do not believe Nash committed the murder; instead, their investigations focused on Feldman and Heyer, respectively.

In 2008, however, the Missouri State Highway Patrol decided to test Spencer's fingernails for DNA at the urging of Spencer's family. Nash voluntarily provided a sample of his DNA to the Highway Patrol for cross-testing. When the fingernail testing located a trace amount of Nash's DNA, the Highway Patrol immediately arrested Nash for Spencer's murder. Petitioner Donald Nash serves a sentence of life without the possibility of parole for fifty years in the Eastern Reception Diagnostic Correctional Center in St. Francois County, Missouri, for Capital Murder. The Circuit Court of Crawford County, Missouri imposed the sentence after a jury trial and conviction, following a change of venue from Dent County.

The Supreme Court of Missouri affirmed the judgment of conviction and sentence, rejecting claims that Nash could not be prosecuted for premeditated murder because the murder statute had been repealed and replaced, that the evidence was insufficient for conviction, that it was trial error not to give a circumstantial evidence instruction, that Missouri's direct connection rule is unconstitutional, and that it

was a state-law trial error to exclude evidence of an alternate suspect under the direct connection rule in this case. Ex. A, *State v. Nash*, 339 S.W.3d 500 (Mo. banc 2011).

The Supreme Court of Missouri found the following: “In Nash’s case, a reasonable juror could have found him guilty beyond a reasonable doubt for Judy’s murder, especially considering the DNA evidence together with other evidence favorable to the jury’s verdict. There was sufficient evidence to support Nash’s conviction.” *State v. Nash*, 339 S.W.3d 500, 511 (Mo. banc 2011). The Supreme Court of Missouri held that despite Nash’s argument that Missouri law required it to use a higher standard specific to Missouri circumstantial evidence cases, the analysis it employed was whether viewing the evidence in the light most favorable to the State any rational trier of fact could have found the elements of the crime beyond a reasonable doubt. *Id.* at 509. The Supreme Court of Missouri noted that it deferred to the jury’s ability to believe all, some, or none of the evidence presented and therefore took the evidence presented by the State and inferences favorable to conviction that could be drawn from that evidence as true, and disregarded evidence and inferences to the contrary. *Id.*

Although the Supreme Court of Missouri cited Missouri case law as opposed to *Jackson v. Virginia*, as the source of this standard, the standard is the same as that required by the Due Process Clause under *Jackson v. Virginia*. See *Jackson v. Virginia*, 443 U.S. 307, 319 (1976). Among the evidence supporting its decision, the Supreme Court of Missouri noted the following facts: The State presented evidence that only Nash’s DNA and the victim’s DNA was found under the victim’s fingernails, and it was the jury’s province to weigh the significance of that finding. *Nash*, 339 S.W. 3d at 510. The State’s

expert testified that the amount of DNA found would not have come from “low level contact” and the same quantity of DNA from Nash as from the victim was found. *Id.* The prosecutor asked the jury to infer that the DNA lodged under the victim’s fingernails at the time of the murder, in light of testimony that the victim had washed her hair before the murder, and expert testimony that hair washing would remove DNA from under the fingernails, although the testifying expert did not have an opinion as to what quantity of DNA would remain. *Id.*

The Supreme Court of Missouri noted testimony from the defense expert that the DNA finding was insignificant in that it was to be expected in a case in which Nash and the victim cohabitated, and testimony that the DNA would not necessarily have been removed by washing, and that recontamination could have occurred from touching a surface or clothing. *Id.* at 510-511. But the Supreme Court of Missouri held that it was the province of the jury to weigh the expert testimony and the court could not reweigh the DNA evidence to reach a verdict different than the jury has. Specifically, the court stated, “There was sufficient evidence to support the jury’s conclusions that Nash’s DNA, rather than a third person’s DNA, was present under Judy’s fingernails because Nash was the last person to have contact with Judy before she was killed.” *Id.*

The Supreme Court of Missouri then went on to list other evidence supporting Nash’s conviction viewed in the light most favorable to the conviction. *Id.* The court noted Nash’s comments and nervousness when asked for a DNA sample; his statement to the victim “that’s the last time you’ll lie to me bitch” on the night before the murder; a witness seeing Nash driving around the victim’s apartment complex after a time he told police he

had gone home and stayed there; Nash's advance request for wake-up call on the morning of the murder even though Nash was living with the victim; and Nash's involvement with another woman shortly after the murder. *Id.*

A fair reading of the Supreme Court of Missouri's decision indicates that the Court found the evidence sufficient to convict based on the circumstantial evidence, but that it found this to be "especially" true "considering the DNA evidence together with other evidence favorable to the jury's verdict." *Id.*

Following the affirmance of his conviction by the Supreme Court of Missouri, Nash sought habeas corpus relief in the United States District Court for the Eastern District of Missouri. Habeas relief was denied under 28 U.S.C. § 2254. In the course of those proceedings, however, the district court wrote:

Although the undersigned finds his hands tied ... and cannot offer [Nash] any relief, the Court hopes that the State of Missouri may provide a forum, either judicial or executive, in which to consider the evidence that Petitioner may be actually innocent of the crime for which he was convicted.

Nash appealed the denial of habeas corpus relief to the United States Court of Appeals for the Eighth Circuit. That court affirmed the district court's denial of federal habeas relief under federal law, but wrote:

As the district court noted below, the newly presented evidence in this case deserves "serious consideration" in the state courts. Missouri provides a procedure for a prisoner to petition for habeas relief in its courts. *See* Mo. Sup. Ct. Rule 91. We suggest ... that state court would be a more appropriate forum for Nash's claims.

The Nash contends that he was arrested, charged, and prosecuted for Spencer's murder based upon an ill-conceived misunderstanding that Spencer's hair washing before her murder would have eliminated *all* of Nash's preexisting DNA underneath Spencer's fingernails. He argues Highway Patrol investigators without any expertise in this area reasoned that Nash's preexisting DNA had been washed away and the remaining DNA "must" have come from a violent struggle. Nash contends that the investigators, however, were not scientists, but they nevertheless advanced and advocated this false purported fact. They reached this conclusion despite the longstanding absence of any physical evidence that Nash was present at the crime scenes or involved in such a struggle.

Nash suggests the probable cause affidavit which launched Nash's arrest and eventual conviction for capital murder was based on a false premise. That affidavit stated that Nash's "DNA *could have not have remained present* during hair washing." (Ex. 34 (Probable Cause Statement), p. 2) (emphasis added). The State's proffered "expert" who testified at trial, Ruth Montgomery, testified she does not recall furnishing this opinion to the individual who prepared and executed the probable cause statement. In any event, Montgomery agrees this statement is wrong. It appears that none of the Highway Patrol investigators ever consulted with Montgomery, let alone an actual expert, to determine whether their hair washing hypothesis was correct before they arrested Nash for capital murder. Today, Nash contends, it is undisputed that the concept behind this probable cause statement is patently incorrect.

Nash contends this false purported "fact" infected his case from its inception through the Supreme Court's affirmance of his conviction. He was arrested and charged

in the first instance based on a false probable cause statement; he was convicted after the prosecutor wrongly told the jury that all of Nash's DNA would have been washed away; and the Supreme Court affirmed his conviction after the State repeated that all of Nash's DNA would have been washed away in its appellate brief.

The Nash argues, returning to court a decade after his conviction, that the State admits it is unaware of any other prosecution in the United States that has ever relied upon this "hair washing" theory. The State nevertheless secured Nash's conviction through a scientific hypothesis created by Montgomery, an unqualified Highway Patrol lab analyst, who testified that she "expected" Spencer's act of hair washing that evening would have had a "great effect" on the elimination of Nash's preexisting DNA. Montgomery had no education, training, or experience in this area, but she provided the opinion anyway.

Nash levels much of his complaint as to the wrongfulness of his conviction upon what he calls a *guess* made by Montgomery. To the untrained ears of the jury, Montgomery's theory likely sounded believable. But the State now admits that Montgomery's "great effect" hypothesis was not generally accepted in the scientific community in 2008 (or today). In fact, as Montgomery admitted during her pretrial deposition, she had only read a small handful of articles about this general topic *the day before* her deposition. None of those articles suggested that hair washing would have a "great effect" on eliminating a romantic or cohabiting partner's DNA from underneath fingernails. Quite the contrary; the articles showed that another person's DNA will persist under someone's fingernails under a variety of conditions. None of the studies addressed hair washing, and the only study about "personal hygiene" found it statistically

insignificant. Nash suggests that it is not clear how Montgomery came up with her “great effect” opinion beyond guessing, but it is quite clear that the opinion was not based on generally accepted scientific principles.

In addition, Nash also implicates his trial counsel in the miscarriage resulting from the Montgomery testimony. Even though it was apparent at trial that Montgomery’s opinion was not generally accepted by the scientific community and that Montgomery lacked any qualifications or expertise to provide the opinion, Nash’s trial counsel did not move to exclude Montgomery’s testimony and did not request a *Frye* hearing. Nash’s trial counsel admits that he knew Montgomery’s opinion was likely “junk science,” but he failed to raise the critical objection necessary to keep out Montgomery’s erroneous opinion. During his cross-examination, Nash’s trial counsel also failed to ask Montgomery rudimentary questions exposing the lack of acceptance of the theory and her lack of qualifications and expertise to provide it.

Today Montgomery admits under oath that the “great effect” opinion was incorrect. The opinion was speculation. She further admits to speculating about the underlying facts that served as the basis for that theory, such as the chemical composition of the shampoo and the manner in which Spencer washed her hair.

Nash also posits that during closing argument, the prosecution misrepresented Montgomery’s already-wrong testimony to the jury by claiming that *all* of Nash’s DNA would have been eliminated by the hair washing. The State concedes the prosecution’s argument was incorrect, even under Montgomery’s already-wrong “great effect” theory.

Nash submits that this argument had a high likelihood of confusing the jury about the meaning of Montgomery's "great effect" theory.

Furthermore, Nash argues that on direct appeal the prosecution *continued* to mischaracterize Montgomery's testimony to the Supreme Court, again claiming that Montgomery's "great effect" theory meant that *all* of Nash's DNA had been washed away. The State concedes that its briefing was also incorrect. Ultimately, the Supreme Court upheld Nash's conviction.

Nash asserts this is a situation in which no one stands by the central "scientific theory" that was used to convict Nash of capital murder. The State admits it was incorrect. Montgomery, the expert who invented the theory, admits that it was incorrect. Nash advises that one could not argue that justice has been served when erroneous "science" – which boils down to a single unqualified witness's disavowed opinion – was the linchpin evidence used to convict him of capital murder.

Today, Montgomery claims that she believes hair washing would have "some" effect, but she cannot even estimate a quantity or percentage of Nash's DNA that would be washed away. All Montgomery can say is that she now believes that hair washing would have "more than no effect." The Warden contends Montgomery's current opinion is merely an unimportant shift in "adjectives." The Warden reminds the Master that the Supreme Court of Missouri noted testimony from the defense expert that the DNA finding was insignificant, in that it was to be expected in a case in which Nash and the victim cohabitated, and testimony that the DNA would not necessarily have been removed by washing, and that recontamination could have occurred from touching a surface or clothing.

Id. at 510-511. But the Supreme Court of Missouri held that it was the province of the jury to weigh the expert testimony and the court could not reweigh the DNA evidence to reach a verdict different than the jury has. Specifically, the court stated, “There was sufficient evidence to support the jury’s conclusions that Nash’s DNA, rather than a third person’s DNA, was present under Judy’s fingernails because Nash was the last person to have contact with Judy before she was killed.” *Id.*

The Warden points out that the Supreme Court of Missouri then went on to list other evidence supporting Nash’s conviction viewed in the light most favorable to the conviction. *Id.* The court noted Nash’s comments and nervousness when asked for a DNA sample; his statement to the victim “that’s the last time you’ll lie to me bitch” on the night before the murder; a witness seeing Nash driving around the victim’s apartment complex after a time he told police he had gone home and stayed there; Nash’s advance request for wake-up call on the morning of the murder even though Nash was living with the victim; and Nash’s involvement with another woman shortly after the murder.

The Warden believes a fair reading of the Supreme Court of Missouri’s decision indicates that the Court found the evidence sufficient to convict based on the circumstantial evidence, but that it found this to be “especially” true “considering the DNA evidence together with other evidence favorable to the jury’s verdict.” *Id.*

Nash asserts, in short, the DNA used to convict him of capital murder has no probative value.

Nash also claims he is entitled to habeas relief based on the prosecution's closing statement. Nash claims the prosecution made multiple material misrepresentations about Ruth Montgomery's testimony, including the critical misrepresentation that *all* of Nash's DNA would be washed away. Nash's counsel – who had failed to challenge Montgomery's ability to testify and thereby ensure that Montgomery's testimony was excluded in the first place – finally objected to the State's mischaracterizations of that testimony at closing argument, but the trial court did not sustain any of the objections. In fact, the trial court threatened to reprimand defense counsel for “hounding” the prosecution during closing argument.

Petitioner claims he suffered unfair prejudice from these misstatements about the critical evidence in the case. The Warden now insists that the mischaracterizations were unintentional. Nash admits that may be true, but argues it does not change the fact that the prosecution's mischaracterizations misled the jury about simultaneously complicated and baseless scientific testimony, which had formed the central basis for Nash's conviction for capital murder. The Warden also argues that the prosecutor misunderstood the meaning of Montgomery's opinion. Nash opines that if the prosecutor who prepared and tried Nash's case misunderstood the central evidence against Nash, it follows that Nash's jury was even more susceptible to confusion.

Nash also claims he is entitled to habeas corpus relief based on his trial counsel's ineffective assistance by failing to move to exclude Montgomery's opinion or even request a *Frye* hearing regarding its inadmissibility. Nash asserts trial counsel's failure to recognize that the critical piece of evidence in a capital murder case was inadmissible and

to object to its admission was so prejudicial that it deprived him of a fair trial. As the Warden's judicial admissions and Montgomery's testimony reveal, it was plain that Montgomery's "great effect" opinion was not generally accepted in the scientific community and that she was unqualified to testify about this topic.

Nash's trial counsel admits that his failure to object was not a strategic decision; he just did not think the objection would be sustained. Nash asserts it is insufficient that trial counsel planned to cross-examine Montgomery. This was critical testimony necessary to secure Nash's conviction, and Nash asserts it never should have reached the jury because Nash had a meritorious objection. Nash suggests there is more than a reasonable likelihood that he would have been acquitted without Montgomery's opinion testimony. It must be noted that Nash did not timely pursue a Rule 29.15 motion, and in doing so, defaulted claims of ineffective assistance of trial or direct appeal counsel, and claims that alleged ineffective assistance of direct appeal counsel provided cause to excuse the default of alleged trial error claims that were not pursued on appeal. The Warden asserts that Nash has defaulted all claims of trial error not raised in his direct appeal and all claims of ineffective assistance of trial and appellate counsel not raised in the timely filed Rule 29.15 motion for post-conviction relief and that he cannot show cause and actual prejudice to excuse those defaults.

Nash claims he is also entitled to habeas relief based on his inability to present evidence that Feldman may have committed the murder. Before trial, the State moved *in limine* to prohibit Nash from presenting this evidence under the direct connection rule. The trial court granted the motion. On direct appeal, Nash's same counsel brought a *facial*

challenge to Missouri's direct connection rule. Nash now acknowledges this was the wrong argument; the general evidentiary rule is plainly constitutional.

Nash now states the correct issue is that the direct connection rule, *as applied* to Nash's case, violated Nash's constitutional right to a complete defense. Nash argues this was an exceptionally weak case, as shown by the State's failure to bring charges against him for 26 years. Nash asserts the fingerprints on Spencer's car had been the only physical evidence for over two decades. He argues, for the decade leading up to his trial, Feldman had even been listed as the primary suspect, and not Nash. He asserts Feldman, a violent sex offender who was known to keep a shotgun in his car, had been unable to provide any evidence of why his fingerprints were on a dead woman's car. Feldman denied knowing the victim and denied ever visiting Salem, despite witnesses who told investigators they had seen them together in the days before the murder. Nash believes the existence of Feldman's fingerprints on a murder victim's vehicle is evidence any reasonable juror would not only want, but would expect, to hear in a fair trial. Nash argues he was also deprived of his right to a complete defense. The Warden contends this claim is procedurally barred and without legal merit.

Finally, Nash alleges he received ineffective assistance of appellate counsel (who was also his trial counsel). As stated above, Nash's appellate counsel failed to raise an *as-applied* challenge to the exclusion of the Feldman evidence. Instead, he raised a *facial* challenge to a state evidentiary rule, which required Nash to establish that the rule was unconstitutional in all of its applications. In addition, just like at trial, Nash alleges appellate counsel failed to raise any challenge to Montgomery's inadmissible testimony or

the prosecution's erroneous closing statement. Nash points out that these were meritorious appellate arguments that should have been identified and raised, but they were not. The Warden argues that neither trial nor appellate counsel were ineffective.

II. REPORT ON PROCEDURAL HISTORY AND EVIDENCE TAKEN

Nash filed his Petition for Writ of Habeas Corpus in the Supreme Court of Missouri on May 22, 2019. The Supreme Court requested suggestions in opposition from the Warden, which the Warden filed on June 21, 2019. Nash filed a reply on July 3, 2019. Pursuant to Rules 84.22 and 91.01, *et seq.*, of the Missouri Rules of Civil Procedure, Petitioner Donald Nash ("Nash") seeks a writ of habeas corpus to vacate his conviction for capital murder, R.S. Mo. § 565.001 (1978), for the 1982 murder of his girlfriend, Judy Spencer ("Spencer"). Nash brings five counts: (I) actual innocence, in light of: (a) the retraction by the State's expert of her trial opinion about the supposed "great effect" of hair washing on the elimination of Nash's preexisting DNA underneath the victim's fingernails, and (b) new DNA evidence from the victim's clothing pointing to another suspect; (II) violation of Nash's right to due process based on the State's presentation of the expert's unreliable and erroneous opinion to the jury, which has never been generally accepted in the scientific community; (III) violation of Nash's right to due process based on the prosecution's mischaracterization of the trial expert's now-disavowed opinion during closing argument and the trial court's error in overruling Nash's timely objections; (IV) violation of Nash's right to a complete defense based on the exclusion of physical evidence that another person, a violent sex offender, committed the murder; and (V)

ineffective assistance of trial and appellate counsel, including counsel's failure to challenge the admission of the expert's erroneous opinion on direct appeal to this Court.

Nash made the same five claims in the Supreme Court of Missouri that the Court of Appeals already rejected. Suggestions in Support in the Supreme Court of Missouri at 58–102. On October 1, 2019, the Supreme Court of Missouri directed the Warden to address claims two through five in Nash's petition. Those claims are that: (1) the admission of the opinion of the State's DNA expert at trial violated due process and should have been excluded, (2) the State's closing argument violated due process and was reversible error, (3) the exclusion of testimony about an alternate suspect, Feldman, violated due process and was reversible error, and (4) trial and appellate counsel were ineffective for not better presenting or preserving these claims..

The Supreme Court granted Nash a preliminary writ of habeas corpus and appointed the Master on October 1, 2019. The Court's appointment directed the Master:

to hold pretrial conferences, to take evidence on the issues raised in the pleadings filed herein regarding the claims set forth in counts II through V of the petition for writ, with full power and authority to issue subpoenas, compel production of books, papers, and documents and the attendance of witnesses; to hear and to determine all objections to testimony in the same manner and to the same extent as this Court might in a trial before it; to arrange for the reporting and transcribing of the testimony; and to report the evidence taken, together with the Master's findings of fact and conclusions of law on said issues.

(Order dated Oct. 1, 2019).

The Warden filed his Return to Preliminary Writ in the Supreme Court on October 30, 2019. All subsequent filings have been directed to the Master and filed in the Circuit Court of St. Charles County.

On November 4, 2019, Nash moved to compel the Warden to answer the allegations in the Petition, which the Warden opposed on November 5, 2019. Nash filed a reply on November 11, 2019.

Also on November 4, 2019, the Warden moved for a scheduling order, which Nash opposed on November 7, 2019. The Warden filed a reply on November 8, 2019, and Nash filed a sur-reply the same day.

On November 19, 2019, the Master ordered the Warden to file an answer, which the Warden filed the same day, entitled “Supplemental Return.” Nash filed a Reply to Respondent’s Return to Preliminary Writ on December 2, 2019.

On November 19, 2019, the Master also ordered Nash to serve any interrogatories, requests for production, and requests for admission before December 2, 2019. Nash served interrogatories, requests for production, and requests for admission on November 27, 2019. The Warden filed its responses to the interrogatories and requests for admissions on January 8, 2020

By order dated January 13, 2020, the Master set aside the week of March 2-6, 2020, for any live testimony. In the interim, the parties proceeded to take depositions of additional witnesses to eliminate the need for in-person appearances for certain witnesses.

The Master held a three-day evidentiary hearing on March 3, 4, and 5, 2020, which included opening statements by the parties. During the course of the evidentiary hearing, Nash called six live witnesses, respectively: (1) former Dent County Sheriff’s Deputy Timothy Bell; (2) Nash’s daughter Diane Kelly; (3) Nash’s brother, Jesse Kenneth Nash; (4) Ruth Montgomery; (5) Nash himself; and (6) former Dent County Sheriff’s Deputy

Steven Lawhead. Nash also presented videotaped testimony from four witnesses, respectively: (1) his ex-wife Jenetta McDonald; (2) former Missouri State Highway Patrol Sergeant Dorothy Taylor; (3) Missouri State Highway Patrol Sergeant Scott Mertens; and (4) Nash's trial and appellate counsel, Frank Carlson.¹ The Warden called one rebuttal witness mid-hearing after the deposition of Sergeant Mertens: the victim's sister, Jeanne Paris.

The Warden suggests that the Special Master need not start over from scratch in this case. He alleges that the transcript of the hearing on the same claims from the Circuit Court of St. Francois County provides *at least* valuable information for the Master, and should receive some degree of deference. In *State ex rel. Nixon v. Jaynes*, 63 S.W.3d 210 (Mo. banc 2001), the Supreme Court of Missouri adopted federal cause and prejudice analysis for use in Missouri habeas cases where a claim was defaulted in the ordinary course of review. But the Supreme Court of Missouri in that case also addressed the issue of successive Missouri habeas corpus petitions. The Supreme Court of Missouri stated that successive habeas petitions are not barred as such, but that a strong presumption exists against claims that have already been litigated once. *Id.* at 217.

The Warden asserts the language in *Nixon v. Jaynes* seems to refer to earlier petitions at the same or a lower court level as there is an absolute bar to a review of a merits habeas denial by a higher court. *Hicks v. State*, 719 S.W.2d 86 (Mo. App. S.D. 1986); § 532.040 (it is unlawful for any inferior court or officer to entertain an

¹ In addition, the parties have represented in correspondence with the Master that Nash's counsel, with the assistance of the State, attempted to serve former Highway Patrol Sgt. Jamie Folsom with a deposition subpoena. It appears that Folsom evaded service.

application for habeas relief refused by a higher court or officer). There is disagreement between the Districts of the Court of Appeals on what is a merits decision by a higher court for purposes of barring habeas review,² but the general principle that a merits decision from a higher court is an absolute bar to review by a lower court is what is important here; because that indicates *Nixon v. Jaynes* is not referring to a decision from a higher court when it speaks of a strong presumption against granting relief on successive petitions.

The Warden advises deference here would be consistent with case law that teaches that deference should be given to a special master who held an evidentiary hearing and issued Findings of Fact and Conclusions of Law, due to the Master's ability to view and judge the credibility of witnesses, and that such deference should be equivalent to the deference given by a reviewing court to the trial court, in a court tried case. *State ex rel. Clemons v. Larkins*, 475 S.W.3d 60, 75–76 (Mo. banc 2015). The Warden argues there is no logical reason for a habeas court to afford deference to a special master who held an evidentiary in a habeas case, as it would to a trial court, but for the master not to afford similar deference to a circuit court judge who already held an evidentiary hearing in a habeas case. *But see In re Ferguson*, 413 S.W.3d 40, and 50–52 (Mo. App. W.D. 2013) (conducting “independent” review of circuit denial of habeas petition after an evidentiary hearing where the respondent provided no authority supporting a more limited review).

² See *McKim v. Cassady*, 457 S.W.3d 831, 838–39 (Mo. App. W.D. 2015).

The Warden instructs the correct position is to provide a presumption of correctness to the lower court of the type discussed in *Nixon v. Jaynes*, manifested by the type of deference discussed in *Clemons v. Larkins*.

The Master received into evidence 55 exhibits from Nash and 20 exhibits from the Warden. Those exhibits are catalogued in the attached Appendix. The Master granted leave for each side to submit Proposed Findings. The Warden's Proposed Findings were received on April 10, 2020. Nash's Proposed Findings were received April 17, 2020.

III. FINDINGS OF FACT

General Procedural and Factual History

Nash serves a sentence of life without the possibility of parole for fifty years in the Eastern Reception Diagnostic Correctional Center in St. Francois County, Missouri, for Capital Murder. The Circuit Court of Crawford County, Missouri imposed the sentence after a jury trial and conviction, following a change of venue from Dent County. Stanley Payne, the Warden of the Eastern Reception Diagnostic Correctional Center, is the proper party respondent in this case. *See State ex rel. Hawley v. Midkiff*, 543 S.W.3d 604 (Mo. 2018) (discussing the proper parties and venue for a habeas case challenging confinement in the Department of Corrections). The Circuit Court of St. Francois County issued a Judgment and Findings of Fact and Conclusions of Law, denying a habeas petition challenging the judgment of conviction and sentence that Nash now challenges. Because there is no appeal from the denial of the habeas petition in this instance, Nash filed an original habeas action in the Missouri Court of Appeals. The Court of Appeals denied the petition.

Nash then filed an original petition in the Supreme Court of Missouri. The Supreme Court of Missouri appointed the Special Master to review claims two through five in the petition.

The Circuit Court of Crawford County convicted Nash of capital murder and sentenced him to life imprisonment without the possibility of parole for fifty years. The Supreme Court of Missouri affirmed the judgment of conviction and sentence, rejecting claims that Nash could not be prosecuted for premeditated murder because the murder statute had been repealed and replaced, that the evidence was insufficient for conviction, that it was trial error not to give a circumstantial evidence instruction, that Missouri's direct connection rule is unconstitutional, and that it was a state-law trial error to exclude evidence of an alternate suspect under the direct connection rule in this case. Ex. A, *State v. Nash*, 339 S.W.3d 500 (Mo. banc 2011). The Supreme Court of Missouri addressed and rejected two claims based on the direct connection rule. One was a federal constitutional claim arguing that the direct connection rule itself is facially unconstitutional, and the other was that the evidence offered was not properly excluded by the direct connection rule under Missouri law. The Missouri Court rejected those arguments in separate sections of its opinion. *Id.* at 512–15.

The Supreme Court of Missouri found the following: “In Nash’s case, a reasonable juror could have found him guilty beyond a reasonable doubt for [Spencer’s] murder, especially considering the DNA evidence together with other evidence favorable to the jury’s verdict. There was sufficient evidence to support Nash’s conviction.” *Id.* at

The Supreme Court of Missouri held that despite Nash's argument that Missouri law required it to use a higher standard specific to Missouri circumstantial evidence cases, the analysis it employed was whether viewing the evidence in the light most favorable to the State any rational trier of fact could have found the elements of the crime beyond a reasonable doubt. *Id.* at 509. The Supreme Court of Missouri noted that it deferred to the jury's ability to believe all, some, or none of the evidence presented and therefore took the evidence presented by the State and inferences favorable to conviction that could be drawn from that evidence as true, and disregarded evidence and inferences to the contrary. *Id.* Although the Supreme Court of Missouri cited Missouri case law as opposed to *Jackson v. Virginia*, as the source of this standard, the standard is the same as that required by the Due Process Clause under *Jackson v. Virginia*. See *Jackson v. Virginia*, 443 U.S. 307, 319 (1976).

Among the evidence supporting its decision, the Supreme Court of Missouri noted the following facts: The State presented evidence that only Nash's DNA and the victim's DNA was found under the victim's fingernails, and it was the jury's province to weigh the significance of that finding. *Nash*, 339 S.W. 3d at 510. The State's expert testified that the amount of DNA found would not have come from "low level contact" and the same quantity of DNA from Nash as from the victim was found. *Id.* The prosecutor asked the jury to infer that the DNA lodged under the victim's fingernails at the time of the murder, in light of testimony that the victim had washed her hair before the murder, and expert testimony that hair washing would remove DNA from under the fingernails,

although the testifying expert did not have an opinion as to what quantity of DNA would remain. *Id.*

The Supreme Court of Missouri noted testimony from the defense expert that the DNA finding was insignificant in that it was to be expected in a case in which Nash and the victim cohabitated, and testimony that the DNA would not necessarily have been removed by washing, and that recontamination could have occurred from touching a surface or clothing. *Id.* at 510-511. But the Supreme Court of Missouri held that it was the province of the jury to weigh the expert testimony and the court could not reweigh the DNA evidence to reach a verdict different than the jury has. Specifically, the court stated, “There was sufficient evidence to support the jury’s conclusions that Nash’s DNA, rather than a third person’s DNA, was present under Judy’s fingernails because Nash was the last person to have contact with Judy before she was killed.” *Id.*

The Supreme Court of Missouri then went on to list other evidence supporting Nash’s conviction viewed in the light most favorable to the conviction. *Id.* The court noted Nash’s comments and nervousness when asked for a DNA sample; his statement to the victim “that’s the last time you’ll lie to me bitch” on the night before the murder; a witness seeing Nash driving around the victim’s apartment complex after a time he told police he had gone home and stayed there; Nash’s advance request for wake-up call on the morning of the murder even though Nash was living with the victim; and Nash’s involvement with another woman shortly after the murder. *Id.*

After his direct appeal, Nash sought federal habeas corpus relief in the United States District Court of the Eastern District of Missouri. He initially raised two federal

constitutional claims. First, he alleged the evidence was constitutionally insufficient for conviction. Second, he alleged that he was denied his constitutional right to present a defense by Missouri's direct connection rule. The United States District Court found that the Supreme Court of Missouri reasonably rejected the sufficiency of the evidence challenge, and that Nash's constitutional challenge to the direct connection rule, as presented in federal court, was procedurally defaulted because he had shifted from a facial challenge in the Supreme Court of Missouri to an as applied challenge in the United States District Court. Resp. Ex. B. Nash attempted to amend his federal habeas petition to add a defaulted claim alleging that it was constitutional error to admit the testimony of the State's DNA expert at trial. Nash alleged he could excuse the default through a showing of gateway actual innocence. The district court denied the motion for leave to amend as futile, finding that Nash failed to make out a gateway actual innocence claim to excuse the default of that claim. Ex. B at *11–*12. . In the course of those proceedings, however, the district court wrote:

Although the undersigned finds his hands tied ... and cannot offer [Nash] any relief, the Court hopes that the State of Missouri may provide a forum, either judicial or executive, in which to consider the evidence that Petitioner may be actually innocent of the crime for which he was convicted.

The United States Court of Appeals for the Eighth Circuit affirmed the district court decision on all three points. Ex. C, *Nash v. Russell*, 807 F.3d 892 (8th Cir. 2015). The court found that the Supreme Court of Missouri reasonably rejected the sufficiency of the

evidence challenge, and that the constitutional challenge to the direct connection rule was defaulted as Nash presented it in federal court. *Id.* at 897–98. The Court of Appeals rejected the gateway actual innocence claim for the alternative reasons that evidence Nash offered is not “new” in the sense required by law; and that even if it is treated as new evidence, it does not rise to the level of proving by a preponderance of the evidence that no reasonable juror would now vote to convict. *Id.* at 898–99. That court affirmed the district court’s denial of federal habeas relief under federal law, but wrote:

As the district court noted below, the newly presented evidence in this case deserves “serious consideration” in the state courts. Missouri provides a procedure for a prisoner to petition for habeas relief in its courts. *See* Mo. Sup. Ct. Rule 91. We suggest ... that state court would be a more appropriate forum for Nash's claims.

Based on the pleadings and the evidence received by the Master, the Master issues these findings of fact. In issuing these findings, the Master has taken into account facts that are not controverted by the parties, the State’s binding judicial admissions, and the Master’s own resolution of any conflicting evidence.

A. March 10-11, 1982

1. At around noon on March 11, 1982, Judy Spencer’s body was discovered at an abandoned schoolhouse southwest of Salem, Missouri. Later that night, her car was also discovered in a ditch off a rural highway northwest of Salem. (Ex. 4 (Missouri State Highway Patrol (“MSHP”) Investigation Report dated March 11, 1982); Ex. 48 (Trial Tr.) 422-438; Ex. 49 (Trial Tr.) 485-487, 726-727).

2. At the time of the murder, Nash and Spencer were dating and lived together in Spencer's house in Salem, Missouri. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶1; Ex. 43 (Requests for Admissions ("RFA")) No.43).

3. On March 10, 1982, Spencer, Janet Jones, Suzette Edmundson, and Suzette Edmundson's infant, had driven together in Nash's pickup truck to Waynesville, Missouri, to an appointment with Spencer's podiatrist. Nash drove carpool to work at the AMAX mine in Spencer's Oldsmobile sedan. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶2-4; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 5; Ex. 43 (RFA) Nos. 46-48).

4. During the drive to Spencer's podiatrist appointment, Spencer, Jones, and Edmundson shared a six-pack of Coors Light bottles. After the appointment, the podiatrist purchased Spencer, Jones, and Edmundson a six-pack of Coors Light cans for their ride back from Waynesville. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶5-8; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 5; Ex. 43 (RFA) Nos. 49-50, 53-54; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶¶ 1-2).

5. After Spencer and Jones dropped off Edmundson and her infant in Anutt, Missouri, Spencer and Jones returned to Jones' apartment in Salem around 7 p.m. to talk and continue drinking. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶9, 10; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 5; Ex. 43 (RFA) Nos. 55, 56); Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3).

6. After Spencer and Jones returned to Jones' apartment, Spencer called Nash and falsely told him that she was still in Anutt. (Ex. 1 (Petitioner's Uncontroverted Facts),

¶11; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 5; Ex. 43 (RFA) No. 57); Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3).

7. When Spencer called Nash from Jones' apartment, Nash suspected that Spencer had lied to him during the phone call about still being in Anutt. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶12; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 6; Ex. 43 (RFA) No. 58).

8. After Spencer called Nash, Nash drove to Jones' apartment, where he saw his pickup in the parking lot. As Nash was starting his truck in Jones' parking lot, Spencer saw Nash in the parking lot, came out of Jones' apartment and yelled at Nash to give her the keys to her car. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 13-14; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 5; Ex. 43 (RFA) Nos. 59-60; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3).

9. Nash and Spencer had a verbal argument outside Jones' apartment about Spencer's drinking. There was no physical altercation between Spencer and Nash during the argument outside Jones' apartment. During or immediately after the argument outside Jones' apartment, Nash threw the keys to Spencer's sedan into the grass near the parking lot. Then Nash returned home. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 15-18; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 5; Ex. 43 (RFA) Nos. 61-63; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3; Answer, ¶ 9).

10. When Spencer returned inside Jones' apartment, she told Jones that Nash was upset with her drinking. According to a police report consisting of several layers of hearsay, in an interview on March 13, 1982, Jones told Sergeant P.J. Mertens that Spencer had told Jones

that Nash had told Spencer, “That will be the last time you lie to me bitch.” Jones was inside while Nash and Spencer were outside, so Jones never personally heard Nash say this. Spencer also told Jones: “I guess that it’s over this time,” referring to her relationship with Nash. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 19-20; Ex. 43 (RFA) Nos. 64, 67; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3).

11. Spencer, who had gotten a haircut on March 9, 1982, also told Jones that Nash “thinks I’m ugly. He doesn’t like my hair this way.” According to Jones, after Spencer returned to Jones’ apartment after the argument with Nash, Spencer washed and restyled her hair in Jones’ kitchen sink. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 21-23; Ex. 43 (RFA) Nos. 68-70; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3).

12. The police reports from 1982 contain only a single sentence about Jones’ description of Spencer’s hair washing, which states “Judy had her hair style changed March 9, 1982, so she washed her hair and refixed it.” These police reports do not use the word “shampoo” or reference any type of shampoo. The police reports do not describe how vigorously Spencer washed her hair. The police reports do not describe how much time Spencer spent washing her hair. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 236-239; Ex. 43 (RFA) Nos. 71-74; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3).

13. After Spencer restyled her hair in Jones’ apartment on March 10, 1982, Spencer drove from Jones’ apartment to her house, where she lived with Nash, to change clothes. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 24-25; Ex. 4 (MSHP Investigation

Report dated March 11, 1982), ¶¶ 5-6; Ex. 43 (RFA) No. 80; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3; Answer, ¶ 9).

14. The police report from that day states:

Donald Nash stated ... When Judy arrived back at Nash's house, he stated that they began to argue about her drinking. Judy became mad and changed from her dress slacks into a pair of blue jeans, a black slipover T-shirt, brushed suede shoes and a white windbreaker jacket.

(Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 6).

15. To the State's knowledge, there is no evidence that Nash was physically violent toward Spencer while she was at the house on the evening of March 10, 1982. For example, the police reports detailing interviews with Jones immediately following the murder never mention any sense that Spencer was fearful of Nash. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 33; Ex. 4 (MSHP Investigation Report dated March 11, 1982); Ex. 43 (RFA) No. 84; Ex. 45 (MSHP Supplementary Investigation Report No. 7)).

16. After Spencer changed clothes at her house, she got back in her car and drove back to Jones' apartment without Nash, to continue drinking. There are no eyewitnesses who have ever placed Nash and Spencer together at any point after Spencer left their home that night. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 25-26, 32; Ex. 43 (RFA) No. 85; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 4; Answer, ¶ 9).

17. That evening, Nash and Jones exchanged multiple telephone calls. Both times, Spencer was not at Jones' apartment. Before Spencer had returned to Jones' apartment, Nash called Jones for the first time and told Jones "how much he loved [Spencer] and how much he was worried for her safety." Nash told Jones he was worried about Spencer

being hurt in a car accident or being arrested for drinking and driving. Nash made this first call to Jones around 8:30 p.m. on March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 27-31; Ex. 43 (RFA) Nos. 86-89; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 3; Answer, ¶ 10).

18. After Spencer returned to Jones' apartment from changing clothes at the house, Spencer and Jones talked and drank beer. Spencer told Jones that she thought her relationship with Nash might be over. Spencer also asked Jones to go with her to bars in Houston, Missouri. Jones declined because she was waiting for her boyfriend to come home. Spencer, who had been drinking all day, then left Jones' apartment after announcing that she was going to bars in Houston alone. As Spencer left Jones' apartment for the second time, Spencer took a bottle of beer with her. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 34-37, 39, 41; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 7; Ex. 43 (RFA) Nos. 90-92, 94, 96; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 4; Answer, ¶ 9).

19. Spencer had arrived at Jones' apartment the second time around 9 p.m. and left around 15 minutes later. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 38; Ex. 43 (RFA) No. 95).

20. Houston is approximately a 45-minute drive southwest of Salem. (Ex. 55 (Pr. Hrg. Tr.) 47:14-48:1; *see also* Evidentiary Hrg. Tr. 106:21-107:11 (identifying direction); Ex. 16 (Maps of Dent County and Salem, Missouri)).

21. Christine (Terrill) Colvin was one of Jones' neighbors in her apartment complex on March 10, 1982. As Spencer left Jones' apartment, Spencer asked Colvin to

go with her to Houston but Colvin declined. Colvin testified she did not want to go because of Spencer's reputation as "wild" and a "party girl." Colvin followed Spencer through town until they turned in opposite directions. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 42-43; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 7; Ex. 43 (RFA) Nos. 97-98; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 4; Ex. 49 (Trial Tr.) 473-475, 478, 481).

22. Another neighbor, Anita Tiefenthaler, reported she saw Spencer leaving the apartment complex around 9 p.m. Tiefenthaler told the police that Spencer "seemed angry and that Mr. [sic] Tiefenthaler thought she might have been drinking. When Miss Spencer left the apartmants [sic] she 'pealed out'." (Ex. 45 (MSHP Supplementary Investigation Report No. 3), ¶ 8).

23. Nash called Jones another time around 9:30 or 10 p.m. on March 10, 1982. During that call, after Spencer had again left Jones' apartment, Nash again said he was concerned about Spencer's whereabouts and her drinking and driving. Nash asked Jones to call him early the next morning if Spencer did not return that night. Both Nash and Jones separately went looking for Spencer in town that night. Nash continued to look for Spencer, but could not find her and he eventually went to bed. Spencer did not come home that evening. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 44-47; *see* Ex. 43 (RFA) Nos. 102-104; Ex. 48 (Trial Tr.) 377:23-378:5, 404:23-405:1, 419:16-25; Ex. 54 (Hearing Tr.) 266-67; Ex. 55 (Jones. Dep.) 61-62; Answer, ¶ 10).

B. The Schoolhouse Crime Scene

24. On March 11, 1982, two ranchers found Spencer's body in an outhouse foundation behind an abandoned one-room schoolhouse far outside of town. The abandoned schoolhouse was not visible from the nearby rural highway. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 72, 74; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶¶ 1-2; Ex. 43 (RFA) No. 144; Answer, ¶ 11).

25. Spencer's body was partially nude, with her blouse and bra pulled up close to her neck, exposing her breasts. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 77-78; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 3; Ex. 43 (RFA) No. 145; Answer, ¶ 11).

26. Spencer's shoes, jeans, and underpants had been thrown into the woods on the other side of a fence separating the school property from the woods. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 79-80; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶¶ 2-3; Ex. 43 (RFA) No. 146; Answer, ¶ 11; *see also* Ex. 11 (Photograph of Right Shoe); Ex. 12 (Photograph of Left Shoe)).

27. There were drag marks made by Spencer's heels as her body had been dragged approximately 153 feet from a point behind the schoolhouse to the outhouse pit. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 75-76; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 2; Ex. 43 (RFA) No. 151; Answer, ¶ 11).

28. The cause of Spencer's death was strangulation with her right shoelace, which was still around her neck. Spencer had also been shot in the neck post-mortem with a shotgun. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 81-84, 108-109; Ex. 10

C. Nash and Jones Search for Spencer on March 11, 1982

31. Jones called Nash around 5:45 or 6:00 a.m. on March 11, 1982, as requested by Nash, and Nash answered the wakeup call. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 49-50; *see* Responses to Ex. 43 (RFA) Nos. 114-115).

32. Nash called Spencer's mother from home later that morning, asking whether Spencer was at her parents' home. She was not. When asked, Nash told Spencer's mother that he was calling from work (which he was not). Nash testified that he did not want to worry her. (Ex. 48 (Trial Tr.) 305:15-309:3, 311:7-312:9, 312:25-313:8; Ex. 54 (Hearing Tr.) 268:24-269:9).

33. Nash argues the Warden has interpreted Nash's phone call to Spencer's mother as if he was attempting to create an alibi that morning, but the Warden's interpretation conflicts with the Warden's simultaneous position that Spencer had died many hours before this phone call. Nash further points out his absence from work also conflicts with the Warden's position that he had requested a wakeup call the prior night *because* his only concern was supposedly getting to work that morning. Nash argues the most reasonable explanation for his phone call to Spencer's mother is simply that he was still trying to locate Spencer. The Master finds the facts of the actions of Nash are mostly uncontroverted with only the motive of those actions in controversy. The Master does not find the facts sufficiently determinative to find a motive for those actions.

34. On March 11, 1982, Jones still thought it was "probably okay" that Spencer had not returned by the morning, until Spencer did not show up for work that afternoon. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 51; Ex. 43 (RFA) No. 117).

35. After Jones got off work on the afternoon of March 11, 1982, Nash and Jones drove to Houston to look for Spencer, but did not find Spencer or her car. During the trip to Houston, Nash continued to express concern for Spencer's safety to Jones. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 52-53; Ex. 43 (RFA) Nos. 118-119).

36. When Jones and Nash returned from Houston on March 11, 1982, they stopped by Spencer's and Nash's house to check for answering machine messages. While Jones and Nash were at the house on March 11, 1982, Nash received a telephone call asking him to come to the hospital in Salem where Spencer worked. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 54-55; Ex. 43 (RFA) Nos. 120-121).

37. When Nash and Jones arrived at the hospital in Salem on March 11, 1982, they were interviewed separately. When Nash was told about Spencer's murder, Nash appeared to be very upset to Highway Patrol Sergeant Gary Dunlap, and began to cry. When Jones next saw Nash after he had been informed of Spencer's murder, he appeared "broken-hearted" to her. In 1982, Jones provided investigators with a list of people "who might be mad at" Spencer, and she did not include Nash on that list. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 56-59; Ex. 43 (RFA) Nos. 122-124, 129; Ex. 45 (MSHP Supplementary Investigation Report No. 7), ¶ 7)).

D. The Discovery of Spencer's Car on March 11, 1982

38. Later that night, Spencer's car was found in a ditch 1.4 miles east of Missouri 72. The car had been driven into a ditch at a 90-degree angle and left abandoned on the side of a rural highway. On March 11, 1982, investigators saw tire marks indicating that

Spencer's car had swerved off the road. The car was not in the ditch at 9 p.m. on March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 122-125; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶¶ 8-9; *see* Response to Ex. 43 (RFA) Nos. 315-316, 318; Answer, ¶ 19).

39. When investigators arrived at the scene of Spencer's car on March 11, 1982, the doors to Spencer's car were unlocked. Spencer's keys and windbreaker were inside the car. The keys were on the console, and the dome light was still on. A beer can was on the driver's floorboard, and a beer bottle was on the passenger's floor. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 126-128; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 9; Ex. 43 (RFA) Nos. 319-320; Answer, ¶ 19).

40. At that time, on March 11, 1982, police observed Alfred John Heyer "standing by a house just a short distance west of where the victim's car was." (Ex. 45, (MSHP Supplementary Investigation Report No. 1), ¶ 16).

E. Nash's Claimed Exculpatory Evidence

1. Physical Evidence

41. The State's only physical evidence supposedly connecting Nash to the crime was a trace amount of 2.5 billionths of a gram of his DNA discovered underneath Spencer's fingernails 26 years after the crime. Nash's conviction rests on an inference, discussed in more detail below, that this DNA was the result of a struggle instead of the exchange of DNA from his romantic relationship and his cohabitation with the victim and that there was no other DNA under her nails except that of the Nash and her own. Male DNA has now been located on Spencer's right shoe, whose shoelace was removed to strangle her.

As explained below, both Nash and the trooper who collected the shoe have been excluded as contributors. (Ex. 2 (Joint Stipulation Regarding Admissibility of Shoe DNA Evidence); Ex. 49 (Trial Tr.) 678:25-679:15).

2. There Are No Eyewitnesses Connecting Nash to the Crime

42. The State admits there are no eyewitnesses who have placed Nash or his vehicle anywhere outside of Salem on the night of March 10, 1982, or the morning of March 11, 1982, let alone at the schoolhouse or the location of the car. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 170-172; Answer, ¶¶ 20, 25, 70).

43. Spencer drove a sedan, while Nash drove a small pickup. The State admits there is no evidence that either Spencer's car or Nash's pickup was ever at the schoolhouse. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 118-120; Ex. 43 (RFA) No. 155; Answer, ¶ 19).

3. Nash Tested Negative for Gunshot Residue

44. Within hours of the discovery of Spencer's body, Nash voluntarily submitted to a test for gunshot residue. The gunshot residue test was negative. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 110-113; Ex. 14 (Gunshot Residue Analysis dated March 25, 1982); Ex. 15 (Gunshot Residue Kit Analysis dated March 24, 1982); Ex. 43 (RFA) Nos. 125-126; Answer, ¶¶ 15, 70).

4. No Scratches

45. Investigators who saw Nash on March 11, 1982, did not see scratches or other marks on Nash which would indicate he was involved in some type of struggle or confrontation. (Ex. 49 (Trial Tr.) 518:6-519:22, 521:10-17; Ex. 54 (Hearing Tr.) 271:2-8).

5. No Shotgun

46. Nash testified he never owned or possessed a shotgun. The State does not know whose shotgun was used to shoot Spencer. The State does not know the make or model of the shotgun, and the State presented no evidence at Nash's trial identifying a shotgun Nash could have used in the murder. Other than Nash's brother-in-law's shotgun, the State has never tested any other gun to determine whether it was used to shoot Spencer. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 114-117; Ex. 30 (McDonald Dep.) 6:5-13:21; Ex. 43 (RFA) Nos. 369-372; Ex. 45 (MSHP Supplementary Investigation Report No. 16), ¶ 3; Evidentiary Hrg. Tr. 135:14-145:9).

6. Tire Tracks

47. Investigators measured the width of the tire tracks that were present when the Missouri State Highway Patrol first arrived at the abandoned schoolhouse grounds. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 91; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 3; Ex. 5 (Photograph of Tire Tracks and Drag Marks); Ex. 43 (RFA) No. 158).

48. The measured width of the tire tracks found at the schoolhouse on March 11, 1982, was 7 ½ inches wide and 70 inches from inside to inside or 77 inches between midpoints. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 92; Ex. 3 (Stipulation on Tire

Tracks), ¶ 2; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 3; Ex. 5 (Photograph of Tire Tracks and Drag Marks); Ex. 43 (RFA) No. 159).

49. The State has stipulated that the published tire track width of the distance between the midpoints of the front tires of a 1979 K-10 pickup (owned by Nash) is 65.8 inches for the front tires and 62.7 inches for the rear tires. (Ex. 3 (Stipulation on Tire Tracks), ¶ 3).

50. The State has stipulated that the published tire track width of the distance between the midpoints of the front tires of a 1976 Oldsmobile car (owned by Spencer) is 63.7 to 64 inches. (Ex. 3 (Stipulation on Tire Tracks), ¶ 4).

51. In short, the tire tracks did not belong to either Nash's truck or Spencer's car. They were, in fact, an entire foot *wider* than the tire tracks of either vehicle. (See Ex. 3 (Stipulation on Tire Tracks), ¶¶ 2-4).

7. Alcohol

52. Analysis of blood drawn during Spencer's autopsy indicated her blood alcohol content at the time of her death was 0.18. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 85; Ex. 13 (Blood Alcohol Analysis dated March 19, 1982); Ex. 43 (RFA) No. 154).

53. When investigators arrived at the scene of Spencer's car on March 11, 1982, there was a single Busch beer can on the driver's side floor and a single Busch bottle on the passenger's side floor. The Busch bottle can be explained based on Jones' statement to the police in a report dated March 13, 1982, that when Spencer left Jones' apartment the final time, "she took another bottle of Busch with her." There was no explanation for the

Busch can in the original police reports. There is no record that the Busch beer can inside Spencer's car on March 11, 1982, was ever tested for fingerprints. The Busch beer can in Spencer's car was not preserved as evidence. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 130-132; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 9; Ex. 43 (RFA) No. 322-324; Ex. 45 (MSHP Supplemental Report No. 7), ¶ 4).

54. At the time Spencer's body was found, there were empty beer cans in the yard of the abandoned schoolhouse, including five Busch beer cans. None of these beer cans was tested for fingerprints. The beer cans recovered from the yard around the abandoned schoolhouse were not preserved as evidence (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 87-89; Ex. 43 (RFA) Nos. 148-149, 151).

8. Autopsy – No Signs of Blood or Skin

55. Thomas Grant, the highway patrol lab employee who examined Spencer's fingernails in 1982 looked for blood with a microscope and saw none. He was not looking for "skin and things like that" in his examination of Spencer's fingernails with a microscope and recorded no notes of seeing skin. He did not see any blood and testified he saw nothing of "evidentiary value." (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 180-181; Ex. 43 (RFA) Nos. 269-270; Ex. 49 (Trial Tr.) 547, 552-553, 570-571; Ex. 53 (Hearing Tr.) 130-131).

56. The State is not aware of any evidence that Nash's blood or skin was underneath Spencer's fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 179, 182-183; Ex. 43 (RFA) Nos. 268, 271-272).

9. The State's Alleged Chronology

57. The State contends that Nash’s request for a wakeup call implicates Nash in the murder because he allegedly “knew” Spencer was dead. (*See* Ex. 50 (Trial Tr.) 865:2-9). The following chronology can be assembled:

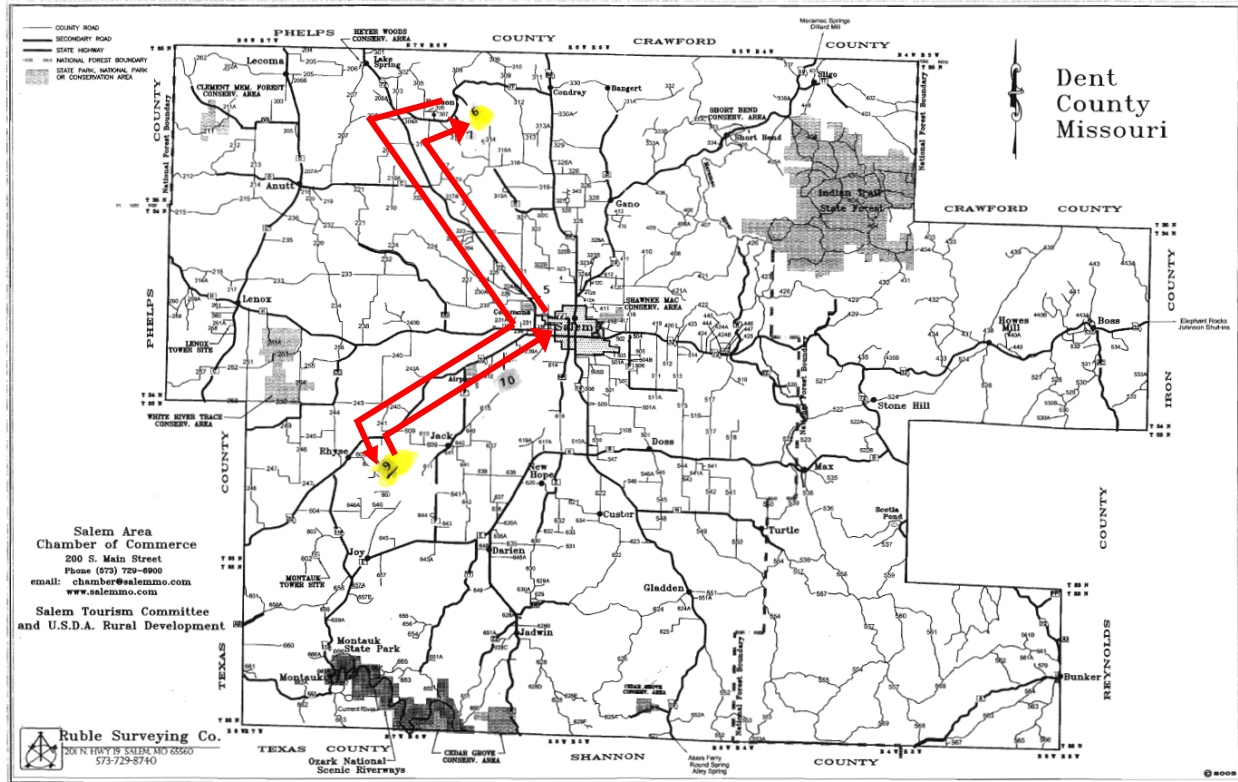
Time	Event	Citation
7 p.m.	Spencer and Jones arrive at Jones’ apartment. Shortly afterward, Nash arrives and argues with Spencer	Ex. 48 (Trial Tr.) 367:12-15; Ex. 55 (Pr. Hrg. Tr.) 11:10-13, 29:9-11
7:15-7:30 p.m.	Spencer returns inside apartment after arguing with Nash	Ex. 55 (Pr. Hrg. Tr.) 36:23-37:5
8:00 p.m.	Spencer leaves Jones’ apartment to return home to change clothes	Ex. 55 (Pr. Hrg. Tr.) 39:19-24
8:30 p.m.	Nash calls Jones before Spencer has returned to Jones’ apartment	Ex. 48 (Trial Tr.) 404:20-22 (8:30); Ex. 55 (Pr. Hrg. Tr.) 41:3-8 (between 8:15 and 9:00)
9 p.m.	Spencer arrives back at Jones’ apartment (and also Spencer’s car is confirmed not in the ditch)	Ex. 43 (RFA) No. 316; Ex. 55 (Pr. Hrg. Tr.) 41:9-15
9:15 p.m.	Spencer leaves Jones’ apartment	Ex. 55 (Pr. Hrg. Tr.) 41:16-20
9:30-10 p.m.	Nash calls Jones after Spencer has left and asks for a wakeup call	Ex. 48 (Trial Tr.) 377:23-378:5 (10 p.m.), 404:23-405:1 (around 9:30), 419:16-25 (9:30); Ex. 55 (Pr. Hrg. Tr.) 43:23-44:3 (30-45 minutes after first call)

58. As described below, if the death of Spencer took place around 9:30 PM, two investigators who lived in Salem testified, at the evidentiary hearing before the Master, that it would not be possible for Nash to make the roundtrip between Salem, Spencer’s vehicle,

the abandoned schoolhouse, and back to Salem in time to commit the murder and make the second phone call to Jones. This is especially true considering that Spencer did not even leave Jones' apartment until 9:15 p.m., which was only 15-45 minutes before the second call. It should be noted that because this crime occurred in 1982, all calls would have been made from land line phones. Furthermore, Spencer had told both Nash and Jones that she was going to Houston, making this timing even more implausible, because her car was found in the direction of Rolla, which is in a completely different direction from Salem. (Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 6; (Evidentiary Hrg. Tr. 104:1-109:7, 306:19-307:7)).

59. Based on the State's admissions, Spencer's car was found approximately 20-30 minutes away from the schoolhouse and Salem, and the schoolhouse itself was approximately 20-30 minutes away from Salem. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 73, 121; Answer, ¶¶ 19-20).

60. The following map depicts the shortest route that Nash would have needed to travel from Salem (center) to Spencer's car (location 6) to the abandoned schoolhouse (location 9) back to Salem:



(Ex. 16 (Maps of Dent County and Salem, Missouri)).

61. Even assuming that: (a) each leg of the roundtrip took the minimum amount of time (20 minutes between Salem and the car, 30 minutes between the car and the schoolhouse, and 20 minutes between the schoolhouse and Salem), (b) Nash drove directly to the location of Spencer's car, (c) that Spencer's abduction took 0 minutes, and (d) the murder took 0 minutes, then the complete roundtrip would have taken at least one hour and 10 minutes. The time, however, between Spencer's leaving Jones' apartment and Nash's second phone call is, *at most*, only 45 minutes and may have been as little as 15 minutes, depending on whether Nash called Jones and asked for the wakeup call around 9:30 p.m. or 10:00 p.m. In either case, there was insufficient time for Nash to carry out the murder at that time and telephone Jones.

62. Furthermore, the actual length of time required would be far longer than one hour and 10 minutes because of the additional time necessary to abduct Spencer, commit the murder by strangulation, drag Spencer's body 153 feet across the schoolyard, shoot her in the neck with a shotgun, and disperse her belongings. In addition, Nash would have had to locate a shotgun sometime that evening before the murder. The argument begs the question of what was the time of death. The Death Certificate, Pet Ex 28, indicates March 11, 1982 at 9:11 AM. The initial MSPH report, Pet Ex 4, reflects the crime occurring between 8:00 PM March 10 and 7:30 AM March 11. Nash's alibi only works if the crime took place in the 9:00 PM to 9:30 PM time range. Outside that range Nash admits he was away from home looking for Spencer or was home alone.

10. Statements About The Victim

63. At trial, the prosecution also sought to argue that Nash made, what the State argued, was an insensitive statement when he learned of Spencer's murder, that when she was drinking, she would get into a car with anyone. A review of the record shows that Spencer's friends and ex-boyfriends made similar statements.

64. Deanna Rosemary Hubbs was one of Spencer's friends and coworkers. On March 12, 1982, Ms. Hubbs told Sheriff Clifford Jadwin and Corporal J.S. Betts:

- (a) that when Spencer "gets drunk she often leads men on and then makes them stop";
- (b) that Spencer "enjoyed seeing men get 'turned on' and then she would tell them to 'leave me alone' or 'get your hands off me'; and
- (c) that Spencer often drank to excess and that Spencer had had a drinking problem since she was about 14 years old.

(Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 60-63; Ex. 6 (MSHP Supplementary Investigation Report No. 3), ¶¶ 9-10; Ex. 43 (RFA) Nos. 130-133)

65. Jo Anne Brookshire was one of Spencer's friends and coworkers. On March 15, 1982, Ms. Brookshire told Sheriff Clifford Jadwin, Sergeant T.W. Parker, Dunlap, and Corporal J.S. Betts:

- (a) that Spencer would often "tease" men and "might have sex with a complete stranger," depending on her mood and how much she had to drink;
- (b) that Spencer "was very unpredictable when she began drinking.... It was not unusual for her to be among friends and without saying a word just get up and drive off"; and
- (c) that Spencer "enjoyed drinking and driving, especially the seldom traveled roads. Sometimes [Spencer] would want company on these drives and other times she preferred to be alone."

(Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 64-67; Ex. 8 (MSHP Supplementary Investigation Report No. 9), ¶¶ 5-6; Ex. 43 (RFA) Nos. 134-137)

66. Clayton Scott was one of Spencer's ex-boyfriends. On March 12, 1982, Mr. Scott told Sheriff Clifford Jadwin and Dunlap that, "if [Spencer] was drinking there was no telling who she might have been with." (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 68-69; Ex. 7 (MSHP Supplementary Investigation Report No. 5), ¶ 2; Ex. 43 (RFA) Nos. 138-139).

67. David Tiefenthaler was one of Spencer's ex-boyfriends. On March 22, 1982, David Tiefenthaler told Sheriff Clifford Jadwin, Lieutenant A.J. Viessman, Corporal J.S. Betts, and Dunlap that he thought Spencer "was an alcoholic and would frequently drink until she passed out. She would pass out for ten minutes or so, then she would come back

and continue with her conversation. When she was drinking one minute she loved you and wanted to get married and the next minute she would be hitting you.” (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 70-71; Ex. 9 (MSHP Supplementary Investigation Report No. 12), ¶ 2; Ex. 43 (RFA) Nos. 140-141).

F. Evidence Claimed to point to Lambert Anthony Feldman

68. Investigators obtained fingerprints from the driver’s side window of Spencer’s abandoned car. They were not identified at that time. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 133-134, 136; Ex. 43 (RFA) No. 326).

69. When the fingerprints from Spencer’s driver’s side window were run through the Automated Fingerprint Identification System years later, they yielded a match with Feldman. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 134, 136; Ex. 43 (RFA) No. 328; Answer, ¶ 39).

70. At the time of Spencer’s murder in 1982, Feldman was living in Rolla, Missouri, about 30 minutes from Salem. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 137; Ex. 43 (RFA) No. 330).

71. In response to questioning by highway patrol investigators, Feldman admitted he was responsible for a small hole drilled from the outside into the ladies’ restroom at the gas station in Rolla where he had worked in 1982. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 152; Ex. 17 (MSHP Report of Investigation dated July 18, 1996), ¶ 24; Ex. 43 (RFA) No. 347).

72. The State is not aware of any eyewitness, anecdotal, or documentary evidence that Spencer ever went to the gas station in Rolla where Feldman worked. In fact, Spencer

bought gas at the Tower DX gas station in Salem after leaving Jones' apartment on the evening of March 10, 1982, and wrote a check for \$10.00. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 157-159; Ex. 29 (Checkbook registry for Judy Spencer (2/12-3/10)); Ex. 43 (RFA) Nos. 352-354).

73. In 1988, Feldman attacked a college student on a campus in Iowa. Feldman was convicted of assault with intent to commit sexual abuse. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 138-139; Ex. 18 (Johnson County, Iowa criminal case regarding Lambert Anthony Feldman); Ex. 25 (Declaration of Tim Bell), ¶ 19; Ex. 43 (RFA) Nos. 331-332).

74. After Feldman's conviction for assault with intent to commit sexual abuse, Feldman was sentenced to one year in jail but placed on probation. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 140; Ex. 18 (Johnson County, Iowa criminal case regarding Lambert Anthony Feldman); Ex. 25 (Declaration of Tim Bell), ¶ 19; Ex. 43 (RFA) No. 334).

75. Feldman's probation was revoked in 1991 when he was convicted of possessing open liquor in public and child endangerment. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 141; Ex. 18 (Johnson County, Iowa criminal case regarding Lambert Anthony Feldman); Ex. 25 (Declaration of Tim Bell), ¶ 19; Ex. 43 (RFA) No. 336).

76. Feldman's arrest record also included:

- (a) Driving with suspended license and possession of marijuana in April 1982;
- (b) Displaying a deadly weapon and attempted first-degree assault (by striking a man in the head with a pistol) in December 1982;

- (c) “Prowling” (peeping into a window of a home), trespassing, and opposing an officer in March 1983;
- (d) Lewdly exposing himself;
- (e) Driving while intoxicated in February 1984;
- (f) Disorderly conduct in August 1984;
- (g) Unlawful use of a weapon in May 1988;
- (h) Robbery in the second degree in June 1988;
- (i) Endangering the welfare of a child in December 1990;
- (j) Criminal misdemeanor of domestic battery/bodily injury for beating his wife in July 2005.

(Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 142-151; Ex. 19 (Lambert Anthony Feldman criminal records); Ex. 20 (Lambert Anthony Feldman criminal records (additional)); Ex. 25 (Declaration of Tim Bell), ¶ 19; Ex. 43 (RFA) Nos. 337-346).

77. Former Dent County Sheriff’s Deputy Tim Bell personally interviewed Feldman, Feldman’s ex-wife, ex-girlfriend, sister-in-law, and a female probation officer. During these interviews, all of the women stated that they were afraid of him. Feldman’s female probation officer was replaced by a male officer because she was afraid of Feldman. The last time Tim Bell interviewed Feldman’s ex-wife, she would not even talk to Bell until he showed her a death certificate proving Feldman was dead. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 153-156; Ex. 43 (RFA) Nos. 348-351).

78. Feldman’s sister-in-law told former Dent County Sheriff’s Deputy Tim Bell that Feldman carried a shotgun in the trunk of his car around the time of Spencer’s murder. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 160; Ex. 43 (RFA) No. 355).

79. Feldman told Sergeant R. E. Roark and Sergeant Paul J. Mertens of the Missouri State Highway Patrol that he did not know Spencer and had never been to Salem. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 163; Ex. 17 (MSHP Report of Investigation dated July 18, 1996), ¶¶ 6, 9; Ex. 43 (RFA) No. 358).

80. Freddie Whitaker, Ted Stevens, and David Tiefenthaler have stated they saw someone they identified by photograph as Feldman talking to Spencer at the Tower Inn in Salem a few days before Spencer's murder. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 161-162; Ex. 23 (Freddie E. Whitaker signed statement); Ex. 43 (RFA) Nos. 356-357).

81. In October 2008, Feldman was found dead in Quincy, Illinois, with a shotgun wound to his chest and a shotgun in the room. Feldman's death was ruled a suicide. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 168-169; Ex. 21 (Medical Examiner/Coroner Certificate of Death for Lambert Anthony Feldman); Ex. 22 (Quincy Police Department Supplemental Report regarding Lambert Anthony Feldman suicide); Ex. 43 (RFA) Nos. 363-364).

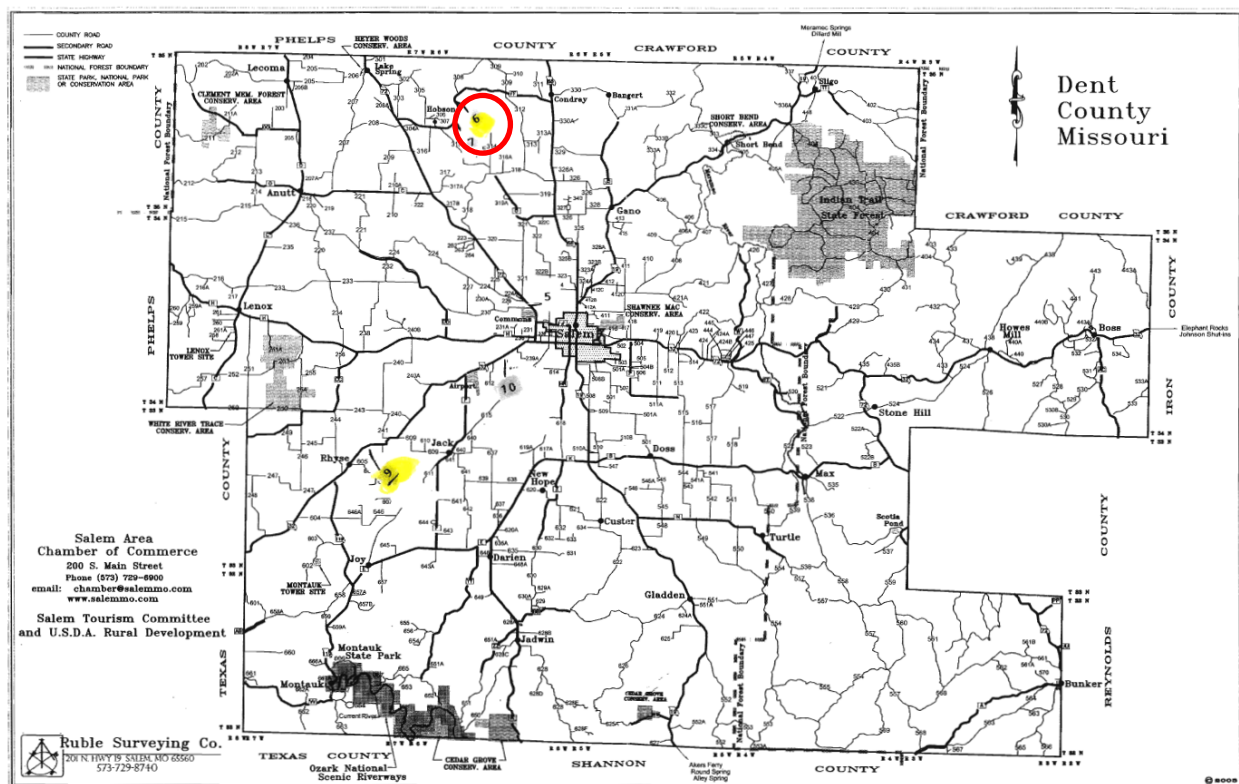
G. Evidence Claimed to Point to Alfred John Heyer

82. In a police report dated March 11, 1982, Corporal J.S. Betts describes the location of Spencer's car on the evening it was reported in the ditch. The report further provides:

As we were leaving the area I saw a man standing by a house just a short distance west of where the victim's car was. The man was identified as Alfred John Heyer, age 25, Salem, Missouri. He stated that he first noticed the car during the evening of March 11, 1982. He had gone to work in Cuba, Missouri, during the morning of March 11, 1982, but had traveled Missouri 72 instead of Missouri 68.

(Ex. 45 (MSHP Supplementary Investigation Report No. 1), ¶ 16).

83. The Master takes judicial notice that Cuba, Missouri is northeast of both Salem and the car's location (depicted below), meaning that Heyer, whose house was west of Spencer's vehicle, claimed that he traveled *west*, to northwest-bound Highway 72 instead of traveling east on Route FF to northbound Highway 68:



(Ex. 16 (Maps of Dent County and Salem, Missouri)). Further evidence regarding Heyer is developed below.

H. No Charges

84. The State did not file charges against Nash for 26 years after Spencer's murder. Former Dent County Sheriff Deputies Tim Bell and Steven Lawhead, who investigated the case in the 1990s and 2000s, respectively, testified that they did not believe

the State even had probable cause to arrest Nash. Their investigations focused more on Feldman and Heyer, respectively. (Evidentiary Hrg. Tr. 84:18-89:5, 293:17-303:11).

85. In January 1996, the Missouri State Highway Patrol's Violent Crime Support Unit performed an Unsolved Case Review with respect to Spencer's murder. The panelists who performed the Unsolved Case Review were Sergeant Mike Martin of the Columbia Police Department, Chief Deputy Steve Myers of the Montgomery County Sheriff's Department, Corporal John Waugh of the Springfield Police Department, and Corporal Don Windham of the Missouri State Highway Patrol. The panel felt that Nash was not as strong of a suspect in Spencer's murder as Feldman or Heyer. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 164-167; Ex. 43 (RFA) Nos. 359-362).

I. The Probable Cause Statement

86. At the same time that the Dent County Sheriff's Office was investigating the case, the Highway Patrol, in 2007-2008, was conducting its own investigation. That investigation was led by Sergeant Jamie Folsom, who was assisted by then-Cpl. Scott Mertens and then-Cpl. Dorothy Taylor. (Ex. 31 (Taylor Dep.) 8:19-11:21, 14:18-18:24; Ex. 32 (Mertens Dep.) 8:17-10:1, 18:14-23).

87. In 2008, at the request of Spencer's sister, the Missouri State Highway Patrol's crime laboratory tested Spencer's fingernails for DNA. The laboratory located a trace mixture of Spencer's and Nash's DNA underneath the fingernail clippings from Spencer's left hand. The total amount of the mixture of Nash's and Spencer's DNA was 5 billionths of a gram. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 173-176; Ex. 43 (RFA) No. 169-170; Answer, ¶ 26).

88. A police report prepared by Sergeant Folsom states:

On March 24, 2008, Corporal Dorothy E. Taylor and I met with Ruth Montgomery at the Missouri State Highway Patrol Crime Laboratory. I asked Ruth Montgomery to explain to me about the DNA profile found in the fingernail clippings of Judy Spencer. Ruth Montgomery indicated that the DNA profile was a mixture of both Judy Spencer's DNA and Donald Nash's DNA. She also indicated that type of DNA mixture more than likely could not have come from casual contact. She stated that this mixture of DNA is often seen where there is a struggle of some kind.

This report never mentions Spencer's hair washing, let alone a discussion with Montgomery about hair washing during their meeting on March 24, 2008. Montgomery testified that she never said that the DNA would all be washed away, and she has no recollection of speaking with Sergeant Folsom about it. (Ex. 46 (MSHP Report of Investigation dated March 19, 2008); Evidentiary Hrg. Tr. 184:18-186:25, 188:25-189:9).

89. Before arresting Nash, Cpl. Taylor had what she later described in a television interview as an "epiphany" or a "light bulb" going off in her head when she read in one of the original police reports that Spencer had washed her hair. Accordingly, three days after the March 24 meeting with Ruth Montgomery, on March 27, 2008, Sergeant Folsom prepared a probable cause statement against Nash, which stated:

It was further determined that a mixture of Judy Spencer's DNA and Doc Nash's DNA was found under the left hand fingernails of Judy Spencer and ***this DNA could have not have remained present during hair washing*** nor was it reportedly transferred during casual contact with Doc Nash. This mixture of DNA is often normally the result of a physical struggle.

Based upon the testimony of Montgomery, this statement about hair washing was false. Nash was subsequently arrested. (Ex. 31 (Taylor Dep.), 37:20-38:25; Ex. 34 (Probable Cause Statement), p. 2) (emphasis added).

J. Preliminary Hearing

90. During the preliminary hearing in Nash’s criminal case on April 28, 2008, Montgomery did not testify that hair washing would have a “great” effect on eliminating Nash’s preexisting DNA from underneath Spencer’s fingernails. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 245; Ex. 43 (RFA) No. 174).

91. Jones’ testimony regarding her recollection of Spencer’s hair washing changed over the course of Nash’s criminal proceedings. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 240; Ex. 43 (RFA) No. 75).

92. At the preliminary hearing in Nash’s criminal case on April 28, 2008, Jones testified that she had “no reason to think” Spencer did not use shampoo on the evening of March 10, 1982, but admitted that she did not “absolutely recall that detail.” When Jones was asked whether Spencer walked “to the kitchen sink and pulled the sprayer out of the sink and wet her hair and began to wash it,” Jones testified: “I don’t remember the details.” Jones further testified that she did not “remember the details on the way it was restyled” and could not be sure that Spencer used a blow dryer when she restyled her hair. When Jones was asked whether she remembered “anything about the hair washing other than what you have said today,” she answered “no.” (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 241-244; Ex. 43 (RFA) Nos. 76-79).

K. Ruth Montgomery’s Pretrial Deposition

93. During Montgomery’s pretrial deposition in Nash’s criminal case on October 14, 2009, Montgomery stated that she had no experience in getting DNA analysis of material that had been collected by police from submerged cadavers or portions of a

human body that had been submerged in water. (Ex. 47 (Ruth Montgomery Dep.) 11:20-25).

94. During the deposition, Nash’s counsel presented Montgomery with an article titled “*The prevalence of mixed DNA profiles in fingernail samples taken from couples who co-habit using autosomal and Y-STRs*,” published in 2009. With respect to the article, Montgomery conceded that the study found that hygiene had no statistically significant impact on the persistence of DNA in fingernail samples. The hygiene practices considered by the study were showers, baths, hand washing, and dish washing. Montgomery also testified that she had first read the article “yesterday” (*i.e.*, the day before her deposition). (Ex. 47 (Ruth Montgomery Dep.) 25:9-27:5, 28:14-30:14)

95. With respect to the article, Montgomery further testified:

I don’t think that this body of evidence – this one publication speaks thoroughly to the question of hygiene’s impact on the persistence of DNA in fingernail cases. This is the only publication that I could find that even addresses it. But generally scientists do not base their evidence on one publication or one piece of literature.

She further testified that “I do not think it’s a well-researched topic.” Montgomery further stated that her “criticism” was “[t]hat we would take one piece of literature and base an entire science on one piece of literature.” When asked: “So would you not either agree or disagree with their findings about hygienic practices unless you have more material to study first?” Montgomery responded: “That’s what I was saying. I wouldn’t base my conclusion on one piece of literature.” (Ex. 47 (Ruth Montgomery Dep.) 26:3-28:7, 30:22-31:2).

96. In Montgomery's search prior to the deposition, she had found one additional article from 2007 about the general population, not cohabiting, and which did not deal with hygiene. The authors of the article, entitled "The prevalence of mixed DNA profiles in fingernail samples taken from individuals in the general population," specifically "indicate[d] that it will be important to include data on hygiene habits in subsequent studies on DNA persistence." Montgomery again testified that she only been aware of this second article for "one day." (Ex. 47 (Ruth Montgomery Dep.) 31:12-34:3).

97. During the deposition, Nash's defense counsel presented Montgomery with two published case reports. The first case report dealt with a male nurse who had digitally penetrated a victim in a hospital where he had washed his hands over the next two days, and the victim's DNA was still located under his fingernails. The second case report dealt with two victims submerged in bath water for two hours and sea water for three hours, respectively, after which the lab was able to develop profiles of someone other than the victims underneath their fingernails. Montgomery stated that the first time she had seen these publications was "earlier today." (Ex. 47 (Ruth Montgomery Dep.) 11:6-17, 34:4-35:3; Ex. 48 (Ruth Montgomery Dep.) 35:4-36:25)

98. During her deposition, Montgomery did not testify that hair washing would have a "great" effect on eliminating Nash's preexisting DNA from underneath Spencer's fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 246; Ex. 43 (RFA) No. 175).

99. Instead, Montgomery testified: "It is my opinion that washing your hair, especially if a soap was used in a mechanical manipulation of the hair on the scalp and the scalp itself, would move the fingertips and there would be a *greater likelihood* of removing

any – any debris that may be under the fingernails than simply washing the hands or running water over the hands.” Thus, Montgomery’s opinion during the deposition was not about the “effect” of hair washing – or hair washing with a detergent-based shampoo – but rather a *comparison* between hair washing and hand washing. In other words, Montgomery testified during her deposition that she believed hair washing was more likely to remove debris under the fingernails than washing one’s hands or running water over one’s hands. (Ex. 48 (Ruth Montgomery Dep.) 38:25-39:7).

100. Montgomery had no opinion whether the DNA mixture came from a biological fluid, skin cells, or tissue. She had no opinion what type of biological material the DNA came from. (Ex. 48 (Ruth Montgomery Dep.) 71:15-72:7).

101. During Montgomery’s deposition, the following exchange also occurred:

Q. What is a detergent?

A. A detergent as in soap?

Q. You used the word, so I’m asking you.

A. Chemical – it’s a chemical, and in DNA analysis a detergent is often used to lice [sic] open cells.

Q. Can you give a further definition of the word “detergent”?

A. Soap. Does that help you?

Q. Can you give any further definition of the word “detergent”?

A. No.

(Ex. 48 (Ruth Montgomery Dep.) 37:23-38:9).

102. Montgomery further testified that, at that time, Spencer’s shoes had only been checked for biological fluids through an alternative light source similar to a black light, and no stains, such as semen, were detected. In other words, no DNA testing had been performed. (Ex. 48 (Ruth Montgomery Dep.) 55:4-58:21).

L. Opening Statements at Nash’s Trial

103. Before trial, Nash’s defense counsel did not object or move to exclude Ruth Montgomery’s opinions regarding hair washing under *Frye* (or any other ground). Nash’s lead trial counsel, Frank Carlson, testified that he thought the DNA evidence was critical because it was the only physical evidence. Habeas Transcript at 9. Carlson testified that he did not move to exclude Montgomery’s testimony on the basis of *Frye* because he did not think that would be a winning effort, and the ruling would be that his objection went to weight, not admissibility. *Id.* at 11–12. He testified that he concluded that he needed to deal with the testimony through impeachment, which he did. *Id.*

104. During the prosecution’s opening statement, the discovery of Nash’s DNA was presented to the jury as the core evidence in the State’s case. The prosecution told the jury:

- “You will hear that it took 27 years for the evidence to come together for – just like the pieces of a puzzle”;
- “[Y]ou’re going to hear that the DNA of Judy Spencer’s murderer, the DNA of the person that murdered Judy Spencer’s [sic] had been underneath those fingernails for 27 years”; and
- “[B]ack in 1982, DNA was not something anybody knew anything about. In fact, you’re going to hear that the highway patrol did look for material underneath those fingernails, but couldn’t find any. But the microscopic DNA was there and stayed there for 27 years.”

The final sentence of the prosecution’s opening statement was:

But I believe at the close of the evidence that you will conclude that that DNA coming underneath Judy Spencer’s fingernails was the DNA of the man who murdered her, Donald Nash.

(Ex. 48 (Trial Tr.) 258:11-13, 274:7-10, 274:24-275:4, 278:18-21).

105. With respect to Montgomery in particular, the prosecution argued:

You're going to hear that on the night that Judy Spencer was murdered, after Mr. Nash told her that he didn't like her hair, that she washed her hair. And you're going to hear that that's significant.

Somebody from the Missouri State Highway Patrol Crime Laboratory, a lady named Ruth Montgomery, who has been doing DNA analysis for at least seven years, ***she is going to tell you that washing the hair would eliminate just about all the DNA underneath somebody's fingernails.***

(Ex. 48 (Trial Tr.) 275:5-15) (emphasis added).

106. This purported opinion described by the prosecution during opening argument was different from Montgomery's deposition opinion about the "greater likelihood" of eliminating DNA from hair washing versus washing one's hands. It is also inconsistent with the only studies that Montgomery had testified during her deposition that she was aware of (even if she had only been aware of them for a day). In fact, Montgomery had testified during her deposition that there was only one available study about the impact of hygiene, and that it had showed no statistically significant effect on the elimination of fingernail DNA.

107. At that point of the opening argument, Nash's defense counsel was on notice that Montgomery's purported expert opinion had changed. Indeed, Carlson acknowledged the new opinion during his opening statement:

The prosecutor says that Ruth Montgomery, the DNA analyst that works for the State of Missouri at the Missouri State Highway Patrol Crime Laboratory, will testify ***that shampooing one's hair would eliminate almost all foreign DNA trapped in one's fingernail debris.***

Nash's defense counsel did not, however, object during opening statement, before the first witness was called, or at any time before Ruth Montgomery testified, to request a *Frye* hearing regarding the admissibility of this new opinion based on Montgomery's lack of

qualifications or the lack of general acceptance for this opinion in the scientific community.
(Ex. 48 (Trial Tr.) 275:5-15, 285:5-10).

108. Nevertheless, during opening statements, Nash's defense counsel further noted Montgomery's lack of expertise:

Ruth Montgomery will admit to you that when she rendered her opinions, she was not aware of scientific studies in her field that show cohabiters are expected to have one another's DNA under their fingernails.

Ruth Montgomery will testify she was not aware when she rendered her opinions that in this study it was determined that 63 percent of cohabiting women had male DNA under their fingernails.

Ruth Montgomery will admit to you that when she rendered her opinion, she was not aware of a valid scientific study in her field that showed a male nurse in a hospital setting who had scrubbed his hands repeatedly for two days still had foreign DNA of his victim under his fingernails.

Ruth Montgomery will admit to you that when she rendered her opinion, she was not aware of valid scientific studies in her field which she recognizes as the type reasonably and normally relied upon by experts in her field for DNA analysis.

She will admit to you that she was unaware of a study of two women, one of whom who had been submerged in bath water for two hours, yet the foreign DNA remained under her fingernails. And another woman who was submerged in the ocean for three hours that still had foreign DNA under her fingernails.

(Ex. 48 (Trial Tr.) 301:22-303:3).

109. Before Montgomery testified, Nash's defense counsel, Carlson, made an oral motion in limine that was not about the impact of hair washing. Rather, Carlson moved to exclude "an opinion that Mr. Bruce said in opening that he hoped to elicit from Montgomery"—namely, "that the DNA of Doc Nash that his witnesses say were found under a fingernail on her left hand could not have been deposited there by casual contact."

Carlson also did not object under *Frye*, but rather based on the State's untimely disclosure of this opinion after the conclusion of her deposition. The trial court overruled the objection.

M. Ruth Montgomery's Trial Testimony

110. The first part of Montgomery's testimony dealt with her ability to perform DNA analysis in the Missouri State Highway Patrol Lab and in particular the process of extraction, quantification, amplification, and analysis. She testified that she developed a partial profile based on a mixture of DNA and determined that the male profile was consistent with Nash's DNA profile. (Ex. 49 (Trial Tr.) 651:4-675:14).

111. Next, the prosecution asked whether Montgomery had an opinion "whether or not DNA that you detected underneath the fingernails would have come from casual contact." In response, she answered:

A. The quantity of DNA, total quantity of DNA extracted from the fingernails from the left hand, was approximately five nanograms. In the amplification process and in our procedures in the crime laboratory, the optimal quantity to amplify, to take only to amplification, was one nanogram. That is five times what you're looking for to actually give us good, reliable results. It is not considered a low level, low quantity amount of DNA.

We do oftentimes work with samples – and I have worked with many samples, many swabs that are considered as low level, non-contact DNA such as touch, touching a surface, or holding something, swabbing people's clothing just from skin cells. It is not consistent with a low-level sample.

Thus, Montgomery's response to the State's question was not about whether the amount of Nash's DNA left underneath Spencer's fingernails was inconsistent with the couple's romantic relationship or cohabitation, or even responsive to the issue of asking whether Nash's DNA could have come from "casual contact." Rather, the response dealt with

whether it was enough DNA to quantify in the amplification process to provide “good, reliable results,” and was not considered “a low level, low quantity amount of DNA” for those purposes. (Ex. 49 (Trial Tr.) 677:25-678:24).

112. Montgomery next testified that she believed that Nash’s DNA was 2.5 nanograms of this 5-nanogram mixture. (Ex. 49 (Trial Tr.) 678:25-679:15).

113. Immediately afterward, the following exchange occurred:

Q. Now, having detected that quantity of DNA, I want to ask you a question. Do you have an opinion, based on your training and experience, what effect an individual washing his or her hair would have on DNA – any DNA underneath the fingernails remaining after the washing?

MR. CARLSON: Judge, this is part of the continuing objection.

HONORABLE JUDGE LONG: Yes. Same ruling. Standing objection.

...

A. I would expect that washing your hair, the mechanical manipulation of the scalp or the hair would remove DNA from underneath the fingernails. Shampoo is a detergent and that is actually one of the ingredients that we use to lyse open the cells, so cells would be lysed during that process.

Q. By “lyse,” what do you mean?

A. Broken open. You can actually break open the cells.

Q. Are we talking about breaking open the DNA?

A. Breaking open the cells, which would make the DNA easier to be washed away. I cannot give you a quantity that would or would not persist under the fingernails, but I would expect that it would have a great effect.

(Ex. 49 (Trial Tr.) 679:16-680:16).

114. Despite having reviewed all the available published materials during Montgomery’s deposition, Nash’s defense counsel did not object at trial to Montgomery’s

“great effect” opinion under *Frye* and did not ask to conduct a voir dire examination outside the presence of the jury. (See Ex. 49 (Trial Tr.) 679:16-680:16).

115. During cross-examination, Montgomery also contended that she had not changed any of her opinions from her deposition about the three articles that defense counsel had presented to her. (Ex. 49 (Trial Tr.) 689:22-691:13).

116. Montgomery admitted she:

- (a) did not know whether Spencer used shampoo;
- (b) did not know, even if Spencer used shampoo, whether the shampoo she used was detergent-based or soap-based;
- (c) did not know about the type of contact that occurred between Nash and Spencer before and after she allegedly washed her hair; and
- (d) did not know about the type of contact that occurred between Nash and Spencer after she washed her hair, but before Spencer was killed.

(Ex. 49 (Trial Tr.) 698:1-24).

117. At no point during the trial did the prosecution elicit testimony from Montgomery about her alleged training or experience to offer the “great effect” opinion. Likewise, at no point during the trial did Nash’s defense counsel elicit testimony from Montgomery about her alleged training or experience to offer the “great effect” opinion, except to ask whether Montgomery had experience “in DNA analysis of materials collected by police from submerged cadavers or portions of the human body that had been submerged in water.” (Ex. 49 (Trial Tr.) 692:7-19, 695:16-24).

118. At no point during the trial did the prosecution or the defense elicit testimony from Montgomery about whether the “great effect” opinion was generally accepted in the scientific community.

119. Nash’s defense counsel did not cross-examine Montgomery about the meaning or analysis behind Montgomery’s “great effect” opinion, or where it came from, but instead only asked Montgomery to confirm that she “cannot say that washing one’s hair would remove all foreign DNA from one’s hands or remove everything foreign from under one’s fingernails.” Then, Nash’s defense counsel abruptly shifted *away* from the “great effect” opinion presented at trial to questioning Montgomery about an issue from Montgomery’s *deposition* about the relative likelihood of removing DNA from hair washing versus handwashing:

Q. Washing one’s hair would be unlikely to remove – I’m sorry, let me rephrase that. Washing one’s hair would be more likely to remove DNA from the surface of one’s hands and fingers than to remove it from one’s fingernails; correct?

A. Yes.

Ex. 49 (Trial Tr.) 696:9-14).

120. Nash’s defense counsel conducted no further cross-examination of Montgomery about the effect of hair washing on eliminating DNA, including about the issues promised in opening statement about her lack of experience. Immediately after Montgomery’s testimony on these issues, the State rested its case. (Ex. 49 (Trial Tr.) 696:4-14, 699:8-10).

N. **The State’s Binding Admissions About Ruth Montgomery’s Trial Testimony**

121. The Warden now admits that, at the time of Nash’s criminal trial, it was not generally accepted in the forensic science community that hair washing, hair washing with shampoo, hair washing with a detergent-based shampoo, or hair washing with a soap-based shampoo has a “great” effect on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 195-198; Ex. 43 (RFA) Nos. 221-224)

122. The Warden further admits that, at the time of Nash’s criminal trial, it was not generally accepted in the forensic science community that hair washing with shampoo, hair washing with a detergent-based shampoo, or hair washing with a soap-based shampoo lyses human cells underneath fingernails. The Warden also admits that, at the time of Nash’s criminal trial, it was not generally accepted in the forensic science community that hair washing, hair washing with a detergent-based shampoo, or hair washing with a soap-based shampoo lyses human cells underneath fingernails and makes the DNA flow more easily. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 199-204; Ex. 43 (RFA) Nos. 225-230).

123. The Warden knows of no scientific journal articles, peer-reviewed publications, or other published materials available at the time of Nash’s trial regarding the effect of hair washing with shampoo on eliminating preexisting DNA from underneath fingernails. To the State’s knowledge, at the time of Nash’s criminal trial, there was no published scientific study quantifying the effect that a single hair washing with shampoo or detergent-based shampoo will have on eliminating foreign DNA from underneath fingernails. The State knows of no scientific journal articles, peer-reviewed publications, and other published materials, relied upon by Montgomery to develop her opinion at Nash’s trial, that hair washing or hair washing with a detergent-based shampoo would have a “great” effect on

eliminating preexisting DNA from underneath Judy Spencer's fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 205-209; Ex. 43 (RFA) Nos. 183, 185; *see* Interrogatory Nos. 6-8).

124. Montgomery did not cite a published study at trial for her testimony about lysing. To the Warden's knowledge, at the time of Nash's criminal trial, there was no published scientific study stating that hair washing with detergent-based shampoo will lyse human cells underneath fingernails. The Warden is also aware of no published research supporting Montgomery's opinion that the lysing chemical she uses in the lab has the effect of making DNA flow more easily. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 228-229, 233-234; Ex. 43 (RFA) Nos. 219, 250; Interrogatory No. 9; Answer, ¶ 32).

125. The State admits that, at the time of Nash's criminal trial, Montgomery had never conducted any scientific research into the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex.1(Petitioner's Uncontroverted Facts), ¶¶ 210-214; Ex. 43 (RFA) Nos. 187, 189, 191, 193; Answer, ¶ 30)

126. The Warden admits that, at the time of Nash's criminal trial, Montgomery had never been involved in any other criminal investigations that analyzed the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 210, 215-218; Ex. 43 (RFA) Nos. 195, 197, 199, 201; Answer, ¶ 30).

127. The Warden admits that, at the time of Nash's criminal trial, Montgomery had never received any training about the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails.(Ex.1(Petitioner's Uncontroverted Facts),¶¶ 219-223; Ex. 43 (RFA) Nos. 203, 205, 207, 209;Interrogatory No. 12).

128. At the time of Nash's criminal trial, Montgomery had never read any published or unpublished studies about the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 224-227; Ex. 43 (RFA) Nos. 211, 213, 215, 217)

129. The Warden admits that it knows of no experiments, unpublished studies, or criminal investigations conducted by the Missouri State Highway Patrol, including but not limited to its Crime Laboratory Division, regarding the effect of hair washing on eliminating preexisting DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 230-232; *see* Interrogatory Nos. 13-15).

130. To the Warden's knowledge, no other criminal case in the United States has involved an expert testifying about the effect of hair washing on eliminating preexisting DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 235; Ex. 43 (RFA) No. 306).

O. The Other Trial Evidence

1. Other Prosecution Witnesses

a. Mildred Spencer

131. The State's first witness was Mildred Spencer, the victim's mother. Spencer's mother testified about her daughter's background, and that Nash had been dating Spencer, but that she had been unaware that the couple had been living together at the house in Salem. Spencer's mother, who lived in Montauk, Missouri, testified that Nash had called her on the morning of March 11, 1982, at around 8:30, which Nash had never done before. Nash asked Spencer's mother whether she was there and said he "thought she might have brought some material down," referring to sewing new uniforms. When asked, Nash told Spencer's mother he was at work. (Ex. 48 (Trial Tr.) 305:15-309:3, 311:7-312:9, 312:25-313:8).

b. Dr. Eddie Adelstein

132. The State's second witness was Dr. Eddie Adelstein, a pathologist and medical examiner. The pathologist from 1982, Dr. Dix, had passed away, and Dr. Adelstein provided an opinion about Spencer's cause of death. Dr. Adelstein opined that Spencer's cause of death was that she was strangled and then shot in the neck "after she had probably already died." He further testified that there was no evidence of a sexual assault because there was no injury to Spencer's genitalia or any signs of male fluid. Dr. Adelstein also testified that he was unable to determine Spencer's time of death. During this examination, Nash's defense counsel objected and during a sidebar objected that Dr. Adelstein had not previously disclosed this opinion about the time of death. (Ex. 48 (Trial Tr.) 314:23-315:3, 317:17-318:16, 322:19-323:1, 323:2-324:23).

133. During cross examination, Nash's counsel pointed out that Dr. Dix's original autopsy, which had been performed at 9 a.m. on March 12, 1982, had opined that Spencer

“has been dead probably 24 hours or less at the time of this autopsy,” placing the time of death after 9 a.m. on March 11, 1982, and that Dr. Adelstein had previously testified at his deposition that he agreed with Dr. Dix’s opinions in the autopsy report. At two points, Nash’s counsel sought voir dire outside the present of the jury because of previously undisclosed opinions. (Ex. 48 (Trial Tr.) 331:20-335:2, 339:4-351:4, 354:18-355:22).

c. Janet Jones

134. The State’s third witness was Jones. Jones detailed the women’s trip drinking and driving in Nash’s truck to the podiatrist appointment in Waynesville. Jones testified that she and Spencer returned to her apartment around 7 p.m. Nash arrived “very shortly after” Spencer called him and falsely said they were in Anutt. She testified that Spencer spoke “[v]ery briefly,” for just a few minutes, outside of her apartment with no physical confrontation. Nash arrived in Spencer’s car and left in his own truck. Before he left, Spencer asked for her keys and Nash “threw them toward her” so that they landed on the grassy area. Jones did not hear the tone of Nash’s voice. In double hearsay testimony, Jones testified that, after Spencer returned inside the apartment, “She said he said ‘This is the last time you’ll ever lie to me, Bitch, and he also said I’m ugly.’” Spencer also told her that Nash commented that Spencer’s hair was ugly. According to Jones, Spencer “washed it right then and restyled it” in the kitchen sink. After Spencer washed her hair, she left. (Ex. 48 (Trial Tr.) 365:17-375:6, 400:6-403:10).

135. Jones testified that after Spencer left, Nash telephoned Jones to ask where Spencer was, and Jones told Nash that she had left. This telephone call took place at 8:30. At that time, Spencer had gone back home and changed clothes. Jones estimated that

Spence was gone for about an hour. When Spencer returned she told Jones that “she thought [her relationship] was over this time, that they hadn’t fought this way since they had stopped drinking.” Spencer then told Jones she was going to Houston, their hometown, and asked Jones to go with her, but Jones said no because her boyfriend was coming home later and she felt she needed to stay home. (Ex. 48 (Trial Tr.) 375:7-377:3, 396:20-25, 403:12-15, 404:20-22).

136. Spencer left shortly afterward in her vehicle. Jones left the apartment and “took a short trip through town and looked for her.” She drove by the Tower Inn and looked for Spencer’s car, then returned to her apartment. In all, Jones was gone for not more than 15-20 minutes. (Ex. 48 (Trial Tr.) 377:6-22).

137. Nash called Jones again the last time around 9:30 or 10 p.m. During the call Nash “was concerned about Judy’s whereabouts and, at one point, he asked if I could call him the next morning and wake him up to make sure he made it to work the next day.” Nash also told Jones during the phone call that he was concerned for Spencer’s safety and was concerned about Spencer’s drinking and driving and that she might have a car accident or get arrested. Nash told Jones how much he loved Spencer and how much he was worried for her safety. Nash wanted Jones to call him around 5:45 a.m. the next morning. Nash hadn’t gone looking for Spencer the first time he called, but the second time he said he had gone out to look for her. (Ex. 48 (Trial Tr.) 377:23-379:10, 385:3-11, 404:1-19, 404:23-405:1, 409:4-13, 419:16-25).

138. Jones called Nash the next morning, and then she went to work from 7 a.m. until 3 p.m. Nash also called Jones at 10 a.m. and 11 a.m. stating that he was still worried

and looking for Spencer. After work, Jones and Nash made arrangements to meet to drive to Houston to see if they could find Spencer. During their trip, Nash seemed concerned about Spencer's whereabouts and expressed his concern for Spencer. After they returned to Salem, Nash and Jones stopped by Nash's and Spencer's home to check the answering machine, thinking there might be a message from Spencer's parents. At that point, Nash received the phone call from the hospital asking them to go there, where they were separated and learned of Spencer's death. The next time Jones saw Nash, he appeared to be "broken-hearted." (Ex. 48 (Trial Tr.) 379:11-382:11, 304:2-8, 408:6-13, 408:14-24).

139. Jones also detailed a conversation that she tape-recorded, at the behest of law enforcement officers, a few months after the murder. Nash told her that he had gone to the Legion Hall on March 10 to look for Spencer's car and then went to the hospital to see if Spencer's car was there. Nash said these were "the only places I went out on the highway." Nash told her that he did not have an alibi and admitted that he was jealous of Spencer and admitted that he was angry on the night of March 10. With respect to Nash's relationship with Della Wingfield, Jones told Nash that "he knew Judy hated her and how would Judy feel if she knew that he was living with her." On cross-examination, Jones admitted that Nash told her during that conversation how much he loved Judy and that he insisted on his innocence. (Ex. 48 (Trial Tr.) 382:21-389:10, 409:14-21, 419:16-25).

140. On cross-examination, Jones said that Spencer washed her hair using shampoo because "[w]hen I say she washed her hair, that indicates shampoo," and she "didn't say she rinsed her hair," but she admitted that she did not remember the details. (Ex. 48 (Trial Tr.) 406:17-407:7).

d. Sergeant Gary Dunlap

141. The State's fourth witness was then-retired Sergeant Gary Dunlap from the Missouri State Highway Patrol. Dunlap testified about responding to the call reporting the discovery of Spencer's body and described the crime scene, which is previously detailed in the Master's findings above, including the locations of various pieces of evidence. Sergeant Dunlap also described the discovery of Spencer's vehicle on Highway FF, which is previously detailed above. None of this evidence directly points to Nash's guilt. (Ex. 48 (Trial Tr.) 420:18-436:25; Ex. 49 (Trial Tr.) 437:4-447:14, 453:22-455:20).

142. Sergeant Dunlap also testified that he informed Nash of Spencer's death at the hospital. Nash reacted visibly, began to cry, and appeared to be very upset. Nash asked how Spencer died, and Sergeant Dunlap said it looked like she had been shot. When asked about his involvement with Spencer over the previous 24 hours, Nash told him about the women's trip to Waynesville, that they had been drinking, and that he wanted his vehicle back. Nash told Sergeant Dunlap about the couple's argument over their drinking, and that he had gone looking for Spencer. According to Sergeant Dunlap, "[a]t that point, he went home and stayed home until the next morning and got Ms. Jones and they went looking for her and that's when they met me at the hospital." Sergeant Dunlap relied on his reports from 1982 to refresh his memory throughout his testimony. When asked whether he agreed "that that report you didn't write for three weeks after the events described in it," Sergeant Dunlap responded that he would "have to see what the date is on it." Nash told Sergeant Dunlap that when Spencer was drinking, she would get in the car with anybody. Nash also told Sergeant Dunlap what Spencer was wearing when she left the house. (Ex. 49 (Trial

Tr.) 447:15-453:21, 464:7-25; *see also* Ex. 37 (MSHP Supplementary Investigation Report No. 19 dated April 5, 1982), ¶ 3).

e. Christine Colvin

143. The State also called Christine Colvin, a neighbor of Jones at the apartment complex. Colvin testified that Spencer asked her if she wanted to go to Houston with her on the evening of March 10, and she declined because she was meeting up with someone and because of Spencer's reputation when she was drinking. She followed her through town until they went different directions. Colvin testified that she saw Nash's truck at the apartment complex around 11 p.m. to midnight. (Ex. 49 (Trial Tr.) 472:20-477:6, 481:3-20).

f. Sergeant P.J. Mertens

144. Similar to Sergeant Dunlap, then-retired Sergeant Mertens testified regarding the condition of the schoolhouse crime scene in March 11, 1982, as well as the discovery of Spencer's car later that evening. In addition, he testified about his process for taking the fingernail clippings from Spencer's hands at the funeral home. Sergeant Mertens further testified about the negative gunshot residue test of Nash, which Nash submitted to voluntarily on March 11, 1982. Sergeant Mertens testified that he was trained to observe, and at all times while he was in Nash's presence during the gunshot residue testing, he did not notice and scratches, scrapes, or bruises on Nash. He testified that if he had seen scratches or fingernail marks on Nash, it would be in the report. (Ex. 49 (Trial Tr.) 488:6-491:1, 509:19-522:2).

g. James Cowan

145. The State also called James Cowan, who had reported Spencer's vehicle on March 11, 1982. The car had not been in the ditch when he came home about 9 p.m. or a couple minutes after on March 10. Cowan testified that he first saw the car perpendicular in the ditch around 7:30 a.m. the next morning as he was heading for work. He then reported the car to the police that night. (Ex. 49 (Trial Tr.) 541:24-547:2).

h. Thomas Grant

146. Thomas Grant was employed by the Missouri State Highway Patrol Crime Laboratory's quality assurance coordinator. In 1982, Grant was the criminalist who looked at Spencer's fingernail clippings. He looked for the presence of blood under a microscope and saw none. After testifying at length about contamination and lab protocols, Grant acknowledged that DNA can be transferred from one person to another, or from a person to an object, and between two objects. Grant testified that spouses carrying one another's DNA would be common at his own home, but he could not testify as to everyone's home. He agreed that the more intimate a couple is, the more opportunities there would be for swapping DNA. (Ex. 49 (Trial. Tr.) 547:12-548:3, 552:11-554:1, 563:2-25, 594:25-10).

i. Sergeant Jamie Folsom

147. The State also called then-Sergeant Jamie Folsom from the Missouri State Highway Patrol. Sergeant Folsom testified that he got involved in Spencer's case in March 2007, when Jeannie Parris, Spencer's sister, contacted him about looking into the murder. In March 2008, Folsom went to Nash's residence, told him that the Missouri State Highway Patrol had developed a DNA profile from Spencer's fingernail clippings, and requested that he voluntarily submit a DNA sample, which Nash did. Nash was very cooperative and

swabbed his cheeks for Sergeant Folsom. According to Folsom, however, Nash appeared nervous. After swabbing his cheeks, Nash asked if Sergeant Folsom would let him know if he was eliminated. At that time, Nash told Sergeant Folsom that he believed he thought that a female was involved in the murder, and Sergeant Folsom told Nash that male DNA had been found. At that point, Nash “paused and took a step back and just kind of stared at [Sergeant Folsom] for a few seconds.” (Ex. 49 (Trial Tr.) 600:5-9, 601:1-11, 602:25-606:15, 635:18-24)

148. Sergeant Folsom visited Nash a second time, approximately ten days after Nash provided the swabs. During the second visit, Sergeant Folsom told Nash that his DNA sample matched the DNA sample found underneath Spencer’s fingernails. Nash said that it was not possible. According to Folsom, Nash was shaking. On cross-examination, Sergeant Folsom admitted that he told Nash that his DNA “was found at the crime scene *and* underneath her fingernails.” Sergeant Folsom also admitted that he had not received specific training as to how people can obtain DNA under their fingernails. (Ex. 59 (Trial Tr.) 606:18-609:20, 631:20-632:7, 632:12-634:12).

j. No Voir Dire of Ruth Montgomery

149. At three separate points during the State’s case, Nash’s defense counsel sought to conduct a voir dire examination of witnesses (Dr. Adelstein and Sergeant Folsom). As stated above, however, Nash’s counsel did not ever seek to conduct a voir dire examination of Ruth Montgomery or her “great effect” opinion but instead allowed it to come in without an objection to its admissibility. (Ex. 49 (Trial Tr.) 339:4-351:4, 613:14-614:5, 679:16-680:16).

2. Defense Witnesses

a. Carl Rothove

150. Nash's first witness was Carl Rothove, a former forensic chemist in the Missouri State Highway Patrol Crime Lab, who performed the gunshot residue analysis. Rothove confirmed that the gunshot residue test performed on Nash on March 11, 1982, was negative. Rothove also tested Spencer's blood and confirmed that her blood alcohol content was 0.18, which was more than twice the legal limit of 0.08 at the time of trial. (Ex. 49 (Trial Tr.) 700:13-25, 701:24-708:8; *see also* Ex. 13 (Blood Alcohol Analysis dated March 19, 1982); Ex. 14 (Gunshot Residue Analysis dated March 25, 1982); Ex. 15 (Gunshot Residue Kit Analysis dated March 24, 1982)).

b. Jenny Box

151. Nash's second witness was Jenny Box, a former dispatcher for the Salem Police Department in 1982. Box testified that, before Spencer's murder, Spencer had called the police department and "said she needed a police escort, someone was following her. She was scared." Box then dispatched officers to escort Spencer home. Box recollected that Spencer had done this either once or twice. (Ex. 49 (Trial Tr.) 713:7-716:8; *see also* Ex. 26 (Memorandum regarding interview with Jennie Box)).

c. Regina White

152. Nash's third witness was Regina White, the Dent County coroner, who testified that the time of death for Spencer's death certificate was 9:10 a.m. on March 11, 1982. (Ex. 49 (Trial Tr.) 716:25-722:11).

d. James Nichols

153. Nash's third witness was James Nichols, one of the ranchers who had discovered Spencer's body. Nichols testified that he and his brother had been at the abandoned schoolhouse shortly before noon on March 11 when they found that there had been "apparently, a large party and there was lots of beer cans and rubbish and stuff scattered around." He saw clothes in the bushes and smelled perfume. Nichols testified about discovering Spencer's body and then leaving to call the police. (Ex. 49 (Trial Tr.) 724:5-727:12).

e. Stephanie Beine

154. Nash's final witness was his expert witness, Stephanie Beine. Beine testified that she had personal experience analyzing DNA material derived from a body that had been submersed, immersed or submerged in water and that she had been able to find DNA evidence in those cases. Beine discussed the three scientific articles presented by defense counsel. For the first article, she testified that showers and baths, hand-washing and dish-washing had no significant impact on the ability to detect foreign DNA from an individual's fingernails, and that the only variables with a statistically significant impact were whether or not the individual bit their nails and how much time the couples had spent together. The study showed that, despite the showers, baths, hand-washing, and dish-washing, 37% of the women showed DNA consistent with their partner and that, if another type of DNA analysis was performed, 63% of the remaining women also showed evidence of male DNA under their fingernails.³ Beine testified that the effect of the hair washing

³ In other words, 37% of the first round of women showed DNA and 63% did not. Then, 63% of the remaining 63% showed male DNA after additional testing. Thus, $0.37 + 0.63 \times 0.63 = 0.7669$ or 76.69% of the total population.

would “depend upon many, many variables” and that “[i]t depends on so many variables and there’s no way of knowing which of those variables are at play in this case.” Beine testified that, based on her education and experience, based upon the materials she had reviewed, she had formed an opinion based upon a reasonable scientific certainty that the finding of Nash’s DNA was not significant. (Ex. 49 (Trial Tr.) 735:5-17, 737:6-740:23, 744:7-745:2, 745:14-22).

3. The Feldman Motion in Limine/Offer of Proof

155. Before trial, the State had moved *in limine* to exclude any evidence related to Feldman. The court’s pretrial ruling granted the motion, evidently in a ruling by email. During an offer of proof, Nash’s counsel argued that the existence of Feldman’s fingerprints and not Nash’s, on Spencer’s car would be established by two Highway Patrol criminalists. Nash would have further established that Feldman had falsely denied to the police that he had ever met Spencer or been to Salem. Tim Bell would have also provided statements from multiple witnesses, including Freddie Whitaker, about seeing Feldman and Spencer together at the Tower Inn. Nash would have also presented evidence about Feldman’s conviction in Iowa on a woman who was approximately the same age as Spencer. Nash would have further presented evidence that Feldman was known to carry a shotgun in his car, and that he later committed suicide with a shotgun. The trial court maintained its prior ruling. (Ex. 50 (Trial Tr.) 916:10-922:11).

P. The Prosecution’s Closing Argument

156. The State's closing statement set forth a theory of the case that was starkly different from the evidence that was actually presented at Nash's trial. The State set forth its theory of the case as follows:

Mr. Nash that day, that night, was angry with Judy Spencer. Judy is gone all day. She goes to the doctor. She comes back and she wants to be with her friend. You heard it. You heard – he admitted he was angry. He was angry. I was mad. He acknowledged he was mad, so mad that when they had the confrontation there at the – Janet Jones's apartment he throws the keys in discuss [sic]. They argue. She comes back in and says, he thinks I am ugly. He doesn't like my hair. She washes her hair. And she doesn't want to be with him. She leaves. And she drives away from that apartment complex that evening.

That's the last time she's ever seen alive. Somebody is looking for her. Donald Nash. Mr. Nash tells the police and tells Janet Jones, well, I went out once, came back around 8:30, stayed in. Well that's not what happened he drove around. Because he was seen by Mr. Cowen. He's seen after 11:00, between 11 and midnight. He's still looking.

And I don't know – I can't tell you at what point that night he found her. But at some point he found her, and in all likelihood, he found her driving on Highway FF and forced her off the road. She pulls off. Now, she tries to back up and can't. And she's not dragged out of her car. Judy Spencer's a cautious person. You heard from the dispatcher. She called a couple times to make sure she had an extra key to the car. She's not getting in a car with some stranger. She got in the car with Donald Nash. And she's not dragged out, because she gets her purse, she drops her keys in the console. The keys aren't still in the ignition. She drops her keys in the console and gets in with Donald Nash. And at some point, they end up at the Bethany [sic] store [sic].

Judy Spencer made two mistakes. She dated Donald Nash, and that night she gets – she had too much to drink, and we're not going to trash her because she had too much to drink. But the tragedy is that because she had too much to drink, she probably didn't know until it was too late that he was pulling out her shoelace to wrap it around her throat and strangle her until she was dead. I don't know if she was conscious at the time or not.

But what I also know and what I think you know from the evidence is that at some point as the life is being strangled out of her, she's pushing, she's fighting against Donald Nash, who is doing that to her. After that happens, after he murders her, he drags her to this pit, throws her in there and covers her up. Before he does that, he stages her. He wants to make it look like a

sexual assault, so he removes her pants and panties and shoes and socks and throws them across the fence and pulls up her shirt and bra.

And any reasonable person, any police officer comes upon that scene is going to think it's a sexual assault. Well, we know it's not a sexual assault. We know it's not a robbery. She was killed by the man who was angry with her. And when she said it was over, it was only on his terms that it was over.

Thankfully, when Mr. Nash takes the clothes and pitches them over the fence, he doesn't because it's dark. Because it's dark he doesn't realize that when he threw her panties across the fence, they got hung up and so the next morning about eleven o'clock when the Nichols brothers come to feed their cattle, take care of their cattle, they see it. They see this. Otherwise she could have been there for days or weeks. And we wouldn't know that her killer's DNA was underneath her fingernails.

(Ex. 50 (Trial Tr.) 852:17-855:10).

157. There is no direct evidence Nash was ever on Highway FF or at the abandoned schoolhouse. The State's closing statement describing Spencer's abduction and murder was the work of the prosecutor's own imagination—all based upon a single inference, based on Nash's DNA. This passage is also riddled with misstatements, misinterpretations of the evidence, holes, and other deficiencies:

(a) There was no evidence presented at trial that Nash threw Spencer's keys in "disgust." Nash has testified that he threw her keys so that she would not be able to find them and drive drunk (Ex. 54 (Hearing Tr.) 262:18-263:6);

(b) Contrary to what the prosecutor said, Spencer did not drive away from the apartment complex after washing her hair so that it was "the last time she's ever seen alive." Rather, Spencer drove to the house she shared with Nash to change clothes, and then drove back to Jones' apartment. This undermines the theory that Nash was in an apparent rage; Spencer evidently did not fear for her safety;

(c) Contrary to the State's argument that Nash was "angry" with Spencer, Jones had testified that during both phone calls Nash expressed concern for Spencer's safety and was afraid she would have an accident or get arrested for drinking and driving;

(d) Nash did not tell the police that he came back at 8:30;

(e) Nash did not tell Janet Jones that he stayed in after the call at 8:30, but rather told her several months later that the Legion Hall and the hospital were the only places he checked “on the highway”;

(f) Nash was not seen by Mr. Cowan. (*See* Ex. 4 (MSHP Investigation Report dated March 11, 1982); Ex. 6 (MSHP Supplementary Investigation Report No. 3)). During his testimony, Cowan, who spotted Spencer’s vehicle on Highway FF, never even mentioned Nash. Rather, it was Christine Colvin who testified that she saw Nash at the apartment complex that was 20-30 minutes away from Spencer’s vehicle;

(g) The fact that the prosecution claimed that Nash was “still looking” for Spencer between 11:00 p.m. and midnight is completely inconsistent with their theory that Nash requested a wakeup call during a phone call with Jones between 9:30 and 10:00 p.m. because Nash supposedly knew Spencer was already dead. (*See* Ex. 50 (Trial Tr.) 865:2-9 (“And then Mr. Nash knowing that Judy’s not coming home, tells Ms. – Janes Jones, he says, wake me up in the morning. Wake me up in the morning. Again, think about that. It’s the night of March 10th. He already knows she’s not coming back. He already knows that she’s not coming back. And he calls and says, you’d better wake me up. How is it possible for him to know, other than the fact that he’d already killed her?”));

(h) Spencer did not contact the dispatcher because she needed an “extra key to her car.” Spencer requested a police escort to her car because she believed someone was following her and she was scared;

(i) There is no evidence that Spencer was “pushing” and “fighting” against Nash;

(j) There is no evidence that Nash “staged” the abandoned schoolhouse crime scene and removed Spencer’s clothes after the fact “because he wants to make it look like a sexual assault.” There is no evidence Nash was at the location. This is yet another inference suggested by the prosecution based on the combination of the hair washing theory and the fact that there was no semen. But the absence of semen does not mean that there was no sexual assault; and

(k) The State argues that there was no robbery. The killer, however, did not throw Spencer’s purse next to the clothes. Instead, the killer threw the purse off a bridge. It is a reasonable inference that the killer checked the purse for valuables and cash, but pitched it afterward.

158. Defense counsel repeatedly objected to the State’s closing argument.

During closing argument, the State argued:

(a) “I don’t know if he went and got a shotgun and came back. I don’t know if he had a shotgun in his truck. What I do know is that beyond any reasonable doubt, he’s the man who strangled and shot her.”

(b) “After strangling her, he then makes the conscious decision to pick up a shotgun, whether it was nearby or far away, pick up the shotgun and shoot her to make sure that she was dead.”

(c) “Mr. Nash is guilty of this crime of capital murder. He intended to kill her. The – the facts as they developed – let me just say this too: I don’t know where the shotgun is. I don’t know where the shotgun is. I am sure the police tried to look, but please, when you go back—” at which point Nash’s counsel objected that this argument was beyond the evidence. The trial court overruled the objection.

(d) “When you get back in your jury room, I ask that if somebody says, well, why didn’t the State produce the shotgun, gently, kindly, because you want to listen to each other and respect each other’s opinion, remind them the State doesn’t have to prove that to you. You promised me that what I had to prove to you is what the law requires me to prove to you. I don’t know where the shotgun is. I have a suspicion that sometime the next morning when Mr. Nash is supposed to be at work that he’s busy getting rid of the shotgun, but—” at which point Nash’s counsel objected that the prosecutor was providing his own thoughts. The trial court did not sustain the objection, but rather said, “All right. You may continue, Counsel. Excuse me.” (Ex. 50 (Trial Tr.) 856:21-25, 858:5-18, 858:22-859:11).

159. Next, the State argued that Nash “becomes visibly shaken when Sergeant Folsom explains to him that there was male DNA found. When asked by Jamie Folsom, do you have an explanation for why your DNA is there, repeatedly—” at which point Nash’s counsel objected that “Jamie Folsom finally admitted that what he said is, we found your DNA at the crime scene. I had to threaten to play the recording before he’d admit it. Now the prosecutor is doing it again.” The trial court overruled the objection, but subsequently reminded the jury to rely on their memories of the evidence. (Ex. 50 (Trial Tr.) 863:14-864:7).

160. During closing argument, the State also argued to the jury that Montgomery had testified that Nash's DNA "was underneath all five fingernails." The State now concedes that this argument was incorrect. Nash's defense counsel also objected to this misstatement. The objection was not sustained. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 328-330; Answer, ¶ 86).

161. During closing argument, the State argued to the jury that Ruth Montgomery "*told you the fact that she [Spencer] had washed her hair would have wiped away any traces of DNA prior to that.*" The Warden now concedes that this argument was incorrect and that, in making the argument, the State misstated the trial evidence. Montgomery has further testified that the State's closing argument was "not an accurate representation of what I said" during the trial because "I said that I could not say that all of the DNA would be washed away." The Warden concedes that the prosecutor, in fact, "misunderstood" Montgomery's opinion in this respect. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 316-322; Ex. 43 (RFA) Nos. 263, 304; Answer, ¶¶ 35, 57, 84).

162. Nash's counsel made a timely objection to the State's argument that "any" traces of DNA were removed by Spencer's hair washing, but the objection was overruled. Nash's counsel was later chastised by the trial judge for continuing to interrupt the State's closing argument. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 324; Answer, ¶ 84).

163. Next, the prosecution also argued to the jury that Nash and Spencer had to

be together for "at least three hours" after Spencer's hair washing to explain Nash's DNA under her fingernails as anything other than the result of a struggle. The

Warden now concedes that a cohabiting couple may have a mixture of both partners' DNA underneath one or both of the partners' fingernails even if the couple has not been together for three consecutive hours. Thus, this statement was also incorrect. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 331-332; Ex. 43 (RFA) No. 305; Answer, ¶ 87).

164. Rather than sustaining these objections, the trial judge chastised Nash's counsel for interrupting the State's closing argument and threatened to reprimand him for "hounding" the prosecution. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 333; Answer, ¶ 88). In addition, the trial court added on four minutes to the prosecution's closing statement. (Ex. 50 (Trial Tr.) 869:6-9).

165. The jury returned a verdict finding Nash guilty of capital murder. (Ex. 50, App'x 526, Trial Tr. 927:13-17).

Q. Direct Appeal

166. On direct appeal, Nash's appellate counsel was the same as his trial counsel. Appellate counsel presented four Points Relied On:

- (a) That the capital murder statute had been repealed;
- (b) That the evidence was insufficient;
- (c) That the trial court erred in denying a request for a circumstantial evidence instruction; and
- (d) That the trial court erred in sustaining the State's motion in limine to exclude the Feldman evidence because the direct connection rule "is an unconstitutional evidentiary rule that infringes on fundamental rights of criminal defendants, including Appellant, without [sic] a compelling state interest for the infringement and without being drawn sufficiently narrowly to serve a compelling state interest without unnecessarily infringing fundamental rights of criminal defendants [sic], including Appellant," among other arguments in a lengthy Point Relied On.

(Ex. 50 (Appellant's Br.) 60-61).

167. Nash's appellate counsel did not raise any arguments related to the admissibility of Ruth Montgomery's testimony. Nash's appellate counsel did not raise any arguments related to the prosecution's mischaracterizations of evidence during closing statement. (Ex. 50 (Appellant's Br.); Ex. 51 (Appellant's Br. (cont'd))).

168. The State opposed Nash's appeal. The State told the Supreme Court the same incorrect statement it told the jury:

(a) "Ms. Ruth Montgomery testified Ms. Spencer's act of washing her hair on the evening of her murder would have removed *any* DNA from underneath her fingernails that had existed prior to the washing"; and

(b) "Ms. Spencer's washing of her hair after her last contact with Appellant would have eliminated *any* DNA underneath her fingernails."

(Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 325; Answer, ¶ 38) (emphasis added).

Contrary to the State's appellate brief, Montgomery did not say hair washing would eliminate all DNA from under the fingernails. These statements to the Supreme Court were incorrect. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 326-327; Answer, ¶ 38, 57).

169. The Supreme Court of Missouri affirmed the conviction, rejecting all of the legal challenges brought on Nash's behalf, including the facial validity of the direct connection rule. *State v. Nash*, 339 S.W.3d 500 (Mo. banc 2011).

170. In finding there was sufficient evidence to convict Nash, the Court held:

The jury, by its verdict, found that the State's expert's testimony suggesting that Nash's DNA from under Spencer's fingernails that existed on the night before her murder would have been removed when she washed her hair. It is not this Court's role to reweigh the DNA evidence to contradict the jury's conclusions. *See State v. Hampton*, 959 S.W.2d 444, 450 (Mo. banc 1997) (refusing to 'reweigh the evidence and second-guess' the trier of fact's

factual conclusion that was supported by expert testimony). There was sufficient evidence to support the jury’s conclusion that Nash’s DNA, rather than a third person’s DNA, was present under Judy’s fingernails because Nash was the last person to have contact with Judy before she was killed.

Nash, 339 S.W.3d at 511 (emphasis added).

171. The Court described all of the other evidence presented at trial against Nash as only “supporting” or “bolstering” this DNA evidence. *Nash*, 339 S.W.3d at 511.

172. The Supreme Court of Missouri held that despite Nash’s argument that Missouri law required it to use a higher standard specific to Missouri circumstantial evidence cases, the analysis it employed was whether viewing the evidence in the light most favorable to the State any rational trier of fact could have found the elements of the crime beyond a reasonable doubt. *Id.* at 509. The Supreme Court of Missouri noted that it deferred to the jury’s ability to believe all some, or none of the evidence presented and therefore took the evidence presented by the State and inferences favorable to conviction that could be drawn from that evidence as true, and disregarded evidence and inferences to the contrary. *Id.*

R. Nash’s Exclusion as the Contributor of the DNA on Spencer’s Shoe

173. Following Nash’s conviction, in 2013 and 2017, DNA testing was performed on Spencer’s right shoe, whose shoelace was used to strangle Spencer. That DNA testing located – for the first time – male DNA on the shoe. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 93-96; Ex. 43 (RFA) Nos. 307-308; Answer, ¶ 12).

174. This newly discovered DNA was cross-tested against Nash’s DNA profile. The Warden concedes that Nash was excluded as the contributor of the shoe DNA.

Furthermore, Nash's DNA was not located on the shoelace or the shoe. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 97-101; Ex. 2 (Joint Stipulation Regarding Admissibility of Shoe DNA Evidence); Ex. 43 (RFA) Nos. 309-310; Answer, ¶ 12).

175. The State subsequently suggested that the DNA could have belonged to a state trooper, Sergeant Gary Dunlap, who had allegedly handled the shoe at the crime scene without wearing gloves. The newly discovered DNA was therefore cross-tested against Sergeant Dunlap's DNA profile. The Warden concedes that Sergeant Dunlap was also excluded as the contributor of the shoe DNA. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 102-105, 340; Ex. 2 (Joint Stipulation Regarding Admissibility of Shoe DNA Evidence); Answer, ¶¶ 13, 44, 69).

176. In these proceedings, the Warden has suggested that the male DNA might belong to Spencer's podiatrist. As an initial matter, the Master also observes that Spencer's foot surgery was on her *left* foot, so there is no apparent reason why Spencer's podiatrist would have even handled her *right* shoe. The Warden also concedes that it knows of no testimony, documents, or other evidence stating or establishing that Spencer was wearing the suede shoes at her podiatrist appointment on March 10, 1982. The police reports from 1982 do not describe or mention Spencer's footwear at the podiatrist appointment on March 10, 1982, but a police report dated March 11, 1982 (*i.e.*, the same day Spencer's body was discovered), Sergeant Dunlap recorded that, when Spencer returned to her house, Nash stated that she "changed *from* her dress slacks *into* a pair of blue jeans, a black slipover T-shirt, *brushed suede shoes* and a white windbreaker jacket." The Master has no reason to doubt that Spencer changed *into* the brown suede

shoes considering that Nash’s innocuous statement about her clothing was recorded more than 30 years before DNA was discovered on Spencer’s right shoe (and, indeed, years before DNA testing existed). It also makes sense that Spencer would change into more casual shoes when she was changing out of her “dress” slacks into blue jeans and a more casual outfit. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 106-107; Ex. 43 (RFA) No. 51; *see* Ex. 44 (Interrogatories) No. 20; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 6; Ex. 10 (Pathologic Diagnoses of the Body of Judy Lynn Spencer); Ex. 11 (Photograph of Right Shoe); Ex. 12 (Photograph of Left Shoe)) (emphasis added).

177. Dorothy Taylor and Sergeant Scott Mertens, two of the investigators involved in the Highway Patrols’ 2007-2008 investigation, testified that finding male DNA on Spencer’s shoe would be “important.” (Ex. 31 (Taylor Dep.) 24:20-25:4, 33:9-35:18; Ex. 34 (Mertens Dep.) 26:13-27:8).

S. Federal Habeas

178. After Nash’s conviction was affirmed on direct appeal, Nash sought habeas corpus relief in federal court. The federal district court did not hold an evidentiary hearing, but rather ruled on the pleadings.⁴ Although Nash submitted a report from Dr. Moses Schanfield disputing Montgomery’s trial testimony, Montgomery was not deposed, and did not otherwise testify, in connection with Nash’s federal habeas corpus proceedings. Thus, at the time Nash’s federal habeas corpus proceedings terminated, Montgomery had not yet

⁴ The federal rules governing discovery in habeas corpus cases are substantially different from Missouri’s. See Rule 6, Rules Governing Section 2254 and 2255 Cases.

changed her opinion of the effect of Spencer's hair washing. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 336-337; Ex. 43 (RFA) Nos. 374-375).

179. Although the federal district court denied Nash relief under strict federal habeas corpus standards, the court wrote:

Although the undersigned finds his hands tied ... and cannot offer him any relief, the Court hopes that the State of Missouri may provide a forum, either judicial or executive, in which to consider the evidence that Petitioner may be actually innocent of the crime for which he was convicted.

(Ex. 52 (Memorandum and Order), App'x 775).

180. Nash appealed, and the Eighth Circuit affirmed. The Eighth Circuit panel also noted that "the scientific studies and expert report [of Dr. Moses Schanfield] raise significant questions about the testimony of the State's expert [*i.e.*, Ruth Montgomery]...." (Ex. 53 (Eighth Circuit Opinion), App'x 805).

181. The Eighth Circuit's concluding paragraph stated:

[A]s the district court noted below, the newly presented evidence in this case deserves 'serious consideration' in the state courts. Missouri provides a procedure for a prisoner to petition for habeas corpus relief in its courts. See Mo. Sup. Ct. Rule 91. We suggest ... that state court would be a more appropriate forum for Nash's claims."

(Ex. 53 (Eighth Circuit Opinion), App'x 806).

T. State Habeas

182. In accordance with Rule 91, Nash then sought habeas corpus relief from the Circuit Court of St. Francois County. Subsequently, Montgomery testified under oath about this case, for the first time since Nash's trial, during a deposition on November 11, 2017. During that deposition, Montgomery testified:

- (a) Montgomery was unable to define what “great effect” meant in terms of a percentage of DNA (Ex. 53 (Ruth Montgomery Dep.) 11:6-12);
- (b) Regarding her trial testimony, Montgomery testified that “*at that time*, I would have expected it [to] be a significant amount of DNA that would be removed” (Ex. 53 (Ruth Montgomery Dep.) 11:6-12);
- (c) Based on the literature currently available, Montgomery changed her opinion: “I would have to say that [hair washing] would have some effect” (Ex. 53 (Ruth Montgomery Dep.) 11:13-21);
- (d) After hair washing, there would probably be some DNA left, and there could be enough DNA to identify a person (Ex. 53 (Ruth Montgomery Dep.) 12:3-23);
- (e) Her opinion is that it is not only “possible that Mr. Nash’s DNA could be under Ms. Spencer’s fingernail as a result of having an intimate relationship and living together,” but, in fact, it is approximately 14 times more likely to find Nash’s DNA if the couple had an intimate relationship and therefore, Nash’s DNA “certainly” could be the result of their intimate relationship” (Ex. 53 (Ruth Montgomery Dep.) 42:21-44:13);
- (f) Montgomery could not provide an opinion about “how likely it is or not” that Nash’s DNA was the result of intimate sexual contact during cohabitation versus a violent encounter (Ex. 53 (Ruth Montgomery Dep.) 43:19-44:13); and
- (g) Speaking as a forensic expert, Montgomery did not conclude that Nash’s DNA got there as a result of Nash’s being involved in Spencer’s murder. (Ex. 53 (Ruth Montgomery Dep.) 45:1-24).

183. Nash called Dr. Moses Schanfield as an expert witness. Hr. Tr. 37. Dr. Schanfield has a B.A. in anthropology, an M.A. in anthropology and Ph.D. in human genetics. *Id.* at 37–38. He did post-doctoral work in immunology and most or a substantial part of his career involved immunological testing on genetic markers as opposed to DNA testing. *Id.* at 38. He is currently a professor of forensic science at George Washington University and has been since 2002. *Id.* at 39. Two introductory undergraduate courses he has taught on forensics covered DNA as well as other areas of forensics. *Id.* at 39-40.

184. Before that, Dr. Schanfield was the director of the Montgomery County Public Safety Laboratory in Rochester, New York. *Id.* at 40. Part of his duties as lab director involved review of lab reports, about 20 percent of which involved DNA testing. *Id.* at 41–42. Before that he was the director of private forensic laboratories in Atlanta and then Denver. *Id.* at 42.

185. Dr. Schanfield subsequently testified in the habeas corpus hearing that there is “no significance” to the fact that Nash’s DNA was found under Spencer’s fingernails in light of the fact that Nash and Spencer were living together. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 193; Ex. 43 (RFA) No. 279).

186. Dr. Schanfield testified that the daily interactions of cohabiting couples involve multiple touches and cannot be characterized as “casual” contact (e.g., sleeping in the same bed, using the same bathroom, sharing a towel). He testified that there are “endless possibilities of touching acquiring DNA.” He testified that one contact or touch normally may result in a conveyance of 0.4 nanograms of DNA, which would mean that six contacts or touches may convey 2.4 nanograms of DNA, which is approximately the amount of Nash’s DNA the State alleges it recovered. Thus, individuals who share the same space or who cohabit are likely to have numerous opportunities to transfer DNA. (Ex. 53 (Hearing Tr.) 60:14-66:16).

187. Schanfield also testified in the habeas corpus hearing that, when he said in his expert report that there was no inconsistency between his opinion and Montgomery’s “great effect” trial opinion, he was referring to the fact that Montgomery never testified that Spencer’s act of hair washing would have removed all of Nash’s preexisting DNA. In

addition, Dr. Schanfield described one study as not “really good research, but it’s what out there,” meaning that there is simply not a developed body of science that allows meaningful opinions on the “effect” of a single hair washing. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 315; Ex. 43 (RFA) No. 278; Ex. 53 (Hearing Tr.) 54:14-58:13).

188. Montgomery also testified during the habeas corpus proceeding in St. Francois County. Montgomery testified as follows:

- (a) Finding Nash’s DNA under Spencer’s fingernails is not a significant finding as far as a forensic expert is concerned without Montgomery’s additional opinion on hair washing (Ex. 53 (Hearing Tr.) 121:18-24);
- (b) When asked what Montgomery meant by “some effect,” she stated: “It’s more than no effect, how’s that?” (Ex. 53 (Hearing Tr.) 127:22-24);
- (c) Montgomery cannot conclude that all of Nash’s DNA would have been washed away as a result of Spencer’s hair washing (Ex. 53 (Hearing Tr.) 123:5-13);
- (d) There was no evidence that would lead Montgomery to conclude that Nash and Spencer were involved in a violent confrontation (Ex. 53 (Hearing Tr.) 133:22-134:3); and
- (e) Nash’s DNA could have gotten underneath Spencer’s fingernails because of some kind of sexual or intimate contact (Ex. 53 (Hearing Tr.) 134:15-17).

189. During the hearing, Montgomery repeatedly admitted that her trial testimony had consisted of speculation. In particular:

- (a) Montgomery admitted she had speculated that Spencer had used a detergent-based shampoo (Ex. 53 (Hearing Tr.) 128:18-23);
- (b) Montgomery admitted she had speculated that the washing with detergent-based shampoo would have lysed the cells and made them flow more readily (Ex. 53 (Hearing Tr.) 128:24-129:3);
- (c) Montgomery was speculating that Spencer scrubbed her fingertips so that the hair would get under her fingernails and tend to remove DNA (Ex. 53 (Hearing Tr.) 129:15-19);

(d) Her trial testimony was “essentially speculation” (Ex. 53 (Hearing Tr.) 130:10-12); and

(e) Montgomery even asked Nash’s counsel: “Since we don’t know what she did, isn’t hair washing without all of the speculation just a different form of speculation?” (Ex. 53 (Hearing Tr.) 137:19-21).

U. Judicial Admissions Considered by the Master

190. Before the evidentiary hearing before the Master, the parties conducted written discovery, which resulted in numerous binding judicial admissions by the Warden. Those admissions first reflect that the Warden no longer contends that Spencer’s hair washing on March 10, 1982, had a “great” effect on removing Nash’s preexisting DNA from underneath Spencer’s fingernails. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 274; Ex. 43 (RFA) No. 231).

191. Furthermore, Montgomery does not agree with the opinion testimony that she provided at Nash’s trial that Spencer’s hair washing on March 10, 1982, would have had a “great” effect in eliminating Nash’s preexisting DNA from underneath Spencer’s fingernails. The Warden has no expert who endorses Montgomery’s “great effect” opinion. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 275, 277; Ex. 43 (RFA) Nos. 232, 243).

192. With respect to the acceptance of Montgomery’s opinion *today* (*i.e.*, more than a decade after Nash’s trial), the Warden admits:

(a) Montgomery’s opinion at Nash’s trial that Spencer’s hair washing on March 10, 1982, had a “great” effect on removing Nash’s preexisting DNA from underneath Spencer’s fingernails ***is not supported by the current state of scientific knowledge***. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 276; Ex. 43 (RFA) No. 233) (emphasis added);

(b) Today, it is still **not** generally accepted in the forensic science community that hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with a soap-based shampoo has a “great” effect on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 266-269; Ex. 43 (RFA) Nos. 234-236);

(c) Today, it is still **not** generally accepted in the forensic science community that hair washing with shampoo lyses human cells underneath fingernails and makes the DNA flow more easily. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 266-270; Ex. 43 (RFA) Nos. 234-238);

(d) The Warden knows of no scientific journal articles, peer-reviewed publications, or other published materials that have become available after Donald Nash’s trial in 2009 regarding the effect of hair washing with shampoo on eliminating preexisting DNA from underneath fingernails. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 271; Ex. 44 (Interrogatories) No. 10);

(e) To the Warden’s knowledge, today there is **no** published scientific study:

(i) Quantifying the effect that a single hair washing with shampoo will have on eliminating foreign DNA from underneath fingernails; or

(ii) Quantifying the effect that a single hair washing with detergent-based shampoo will have on eliminating foreign DNA from underneath fingernails.

(Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 272-273; Ex. 43 (RFA) Nos. 184, 186)

(f) To the Warden’s knowledge, today there is no published scientific study stating that hair washing with detergent-based shampoo will lyse human cells underneath fingernails. The Warden knows of no scientific journal articles, peer-reviewed publications, or other published materials that have become available after Donald Nash’s trial in 2009 stating or opining that a detergent-based shampoo will lyse cells. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 298, 399; Ex. 43 (RFA) No. 220; *see* Ex. 44 (Interrogatories) No. 11); and

(g) The Warden knows of no experiments, unpublished studies, or criminal investigations conducted by the Missouri State Highway Patrol after Nash’s trial regarding the effect of hair washing on eliminating preexisting DNA from underneath fingernails. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 300-302; *see* Ex. 44 (Interrogatories) Nos. 17-19).

193. The Warden does not know what amount of Nash's DNA was underneath the fingernails of Spencer's left hand before she washed her hair on the evening of March 10, 1982. The Warden does not know what amount of Nash's DNA was removed from underneath the fingernails of Spencer's left hand when Spencer washed her hair. The Warden does not know what percentage of Nash's DNA was removed when Spencer washed her hair. After hair washing, one cannot say how much DNA would likely be left. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 278-280, 323; Ex. 43 (RFA) Nos. 180-182; Answer, ¶ 58). In addition, the Warden admits:

- (a) Cohabiting couples have multiple occasions to exchange touch DNA, including sleeping in the same bed and using the same bathroom. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 190; Ex. 43 (RFA) No. 280);
- (b) Montgomery believes that the source of Nash's DNA under Spencer's fingernails could not be blood, but could be "any other biological material." (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 184; Ex. 43 (RFA) No. 285);
- (c) Montgomery does not know how Nash's DNA got under Spencer's fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 185; Ex. 43 (RFA) No. 274);
- (d) Montgomery admits that Nash's DNA could have gotten under Spencer's fingernails because of "some kind of sexual or intimate contact." (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 186; Ex. 43 (RFA) No. 275);
- (e) Montgomery agrees that *the amount of* Nash's DNA underneath Spencer's fingernails "could have gotten there because of some kind of sexual or intimate contact." (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 187; Ex. 43 (RFA) No. 286);
- (f) Montgomery and Schanfield agree that Nash's DNA recovered from under Spencer's fingernails could be the result of his intimate sexual relationship with Spencer. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 188; Ex. 43 (RFA) No. 299);
- (g) Montgomery admitted that Nash's DNA "certainly" could be under Spencer's fingernails because they had an intimate relationship. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 189; Answer, ¶ 47); and

(h) Montgomery admits that there is no evidence that would lead her to conclude that Nash and Spencer were involved in a violent confrontation. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 191-192; Ex. 43 (RFA) No. 273; Answer, ¶ 48).

194. The Warden admits that Montgomery's opinion that Spencer's hair washing had a "great" effect on eliminating Nash's preexisting DNA from Spencer's fingernails depended on Spencer's use of a detergent-based shampoo on the evening of March 10, 1982, and that the shampoo contained the same type of detergent that Montgomery uses to lyse cells in a laboratory setting. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 248; Ex. 43 (RFA) No. 259). But the Warden also admits:

(a) There was no evidence presented at Nash's trial about whether the shampoo that Spencer used on the evening of March 10, 1982, contained detergents. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 249; Ex. 43 (RFA) No. 179; *see also* Ex. 44 (Interrogatories) No. 2);

(b) There was no evidence presented at Nash's trial about the brand of shampoo that Spencer used on the evening of March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 250; Ex. 43 (RFA) No. 176);

(c) The Warden does not know the brand of shampoo used by Judy Spencer on the evening of March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 251; Ex. 44 (Interrogatories) No. 1);

(d) There was no evidence presented at Nash's trial about the type of shampoo that Spencer used on the evening of March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 252; Ex. 43 (RFA) No. 177);

(e) There was no evidence presented at Nash's trial about the chemical composition of the shampoo that Spencer used on the evening of March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 253; Ex. 43 (RFA) No. 178);

(f) There was no evidence presented at trial about the chemical composition of shampoos available in 1982 and whether they contained detergents. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 260; Answer, ¶ 53);

(g) The Warden is aware of no scientific research that would support the assumption that a detergent-based shampoo in 1982 contained the same

ingredients that Montgomery uses in a laboratory setting to lyse open cells. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 254; Ex. 43 (RFA) No. 248);

(h) The Warden is aware of no scientific research that would support the assumption that a detergent-based shampoo in 1982 contained the same concentration of the ingredients that Montgomery uses in a laboratory setting to lyse open cells. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 255; Ex. 43 (RFA) No. 249);

(i) Before her testimony at Nash's criminal trial, Montgomery was not provided any evidence that Spencer used a detergent-based shampoo on the evening of March 10, 1982, as opposed to a shampoo that did not contain a detergent. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 256; Ex. 43 (RFA) No. 252);

(j) At the time of Nash's trial, Montgomery did not know the chemical composition of shampoos available in 1982 and whether they contained detergents. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 258; Answer, ¶ 53);

(k) Montgomery does not know the chemical composition of shampoos available in 1982, as opposed to those available today. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 259; Ex. 43 (RFA) No. 253);

(l) There was also no evidence at trial whether the shampoo Spencer had used in 1982 contained the same ingredients, strength, or concentration of the detergents that Montgomery uses in the lab for lysing. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 261; Answer, ¶ 54);

(m) At Nash's trial, Montgomery did not know whether the shampoo Spencer had used in 1982 contained the same ingredients, strength, or concentration of the detergents that Montgomery uses in the lab for lysing. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 262; Answer, ¶ 54); and

(n) The Warden has no evidence that the specific shampoo Spencer purportedly used on the evening of March 10, 1982, had the strength or concentration of the lysing chemical Montgomery used? in her lab. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶ 263; Ex. 43 (RFA) No. 254)

195. At Nash's criminal trial, the State also did not furnish any evidence that Spencer mechanically manipulated her scalp with her fingertips when she washed her hair on the evening of March 10, 1982. To the Warden's knowledge, there is no evidence that Spencer mechanically manipulated her scalp with her fingertips when she washed her

hair on the evening of March 10, 1982. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 264-265; Ex. 43 (RFA) Nos. 255-56).

196. Montgomery now admits that, even with all the hypothetical assumptions she made at Nash's trial, she cannot say all of Nash's preexisting DNA from underneath Spencer's fingernails would be washed away by Spencer's hair washing on the evening of March 10, 1982, and that enough of Nash's preexisting DNA from cohabitation could have been left after Spencer's hair washing to identify Nash as the contributor of that DNA. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 312-314; Ex. 43 (RFA) Nos. 260, 262; Answer, ¶ 49).

197. Montgomery admits that, even with all the hypothetical assumptions she made at Nash's trial, she can only opine that Spencer's hair washing on the evening of March 10, 1982, would have had "some" effect on eliminating Nash's preexisting DNA from underneath Spencer's fingernails. Montgomery admits that she cannot quantify "some" effect at all with respect to her opinion regarding the effect of Spencer's hair washing on the evening of March 10, 1982. According to Montgomery, "some" effect is less than a "great" effect but more than "no" effect. But Montgomery admits she cannot further explain the meaning of "some" effect and cannot define a quantity of Nash's DNA that would have remained after Spencer's hair washing. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 307-310; Ex. 43 (RFA) Nos. 264, 266; Answer, ¶ 46).

198. With respect to Montgomery's qualifications to provide such opinions, the Warden's binding judicial admissions further reflect the following:

(a) As of today, Montgomery has never conducted any scientific research into the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 281-283; Ex. 43 (RFA) Nos. 188, 190, 192, 194);

(b) As of today, Montgomery has never been involved in any other criminal investigations that analyzed the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 285-288; Ex. 43 (RFA) Nos. 196, 198, 200, 202);

(c) As of today, Montgomery has never received any training about the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 289-293; Ex. 43 (RFA) Nos. 204, 206, 208, 210; Ex. 44 (Interrogatories) No. 16); and

(d) As of today, Montgomery has never read any published or unpublished studies about the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 294-297; Ex. 43 (RFA) Nos. 212, 214, 216, 218).

V. Testimony Considered by the Master

1. Tim Bell

199. Nash's first witness was Tim Bell, who worked for the Dent County Sheriff's Department from April 1991 through August 1997, at which time Bell was the Chief Deputy Sheriff. In 1992, the sheriff's office reopened the Spencer case. Bell and two others were assigned to the case, and Bell worked on the case until the time he left the sheriff's office. (Evidentiary Hrg. Tr. 82:12-24, 83:11-23).

200. During the investigation, Bell and his fellow investigators reviewed the existing case file, and Bell interviewed witnesses and obtained documents. Nothing in the existing reports indicated to Bell that Nash was involved with the murder or that he should be charged. (Evidentiary Hrg. Tr. 84:18-89:5).

201. Bell was unaware of any indication that Nash ever owned or possessed a shotgun. Bell was unaware of any indication that the tire tracks at the schoolhouse belonged to the ranchers who discovered Spencer's body. (Evidentiary Hrg. Tr. 90:23-92:12).

202. Bell, who was highly familiar with the area, also reviewed a map of the two crime scenes. Bell testified that he did not believe it was possible for Nash to call Jones around 8:30, then travel to the location of Spencer's vehicle, transport her to the Bethlehem schoolhouse, commit the murder, and then drive back to Salem in time to make a call to Jones at 9:30. (Evidentiary Hrg. Tr. 104:1-109:7). This testimony again assumes that the homicide took place between 8:30 PM and 9:30 PM. This testimony does counter the argument made by the prosecutor, at trial, that at the time of the 9:30 PM call that Nash knew that Spencer was already dead.

203. Nash's family also asked Bell to reinvestigate when Nash was arrested in 2008. Bell testified he received no compensation for the reinvestigation. (Evidentiary Hrg. Tr. 89:10-16, 129:11-22).

204. Bell testified that Feldman's fingerprints were identified during his investigation when the major case squad ran the fingerprints for a second time (after the creation of AFIS). Bell recounted the fact that Feldman lived in Rolla at the time of the

murder and his criminal history. Bell interviewed Feldman's ex-wife, who he indicated was reluctant to speak with Bell until she saw Feldman's death certificate. Bell interviewed Feldman's ex-girlfriends, who he indicated were also scared of him. He testified his ex-sister-in-law was also scared of him. Bell testified Feldman's probation officer was removed from overseeing his probation because she and her boss feared that she was in danger. (Evidentiary Hrg. Tr. 109:9-111:17).

205. Feldman's ex-sister-in-law told Bell that Feldman always carried a shotgun in his vehicle at the time of the murder. Feldman ultimately committed suicide by shotgun. (Evidentiary Hrg. Tr. 112:18-113:11).

206. In connection with Bell's initial investigation at the sheriff's department, Freddie Whitaker stated that he and Ted Stevens had seen Feldman with Spencer at the Tower Inn parking lot within a couple days of her death. (Evidentiary Hrg. Tr. 116:12-117:15; *see* Ex. 23 (Freddie E. Whitaker signed statement)).

207. The Warden argues Bell's testimony is not relevant to any issue on the case; invades the province of the fact finder; is not relevant to whether, the trial court erred in admitting certain evidence and excluding other evidence, or whether closing argument created reversible error; has no bearing on whether counsel was ineffective in presenting and preserving particular claims; is not about new reliable evidence in light of which no reasonable jury would vote to convict; is at its core the opinion of a former police officer, based on events that happened before trial, that he does not think there was enough evidence to charge and convict Nash. The Warden pointed out the Supreme Court of Missouri and the federal courts have already found the evidence was sufficient.

208. The Master found Bell to be a credible witness, who testified over the objection of the Warden. Bells' testimony was apparently consistent with the testimony he provided at the prior Habeas hearing. The testimony does, as it did previously, present evidence about his investigation and a detailed history of Mr. Feldman, most of which occurred prior to the trial.

2. Janet Diane Kelly

209. Nash's second witness was his daughter, Janet Diane Kelly. Ms. Kelly is currently 60 years old, and lived with her father for 22 years. Kelly testified that when she was growing up her father did not have a shotgun and she never saw him shoot a shotgun or go hunting, unlike other family members. (Evidentiary Hrg. Tr. 135:14-138:18). This testimony is not new and was available at trial, although this witness did not testify at the trial. The Master found Ms. Kelly's testimony credible.

3. Jesse Kenneth Nash

210. Nash's third witness was his brother, Jesse Kenneth Nash, who is an alderman in Salem and is now 81 years old. The brothers grew up together and worked together at the AMAX mine near Salem. Nash's brother was an avid hunter, but never knew Nash to hunt or shoot a gun. Nash's brother did not know Nash ever to have a gun. (Evidentiary Hrg. Tr. 139:16-145:9). This testimony is not new and was available at trial. The Master found Mr. Nash's testimony credible.

4. Jenetta McDonald

211. Nash's fourth witness was his ex-wife, Jenetta McDonald. McDonald and Nash were married for 22 years, starting in 1959, until approximately 1981. McDonald has not spoken with Nash for the past decade while he was in prison. For all the years that McDonald lived with Nash, Nash did not hunt and she had never seen him hunt nor heard about him hunting. She never saw a shotgun around Nash and testified that Nash had never owned a gun. She testified that she didn't think that Nash ever shot a gun throughout the entire time she lived with him. At one point, her father gave Nash a .22 caliber rifle, but Nash returned it to her father after the divorce. (Ex. 30 (McDonald Dep.) 6:5-13:21; *see also* Ex. 45 (MSHP Supplementary Investigation Report No. 14)). This testimony is not new and was available at trial. The Master found Ms. McDonald's testimony credible.

5. Dorothy Taylor

212. Dorothy ("Dottie") Taylor was a corporal who was one of the Missouri State Highway Patrol investigators in Nash's case. Ms. Taylor testified by deposition and over the objection of the Warden on the basis of relevancy and invading the province of the finder of fact. Taylor had just joined the Criminal Investigation Unit in 2007, which was a three-person division consisting of Jamie Folsom, Scott Mertens, and herself. Folsom ran the unit. Taylor did not coordinate their investigation with the Dent County sheriff's department. Taylor did not investigate Feldman or Heyer as a suspect. (Ex. 31 (Taylor Dep.) 8:19-11:21, 14:18-18:24).

213. Taylor read all of the reports going back to 1982. As of March 2008, no investigator had determined that there was enough evidence to arrest Nash. Until the

discovery of the DNA, she did not believe there was not enough evidence to make an arrest. (Ex. 31 (Taylor Dep.) 26:17-28:25, 43:11-44:20, 46:3-17).

214. Taylor repeatedly testified that she is not a DNA expert, and has no training except for “general information.” (Ex. 31 (Taylor Dep.) 25:15-26:6, 41:1-11, 64:8-13, 66:19-67:2, 74:18-21).

215. During the deposition, Nash’s counsel played a clip from the television show, *Paula Zahn: On the Case*, which featured an interview of Taylor. With respect to Nash’s DNA found underneath Spencer’s fingernails, Taylor stated: “It was a concern for us. They were boyfriend and girlfriend. It could be explained away.” Taylor then took credit for developing the hair washing theory: “I read that she [Spencer] had washed and styled her hair. It was like this light bulb came on. I can remember going, ‘Oh my gosh. She washed her hair.’ It was like this epiphany.” (Ex. 31 (Taylor Dep.) 37:20-38:25).

216. Taylor testified that she “certainly” understood that people who live together likely have one another’s DNA under their fingernails or their clothing and that Nash’s DNA would “not necessarily in and of itself point to him,” and that it could be “meaningless.” Although Taylor is unsure whether she, Mertens, and Folsom had a “specific conversation” about it, she testified that “obviously, we kn[e]w that” they were going to have a problem proving Nash’s guilt just because his DNA was under Spencer’s fingernails because people who live together have one another’s DNA under their fingernails. (Ex. 31 (Taylor Dep.) 40:4-17, 42:1-22).

217. Taylor admitted that she is the person who came up with the theory that since Spencer washed her hair, it would have washed Nash’s DNA away, saying “when I

observed it in the report, I spoke it aloud. And then we started having that discussion.”

When asked about the “significance” of the hair washing, Taylor responded:

Because I’m not an expert on DNA, we had discussions and – about that specifically. And that it was – in my mind, not being an expert in DNA, that if she had washed her hair, that likely would have removed that foreign DNA. And doing the timeline and by Nash’s own admissions⁵ that he had not – there had not been any contact with her after the – with him and her after the fact that she washed her hair.

(Ex. 31 (Taylor Dep.) 41:1-18).

218. When asked “who made the conclusion that Donald Nash’s DNA could not have remained present during the hair washing?” (as written in the probable cause statement), Taylor stated: “I don’t recall having a specific direct conversation. My recollection is that information would have come from the DNA expert, which is Ruth Montgomery. But I don’t recall that I was present when she gave that information.” (Ex. 31 (Taylor Dep.) 76:2-10).

219. Taylor conceded that the totality of the evidence was “not enough to arrest” Nash until the Highway Patrol found the DNA and learned about the hair washing, stating: “I would say that this was – this is what led us to – led Sergeant Folsom to request – a warrant for his arrest.” (Ex. 31 (Taylor Dep.) 43:17-44:20, 46:10-17).

220. With respect to the newly discovered DNA, Taylor testified that it would be “important” for her to know if Spencer’s shoe was tested for DNA and found male DNA.

⁵ This testimony is inaccurate. Although additional contact between Nash and Spencer is not necessary in light of the fact that Nash’s DNA could have remained after the hair washing, Taylor misremembers the existence of any such admission by Nash. To the contrary, after Spencer left Jones’ apartment the first time, the police reports clearly disclose that Spencer and Nash were together at the house. (Ex. 4 (MSHP Report of Investigation dated March 11, 1982), ¶ 6).

She further testified that “[a]ny DNA that would be developed would be important.” (Ex. 31 (Taylor Dep.) 24:20-25:4, 33:9-35:18). The Master found the testimony of Taylor to be credible.

6. Sergeant Scott Mertens

221. Sergeant Mertens testified over the objection of the Warden on the basis of relevancy and invading the province of the fact finder. Sergeant Scott Mertens joined the criminal investigation unit of the Highway Patrol in 2006. His father was part of the original investigation of the Spencer murder in 1982. In 2007 or 2008, Mertens, Taylor, and Sergeant Folsom were assigned to investigate the Spencer murder, with Sergeant Folsom as the case agent and supervisor of the unit. The other two investigators were “back up” to Sergeant Folsom. Mertens was acting as Sergeant Folsom’s subordinate and was not doing anything on his own. (Ex. 32 (Mertens Dep.) 8:17-10:1, 18:14-23).

222. Mertens read some of the prior reports, but could not guarantee that he read all of them. He testified, however, that the DNA evidence was “extremely important” evidence. (Ex. 32 (Mertens Dep.) 27:13-21, 32:20-33:1).

223. Sergeant Mertens nevertheless conceded that it is pretty common for people who live or associate together to have one another’s DNA under their fingernails. He testified that the importance of Nash’s DNA “hinged” upon Spencer’s hair washing. Sergeant Mertens denied writing the probable cause statement against Nash or having any input in it except for proofreading for typographical errors. (Ex. 32 (Mertens Dep.) 33:11-34:8, 35:4-11).

224. Sergeant Mertens watched his appearance on the episode of *Paula Zahn: On the Case* before his deposition. He testified that the statements were truthful and that he stood by them today. During that interview, he stated: “We thought we had a pretty good case. We did find the DNA, but we still had to explain the DNA.” When asked, “So how critical was this discovery that Judy had washed her hair before she was murdered?” Sergeant Mertens responded: “That meant everything to the case. We knew that she didn’t have contact with him after she washed her hair until the time of her murder.” When asked, “So you’re saying the only explanation for Donald Nash’s DNA being under her fingernails was that he was the killer?” Sergeant Mertens answered: “He was the killer.” (Ex. 32 (Mertens Dep.) 37:24-38:12, 39:11-41:7).

225. Sergeant Mertens also furnished a previously undisclosed police report about Jeanne Paris and Darla Spencer obtaining a buccal swab from Alfred John Heyer. That report, dated September 11, 2009, states:

Darla Spencer continued by explaining that Heyer acknowledged he knew that his fingerprints were found on Judy Spencer’s vehicle and according to Darla Spencer Heyer even admitted that he had possibly thrown trash into Judy Spencer’s vehicle when it was abandoned near his residence. Paris stated that it was at this time that Heyer expressed his concerns that his DNA could have been found on a **beer can or bottle** found in the trash he threw in Judy Spencer’s vehicle. Paris continued by stating Heyer expressed further concerns that if his DNA was to be discovered in the trash, he did not want the problems nor to spend a lot of money on an attorney to clear his name.

(Ex. 32 (Mertens Dep.) 52:14-54:2; Ex. 24 (MSHP Report of Investigation dated September 11, 2009), ¶ 4) (emphasis added).

226. Sergeant Mertens, who was not aware of the male DNA finding, testified that if male DNA was found on the shoe, it would be “important”:

Q. If Doc's DNA had been found on the shoe, would that have been important in your investigation?

A. Oh I would say it would be important. Yeah.

Q. Let's assume somebody else's DNA, some other male's DNA, was found on the shoe. Would that be important?

A. That would be important. Something to look at.

(Ex. 32 (Mertens Dep.) 26:13-27:8). The Master found Mertens to be credible.

7. Jeanne Paris

227. As a rebuttal witness, the Warden called Spencer's sister, Jeanne Paris. Ms. Paris testified that she and her sister-in-law, Darla Spencer, had gone up to Chicago to get Heyer's DNA sample. They were aware that Heyer was a suspect, but he was adamantly refusing to give a sample to law enforcement. She testified that she and Ms. Spencer were able to persuade Heyer to provide a DNA sample, which they brought to the Highway Patrol. (Evidentiary Hrg. Tr. 160:13-163:10).

228. Sergeant Mertens' report provides, in relevant part: "[A]ccording to Darla Spencer, Heyer even admitted that he had possibly throw[n] trash into Judy Spencer's vehicle when it was abandoned near his residence. Paris stated that it was at this time that Heyer expressed his concerns that his DNA could have been found on a beer can or a bottle found in the trash he threw in Judy Spencer's vehicle." (Ex. 24 (MSHP Report of Investigation dated September 11, 2009), ¶ 4).

229. Ms. Paris testified that she did not tell Sergeant Mertens that Heyer told her that he dumped trash in Spencer's vehicle. She could not recall whether her sister-in-law, Darla Spencer or anyone else, had told Sergeant Mertens that information. On cross-examination, she clarified that she did not recall whether she said this and could not

specifically deny making the statement. (Evidentiary Hrg. Tr. 160:25-161:5, 165:14-166:18).

230. The Master finds no reason to determine the testimony of Ms. Paris not to be credible, but she did, considering all the ways she was asked the question, seem less than sure about the statement attributed to her by Sergeant Mertens. The Master sees no reason to disregard Sergeant Mertens' report. The Warden only called Ms. Paris, and did not call Darla Spencer, as a rebuttal to deny the statements recorded in the report. The Master believes it is more likely that after more than a decade Ms. Spencer does not recall this portion of their conversation, which may have lasted only a few moments.

231. Heyer's statements cast further suspicion on him as a suspect. Heyer denied ever seeing the car on the night. This was later proved to be a lie based on his fingerprint on the car window. This additional statement, if true, places Heyer not only outside the vehicle, but inside the vehicle. It is strange behavior, to say the least, to see a wrecked vehicle outside one's own home and immediately throw trash in it, which is what Heyer appears to claim that he did. From the police report, there was not recorded "trash" in the vehicle, but rather *only* a beer bottle on the passenger's floor and a beer can on the other side. (Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 9).

8. Ruth Montgomery

232. Ruth Montgomery, the supervisor of the Highway Patrol DNA laboratory, testified for the Warden at the circuit court habeas hearing. Nash called her at the evidentiary hearing before the Master. Habeas Hearing at 174. On cross-examination, Ms. Montgomery testified that she had a master's degree in pharmacology, with an

emphasis in DNA and serology. *Id.* at 216–17. She testified that her master’s degree involved studying molecular biology, case analysis, finding DNA, analyzing DNA, and interpreting statistics. *Id.* at 216–17. She testified that she had a bachelor’s degree in biology, had done two years of research for the University of Missouri in biology and immunology, had worked for the Highway Patrol for eighteen years, and had done one-year of training after joining the Patrol. *Id.* at 216–17.

233. Montgomery testified that she reviewed the State’s responses to Nash’s requests for admissions that dealt with her expertise on the effect of hair washing, with regards to her testimony, and with regards to the evidence of a struggle or violent confrontation. (Evidentiary Hrg. Tr. 175:16-176:25).

234. Montgomery testified that at the time of Nash’s trial she was not aware of any scientific research about the effect of a single hair washing on fingernail DNA. She has not discovered any such research since Nash’s trial. She has not conducted or participated in any scientific research on the effect of hair washing on fingernail DNA. She has not been involved in any other criminal investigations that involved the effect of hair washing on fingernail DNA. She has not received any training on the effect of hair washing on the removal of fingernail DNA. She was not aware of any forensic scientists at the time of Nash’s trial with the opinion that hair washing with a detergent-based shampoo would have a “great effect” on fingernail DNA. (Evidentiary Hrg. Tr. 177:14-179:4).

235. Montgomery testified that “I have revised my opinion regarding the effect of hair washing from the original adjective of great effect to some effect.” She then conceded

that she has been unable “to quantify some effect other than to say it’s more than no effect.” (Evidentiary Hrg. Tr. 180:18-182:2).

236. When Montgomery reviewed the probable cause statement (*see* Ex. 34), she denied telling anyone that Nash’s DNA “could not have remained present during hair washing” and said that it was not consistent with her testimony. She testified that the probable cause statement “is not the opinion I gave at trial or at the habeas trial or in a deposition.” (Evidentiary Hrg. Tr. 185:19-186:19, 188:15-20).

237. Montgomery testified that she defines “casual contact” as “a single instance of shaking hands or hugging or something along those lines.” She testified that it is possible that fingernail DNA can accumulate over time from living together, sleeping in the same bed every night, and using the same bathroom, even if there is no sexually intimate relationship. Montgomery agreed that the DNA could have been from “intimate” contact, including a sexual relationship. Montgomery testified that her opinion was that the DNA “would be more likely from the transfer of biological fluid or cells of some type than casual contact accumulation over time.” She admitted: “Casual is possible.” (Evidentiary Hrg. Tr. 189:10-191:5).

238. Montgomery testified that she is not aware of any evidence that Nash and Spencer were involved in a violent confrontation of any kind. (Evidentiary Hrg. Tr. 191:6-11).

239. Although Montgomery testified that she believes detergents began to be added to shampoos in the 1930s she conceded that “I still do not know today whether the shampoo Judy Spencer used had detergent in it but it’s a possibility.” She also admitted:

“I don’t know if the concentration basically of the detergent was the same in the shampoo as what I use in the laboratory.” (Evidentiary Hrg. Tr. 197:1-21).

240. Montgomery testified about research finding that hand washing and dish washing had a statistically significant effect on the presence of foreign fingernail DNA. The research did not examine hair washing, but Montgomery acknowledged that the same research found *no* statistically significant effect for *showering*. The Master further notes that Montgomery was reluctant to concede that showering frequently includes hair washing, saying that she did not know and that there was nothing in the article to indicate whether it did. The researchers noted they “assumed” the men used “a detergent of some variety” for showering. The purpose behind discussing this research about hand washing and dish washing is unclear, as it did not change Montgomery’s “some effect”/“more than no effect” opinion about *hair washing*. Montgomery still concedes her “great effect” opinion was different than the opinion she expressed before the Master, and is still only able to say that she personally believes hair washing with a detergent-based shampoo would have “more than no” effect. (Evidentiary Hrg. Tr. 222:13-223:21; Ex. 35 (Flanagan study), 482-483).

241. Montgomery testified that the 2.5 nanograms of Nash’s DNA was consistent with a sexual or intimate relationship. She also testified that this amount of DNA was consistent with accumulated contacts over time with people living together. It was her opinion that the amount of Nash’s DNA “could be there because of either ... an intimate relationship certainly and possibly cohabitation.” (Evidentiary Hrg. Tr. 221:19-222:12, 225:16-226:4).

242. Montgomery summarized her opinion as follows:

A. Sitting here today, it is my opinion that Spencer's hair washing had some effect which I have defined as more than no effect.

Q. All right. You can't quantify it any more than that?

A. I cannot.

Q. You can't provide a percentage of DNA that would be washed away?

A. Not now or ever have I done that, no.

Q. What if you had 2.6 nanograms; would that still be consistent with either intimate sexual contact or this accumulation of small contacts over time?

A. It's possible.

Q. Or 3 nanograms?

A. So as you increase these quantities, the possibility of it being *from casual contact* decreases. I can't tell you at what exact mathematical point that is, but low level DNA typically from casual touch or, without body fluid transfer, is not a high quantity of DNA.

Q. Do you know whether your some-effect opinion is published in any kind of scientific journal?

A. It is not.

(Evidentiary Hrg. Tr. 226:9-227:8) (emphasis added).

The Warden would have the Master find Montgomery's testimony was not helpful to Nash. He states her trial testimony would likely not have been excluded based on a *Frye* challenge, nor should it have been. And, he argues, Montgomery's modification of the adjective she would use to describe the effect of hair washing on DNA under fingernails does not come close to meeting the standard for gateway innocence. The Master does not so find. As will be addressed further in the following paragraphs, a *Frye* hearing would have allowed the trial judge, prior to trial, to be focused on the opinion of the witness as to the persistence of DNA after hair washing.

"Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this

twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs”. (*Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923)).

Had a *Frye* hearing been conducted the nature and extent of Montgomery’s opinion as to hair washing would have been more fully explored and lessened the possibility that her opinion would differ from deposition to trial.

9. Frank Carlson

243. Nash also presented the videotaped testimony of Frank Carlson, his attorney at trial and on direct appeal. He testified that he practices criminal law, and overwhelmingly handles felony cases. Carlson agreed that the DNA evidence was the “critical” evidence against Nash. Carlson testified that he did not move to exclude Ms. Montgomery’s testimony on the basis of *Frye* because he did not think that would be a winning effort, and the ruling would be that his objection went to weight, not admissibility. Carlson testified that he did not move to exclude Montgomery’s testimony because “[j]unk science was being allowed in court all over the place in the state of Missouri during that period of time,” and that he believed his objections only went to the weight of Montgomery’s testimony instead of admissibility. (Ex. 36 (Carlson Dep.) 9:3-5, 11:22-12:10). He testified that he concluded that he needed to deal with the testimony through impeachment, which he did.

244. Carlson recalled that, at Montgomery’s deposition, he “presented her with three studies that she was completely unfamiliar with” and that she had no expertise about the extraction of foreign DNA after submersion in water. By the time of trial, the only evidence Carlson had seen about the “general acceptance” of Montgomery’s hair washing theory was her own testimony. (Ex. 36 (Carlson Dep.) 18:13-19:3, 25:23-26:22)

245. Carlson agreed that the prosecution’s opening statement that “washing the hair would eliminate just about all the DNA underneath somebody’s fingernails” was different from the opinion Montgomery had provided during her deposition and that he had not seen any scientific studies about the prosecution’s brand new opinion. Carlson admitted that he did not consider requesting a *Frye* hearing or moving to exclude the opinion at that time. (Ex. 36 (Carlson Dep.) 27:14-30:19). Carlson made a continuing objection at trial, which included Ms. Montgomery’s testimony about the effect of hair washing, but the basis of the objection was that she was exceeding the opinion she had given prior to trial. *Carlson Depo* at 25–36. Carlson’s trial strategy on dealing with the substance of the opinion was to do so by impeachment. *Id.* at 50.

246. With respect to Montgomery’s trial testimony, Carlson admitted that he did not know where the “great effect” opinion originated. He admitted that Montgomery’s critical opinion was “brand new” at trial. He agreed with Montgomery’s retraction being consistent with the fact that her theory was never generally accepted in the scientific community and her lack of specialized education or experience in this area. (Ex. 36 (Carlson Dep.) 31:6-35:10, 49:16-23).

247. Carlson would “expect” that Montgomery gave her opinions “to a reasonable degree of scientific certainty.” Carlson did not recall whether he had asked her, but it is something that he would expect he would typically ask an opinion witness. (The trial transcript, however, reveals that she did not testify to a reasonable degree of scientific certainty about the “great effect” opinion, and Carlson did not ask.) (Ex. 36 (Carlson Dep.) 36:23-37:11).

248. A review of the trial transcript shows that Carlson did not address the following topics during cross-examination:

- (a) Whether Montgomery had ever conducted any scientific research on the effect of hair washing on the elimination of fingernail DNA;
- (b) Whether Montgomery had received any training on the effect of hair washing on the removal of DNA from underneath fingernails;
- (c) Whether Montgomery had been involved in any other criminal investigations that involved the effect of hair washing on the elimination of fingernail DNA;
- (d) Whether Montgomery was aware of any scientific research on the effect of a single hair washing on the elimination of fingernail DNA;
- (e) Whether Montgomery had read any published or unpublished research on the effect of hair washing on the removal of fingernail DNA;
- (f) Whether Montgomery had read any published or unpublished research on the effect of hair washing with a detergent-based shampoo on the removal of fingernail DNA;
- (g) Whether Montgomery had read any published or unpublished research on the effect of hair washing with any type of shampoo on the removal of fingernail DNA;
- (h) Whether she knew of any scientific research that said that hair washing with a detergent-based shampoo would lyse cells and cause the DNA to flow more easily;
or

- (i) Whether Montgomery's opinions were generally accepted among forensic scientists.

Carlson's only questioning about Montgomery's qualifications involved whether Montgomery had experience "in DNA analysis of materials collected by police from submerged cadavers or portions of the human body that had been submerged in water." (Ex. 49 (Trial Tr.) 687-699).

249. Carlson admitted that he did not make a strategic decision not to make a *Frye* objection to Montgomery's testimony. Carlson further conceded that he could not think of any disadvantages to making the *Frye* objection. He agreed that "the only 100 percent fail safe way to make sure that the jury did not believe Montgomery's testimony was to make sure she never testified." (Ex. 36 (Carlson Dep.) 55:5-7, 57:4-19, 70:1-19).

250. Carlson did not recall why he did not challenge Montgomery's opinion on appeal. Carlson thought the trial court's threat of a reprimand was prejudicial, but he did not remember whether he considered raising a challenge to the prosecution's closing statement. He could not say that the failure to raise these challenges were strategic decisions. (Ex. 36 (Carlson Dep.) 44:15-47:8, 68:10-2, 68:10-69:2).

251. Carlson could not remember whether he brought an *as-applied* or *facial* challenge to the exclusion of the Feldman evidence, but acknowledged that a *facial* challenge is more difficult "because you essentially have to prove that it's unconstitutional in every case." He had no memory why he did not bring the argument as an *as-applied* challenge, although his "practice is to make both arguments, because if you miss one, it

can be a problem,” including because a defendant might lose on a *facial* challenge but win on an *as-applied* challenge. (Ex. 36 (Carlson Dep.) 47:21-49:9).

252. The Master found Carlson’s testimony credible, and as suggested by the Warden, Carlson is a very experienced trial and appellate attorney. The Master does not find his decisions to forgo a *Frye* pre-trial hearing; make an objection, at trial, upon the appearance of the opinion of “great effect”, pursuant to *Frye*; raise an objection to the Montgomery opinion of “great effect” on appeal or challenge the misstatements by the Attorney General, during closing, on appeal constituted reasonable and well informed choices about how to handle the trial and appeal. Several witnesses testified that the DNA evidence was the crucial evidence that resulted in prosecution of this case more than 2 decades after the crime. Whether the DNA of Nash, which persisted under the finger nails of the victim, was the result of Nash’s involvement in her death or the result of their intimate cohabitation, was the crucial decision which must be made by the jury. The change in Montgomery’s opinion after the trial highlights the crucial nature of the DNA evidence during that trial.

10. Donald Nash

253. Nash personally testified regarding the events of March 10-11, 1982. Nash testified that he lived with Judy Spencer, the victim, at the time of the murder and was helping her pay her rent. Hearing Transcript at 234. He testified on direct examination that he worked at the Amax lead company where he was president of the United Steel Workers Union. *Id.* at 235. Nash testified that he told the victim he would not marry her

until she stopped drinking, and the two agreed that they would each stop drinking. *Id.* at 235–36.

254. Nash testified that he drove a Chevy K model pickup truck, and the victim drove an Oldsmobile. *Id.* at 237. Nash testified that on March 10, 1982, he drove the victim's car to work because there was not room in his truck for all the people in his carpool. *Id.* at 236–37. The victim worked at a hospital in Salem. *Id.* at 237–38. When the victim had not yet returned from the podiatrist at 7 p.m. on March 10, 1982, Nash called her. *Id.* at 238. She said she was in Anutt, Missouri and would be home in a little while, but she sounded like she had been drinking and Nash did not believe her. *Id.* at 238. Nash testified that he then drove to Janet Jones' apartment in Salem. *Id.* at 238.

255. Nash indicated that he found the victim at Janet Jones' apartment where in the parking lot she handed him the keys to his truck, and he threw the keys to her Oldsmobile in the grass. *Id.* at 239. He threw her keys in the grass hoping she wouldn't find them and drive. Nash told her that she was either going to have a wreck and kill herself or kill somebody else. Nash was upset and he testified that he said something to the effect of "that's the last time you'll lie to me," but he indicated he does not remember the exact words. *Id.* at 239–40.

256. Nash testified that he drove home and the victim also drove home. *Id.* at 240. He testified that the victim changed her clothes including changing out of heels into brown suede shoes, and said she was going to Houston. *Id.* at 241. Counsel for Nash read a police report in which Nash had told the officer the victim had changed clothes and that

she was wearing brown suede shoes when she went out, but the report did not mention changing out of heels. *Id.* at 242–43.

257. Nash’s counsel also referred to a report in which a trooper said Nash told him that he went out, briefly looked for the victim, then returned home and remained there for the rest of the night. *Id.* at 243–44. Nash then denied that he had told the trooper that he had returned home and stayed there. *Id.* at 244. He indicated that he later told a private investigator that he did go out looking again. *Id.* at 244–45. He testified that he did not know where the victim was going except Houston, Missouri and that he would not have looked for the victim in the area where her body was found. *Id.* at 245–47.

258. Nash testified that he asked Janet Jones for a wake-up call the next morning, and she gave him a wake-up call at 5:45 the next morning. *Id.* at 248–249. He testified that he called the victim’s mother on the morning of the 11th, the first time he had ever called her, and he lied about calling from work, because he did not want to worry her. *Id.* at 272–73.

259. At the hospital, after the victim’s body was found, Nash told the prosecutor and a trooper that a particular young lady and some other girls had it in for the victim. *Id.* at 253. Nash testified that the victim had previously stayed all night with a band member who played at the Tower Inn. A gunshot residue test, conducted on Nash on the day the homicide was discovered, did not show that he had fired a weapon. *Id.* at 254–56.

260. When confronted with information in the record that the police did not check him for scratches, Nash said he figured they probably looked for scratches because he was wearing a short-sleeved shirt. *Id.* at 270.

261. Nash initially said it is very possible he did tell the trooper that he went home and stayed there after briefly looking for the victim. *Id.* at 271. Then he said the trooper got it wrong. *Id.* at 271. Then he said he does not remember exactly what he told the trooper, he may have told the trooper what the trooper recorded in the report, or the trooper could have gotten it wrong, or the trooper could have made it up. *Id.* at 275–277.

262. The Warden sought to challenge Nash’s credibility, but Nash’s statement is recorded in the very first police report, which states that Nash told investigators that “[w]hen Judy arrived back at Nash’s house, he stated that they began to argue about her drinking. Judy became mad and changed *from* her dress slacks *into* a pair of blue jeans, a black slipover T-shirt, *brushed suede shoes* and a white windbreaker jacket.” Nash adamantly denied killing Spencer. (Evidentiary Hrg. Tr. 231-282; Ex. 4 (MSHP Investigation Report dated March 11, 1982), ¶ 6). The Warde summarizes the overall effect of his testimony is that it is tailored to attempt to refute the case against Nash, and that it contains assertions that are not plausible, and make him appear guilty. The Master disagrees. The Master found Nash’s testimony credible.

11. Steven Lawhead

263. The final witness was Steven Lawhead, a former member of the Dent County Sheriff’s Department. Lawhead variously worked for the Air Force as a security policeman, in Army intelligence, and as a supervisory special agent with the Department of the Army’s Criminal Investigation Division Command, as a police officer with the Fort Leonard Wood Police Department and as an operations sergeant with the Waynesville

Police Department before he retired. Lawhead had worked as a sheriff's deputy while he was in the army and stationed at Fort Leonard Wood. (Evidentiary Hrg. Tr. 291:10-293:9).

264. Lawhead became involved in Nash's case around 2007 or 2008 when the sheriff's office reopened the murder case at Lawhead's request. After gathering all of the records, Lawhead saw no evidence to charge Nash for the murder. Among other things, Lawhead saw no evidence that Nash owned a shotgun and had tested negative for gunshot residue on the day the homicide was discovered. In addition, the tire tracks at the abandoned schoolhouse did not match either his truck or the victim's car. The existing evidence against Nash was not strong enough for a finding of probable cause against Nash. (Evidentiary Hrg. Tr. 293:17-303:11).

265. Lawhead, who was a deputy for seven years and was familiar with the roads, testified (like former deputy Bell) that he did not believe it was possible for Nash to travel among the various locations within the span of an hour to commit the murder between the two phone calls to Jones. In fact, because the locations were so remote, Lawhead testified that he did not believe Nash would have been able to find Spencer's car on Highway F without already knowing where she was. (Evidentiary Hrg. Tr. 306:19-307:7).

266. Lawhead began to focus on Heyer after reviewing a criminal profile from the FBI's behavioral sciences unit, which stated that the killer would more than likely have already spoken to the police and that he would have left the area. This was consistent with Heyer's behavior after the murder, when Heyer initially spoke with the police, denying having seen Spencer's vehicle, and then left the area and even abandoned his family. Based on the profile, Lawhead tracked down Heyer and obtained copies of his fingerprints, which

matched an unidentified set of fingerprints on Spencer's vehicle. Collectively, this raised a "red flag" for Lawhead. (Evidentiary Hrg. Tr. 307:8-311:18; *see also* Ex. 39 (MSHP Investigation Report dated April 7, 1982 and additional materials)).

267. Lawhead spoke with Heyer over the phone. Heyer said that law enforcement would have to put up a dragnet to catch him. Heyer also said that "if we wanted to eliminate him, he said we should send a hit man to his home and eliminate him that way." Lawhead also spoke with an old neighbor, who suspected that Heyer was the murderer and remembered that after the murder, Heyer would come to her house and ask if there was any information being relayed over the police scanner about the murder. The neighbor also remembered that Heyer owned a shotgun because he had just killed a dog in her backyard. (Evidentiary Hrg. Tr. 311:19-315:12; *see also* Ex. 41 (Draft Affidavit for Probable Cause to Issue Felony Arrest Warrants for Alfred John Heyer III)).

268. The Highway Patrol did not coordinate with the Dent County Sheriff's Department. Sergeant Folsom had reached out to Lawhead because he wanted to go to the evidence repository and retrieve evidence. Lawhead agreed to allow Folsom to go with him because Lawhead wanted to see where the evidence was kept. They made plans to go together on a Monday, but when Sergeant Folsom never called, Lawhead learned that Sergeant Folsom went the previous Thursday. At that point, Lawhead did not coordinate with Sergeant Folsom further "because at that point I knew he was going to be deceptive to me." (Evidentiary Hrg. Tr. 320:24-321:20).

269. In March 2008, around the same time that the Highway Patrol was preparing to arrest Nash, Lawhead was in the process of preparing an affidavit for probable cause to

issue a felony warrant for Heyer. Lawhead's sergeants brought him into the office and told him to stop his investigation. Lawhead went to speak with the sheriff, who told him the same thing. (Evidentiary Hrg. Tr. 323:8-324:17; *see also* Ex. 41 (Draft Affidavit for Probable Cause to Issue Felony Arrest Warrants for Alfred John Heyer III)).

270. For Lawhead, the discovery of Nash's DNA did not change his opinion of Nash's guilt or innocence because he was trained throughout his schooling "that two people living together would normally naturally have DNA from each other on each other." Through today, Lawhead has "absolutely not" seen any evidence that Nash is guilty of Spencer's murder, and Lawhead believes he is innocent. (Evidentiary Hrg. Tr. 324:18-325:15, 326:23-327:5).

271. Lawhead further testified that the newly discovered police report about Heyer was "very significant" because he had denied seeing Spencer's vehicle, but he knew about his fingerprints and was concerned about his DNA being on the discarded beer can or beer bottle. If Lawhead had known about it, Lawhead would have included it in his probable cause statement against Heyer. (Evidentiary Hrg. Tr. 319:14-320:11, 325:16-326:3).

272. Nothing in Lawhead's testimony is really new. Lawhead's opinion about the strength of the evidence against Heyer, as opposed to Nash, is simply that, Lawhead's' opinion. The Master found Lawhead's testimony credible.

273. Following Lawhead's testimony, Warden offered no additional witnesses.

IV. CONCLUSIONS OF LAW

A. Overview of Habeas Corpus

“[T]he central purpose of any system of justice is to convict the guilty and free the innocent.” *Herrera v. Collins*, 506 U.S. 390, 398 (1993). Few foundational principles can compare to the “fundamental value determination of our society that it is far worse to convict an innocent man than to let a guilty man go free.” *Schlup v. Delo*, 513 U.S. 298, 325 (1995) (quoting *In re Winship*, 397 U.S. 358, 372 (1970)).

“Habeas corpus is the last judicial inquiry into the validity of a criminal conviction and serves as “a bulwark against convictions that violate fundamental fairness.”” *State ex rel. Woodworth v. Denney*, 396 S.W.3d 330, 337 (Mo. banc 2013) (quoting *State ex rel. Engel v. Dormire*, 304 S.W.3d 120, 125 (Mo. banc 2010) (quoting *State ex rel. Amrine v. Roper*, 102 S.W.3d 541, 545 (Mo. banc 2003))). In Missouri, “[a] writ of habeas corpus may be issued when a person is restrained of his or her liberty in violation of the constitution or laws of the state or federal government.” *Id.* (quoting *Engel*, 304 S.W.3d at 125).

Habeas corpus frequently involves the review of “procedurally barred” claims, meaning claims that were not raised on direct appeal or in post-conviction proceedings. *See, e.g., State ex rel. Koster v. McElwain*, 340 S.W.3d 221, 244 (Mo. App. 2011) (“[F]ollowing *Clay*, our courts have permitted review of procedurally barred claims in habeas proceedings ... if the claim alleges manifest injustice because of new evidence establishing by a preponderance of the evidence that a reasonable juror would not have convicted the defendant.”). To raise such claims, Nash must “show a jurisdictional defect,

cause for failing to timely raise the ineffective assistance or other constitutional defect and prejudice resulting from the defect, or manifest injustice such as either a freestanding or a gateway claim of actual innocence.” *Woodworth*, 396 S.W.3d at 337. “Moreover, a petitioner may seek habeas relief for procedurally barred claims ‘in circumstances so rare and exceptional that a manifest injustice results.’” *State ex rel. Clemons v. Larkins*, 475 S.W.3d 60, 76 (Mo. banc 2015) (quoting *State ex rel. Simmons v. White*, 866 S.W.2d 443, 446 (Mo. banc 1993)).

Missouri habeas corpus procedure does not follow the standard system of appellate review following civil trials. Upon the denial of habeas relief by a circuit court, habeas petitioners file new petitions before the Court of Appeals and then the Supreme Court instead of filing a notice of appeal followed by a request for transfer. *State ex rel. Zinna v. Steele*, 301 S.W.3d 510, 513 (Mo. banc 2010) (habeas corpus cases in this Court “are original proceedings and not an exercise of appellate jurisdiction”); *Brown v. State*, 66 S.W.3d 721, 732 (Mo. banc 2002) (“[D]enial of a petition for writ of habeas corpus is not appealable,” and “the remedy is to file a new petition in a higher court....”).

Upon such filing, each successive court is “required to independently consider [the] Petition as an original writ filed pursuant to the authority of Rule 91 and Rule 84.22, and subject to the procedure set forth in Rule 84.24.” *In re Ferguson v. Dormire*, 413 S.W.3d 40, 51 (Mo. App. 2013); *see also State ex rel. Cole v. Griffith*, 460 S.W.3d 349, 358 (Mo. banc 2015) (explaining that the Supreme Court “is the factfinder” for habeas petitions filed in that court). The Supreme Court does not “conduct appellate review of the judgment entered” by the circuit court—here, the St. Francois County Circuit Court. *Ferguson*, 413

S.W.3d at 51-52; *see also Woodworth*, 396 S.W.3d at 336 (granting writ of habeas corpus after denials by circuit court and court of appeals).

The Warden has nevertheless asked the Master to apply some form of “deference” with respect to the Amended Findings of Fact, Conclusions of Law, and Judgment issued by the St. Francois County Circuit Court. The Warden, however, cites no case, rule, statute, or other legal authority for this principle, which conflicts with the precedent described above.⁶ The Warden also does not explain what this “deference” might look like, especially when the Master has received numerous binding judicial admissions by the Warden and heard live testimony from some of the same witnesses. These witnesses supplemented or clarified their prior testimony and led the Master to disagree with certain findings reached by that court. The Master further observes that in other cases, such as *Woodworth*, the Supreme Court relied upon the findings of the appointed Master, and not the findings of the circuit

⁶ The State’s reliance on *State ex rel. Nixon v. Jaynes*, 63 S.W.3d 210 (Mo. banc 2001), is misplaced. In *Jaynes*, the circuit court had appointed a criminal defendant’s same trial counsel to represent him during his post-conviction proceedings. Appointed counsel did not raise a claim of ineffective assistance of counsel (*i.e.*, about himself), among other alleged deficiencies, and the defendant subsequently filed a habeas petition asserting that his counsel had a conflict of interest. The Supreme Court wrote that “this Court has dealt with habeas corpus petitions, after default in post-conviction proceedings, ***in a manner similar to that of the United States Supreme Court in dealing with successive federal habeas petitions*** or federal petitions that follow post-conviction default in state court.” *Id.* at 215 (emphasis added). The court then explained the familiar requirement that allows defaulted post-conviction claims to be heard under the gateway actual innocence standard: “There is no absolute procedural bar to [petitioner] in seeking habeas relief. Successive habeas corpus petitions are, as such, not barred. But the opportunities for such relief are extremely limited. A strong presumption exists, as *Schlup v. Delo* indicates, against claims that already have once been litigated.” *Id.* at 217. The court ruled that, because the petitioner could not show cause and prejudice or his actual innocence, his remedy was to file a motion to reopen his post-conviction proceedings. *Id.* at 217-18. Thus, *Jaynes*’ use of the word “successive” has nothing to do with “earlier [habeas] petitions at the same or a lower court level,” as the State contends *Jaynes* “seems” to say, but rather the presumption against raising claims that could have been presented on direct appeal or during post-conviction proceedings. That presumption can be rebutted by a successful gateway claim of actual innocence. The State’s analysis is also counterfactual because in *Jaynes* the circuit court had *granted* habeas relief, and the State sought a writ of certiorari from the Supreme Court, so there was no “successive” habeas petition filed in the Supreme Court. The Supreme Court also did not appoint a master.

court, which had necessarily denied habeas relief for the case to reach the Supreme Court in the first place.

While the Master has reviewed the findings of the St. Francois County Circuit Court as part of the complete record (along with all other court opinions), the Master, consistent with his appointment by the Supreme Court, declines to afford “deference” to that court’s Amended Findings of Fact, Conclusions of Law, and Judgment. Respectfully, the Master believes that if the Supreme Court wished to “defer” to that court’s findings, there would be no purpose to the appointment of the Master to take evidence and issue new findings of fact. The Court’s appointment of the Master specifically directs the Master “to take evidence on the issues raised in the pleadings ...; and to report the evidence taken, together with *the Master’s* findings of fact and conclusions of law.” (Order dated Oct. 1, 2019) (emphasis added). The Master will discharge that mandate, consistent with the original jurisdiction of the Supreme Court in these proceedings.

Furthermore, consistent with the Supreme Court’s explicit directive to “take evidence on the issues raised in the pleadings filed herein ... ; and to report the evidence taken,” the Master has had the benefit of hearing testimony firsthand that allows the Master to judge the credibility of witnesses for himself. In addition to hearing the same witnesses, the Master has taken the testimony of witnesses who did *not* testify before the St. Francois County Circuit Court, as well as received other evidence that was not presented to that Court, including the State’s numerous binding judicial admissions. (See Ex. 1 (Petitioner’s Uncontroverted Facts); Ex. 43 (RFA); Ex. 44 (Interrogatories)). The different “mix” of information provides the Master with a fresh perspective about the totality of the evidence,

including the credibility of witnesses, which understandably may differ from that court, or any prior court.⁷ Accordingly, these findings are the Master’s own, based on the evidence taken in the course of this appointment, and they are based on the entirety of the factual record as it now exists.

B. Nash’s Gateway Claim of Actual Innocence

Before addressing the merits of Nash’s substantive claims in Counts II through V of the Petition, the Master first addresses the threshold issue of Nash’s gateway claim of actual innocence. As explained below, the Master concludes that Nash has carried his burden of proof for his gateway claim, which therefore allows the Master to adjudicate Counts II through V of the Petition on the merits.

1. The Gateway Standard

To establish a gateway claim of actual innocence, Missouri has adopted the U.S. Supreme Court’s “gateway” standard that a petitioner must “‘show that “a constitutional violation has probably resulted in the conviction of one who is actually innocent.””’ *Clay v. Dormire*, 37 S.W.3d 214, 217 (Mo. banc 2000) (quoting *Schlup v. Delo*, 513 U.S. 298, 327 (1995) (quoting *Murray v. Carrier*, 477 U.S. 478, 496 (1986))). “A petitioner’s burden at the gateway stage is to demonstrate that more likely than not, in light of the new

⁷ The Master disagrees with several aspects of the circuit court’s findings. For example, the circuit court’s findings never mention that Montgomery admitted her opinion was speculation based on another speculation about the evidentiary facts, for which there was no evidence presented at trial. Montgomery confirmed that testimony at the hearing before the Master. The State’s numerous judicial admissions also confirm these deficiencies. In addition, the circuit court’s findings continued to reference “casual contact,” which is misleading. Montgomery agreed at the evidentiary hearing before the Master that an accumulation of DNA from repeated casual contacts (*i.e.*, touches) was possible. But Nash’s DNA is explainable by the romantic relationship, cohabitation, or multiple “touches.” Additionally, the circuit court never properly acknowledged Montgomery’s lack of qualifications in this area, as well as the deficiencies in her “some effect”/“more than no effect” opinion, which are meaningless.

evidence, no reasonable juror would find him guilty beyond a reasonable doubt—or, to remove the double negative, that more likely than not any reasonable juror would have reasonable doubt.” *House v. Bell*, 547 U.S. 518, 538 (2006); *see also State ex rel. Nixon v. Jaynes*, 63 S.W.3d 210, 214 (Mo. banc 2001) (“‘[A]ctual innocence’ means that the petitioner must show that it is more likely than not that ‘no reasonable juror would have found the defendant guilty’ beyond a reasonable doubt.”) (quoting *Schlup*, 513 U.S. at 328-29).

There are several features of the actual innocence standard that warrant emphasis. First, a credible gateway claim “requires ‘new reliable evidence—whether it be exculpatory scientific evidence, trustworthy eyewitness accounts, or critical physical evidence—that was not presented at trial,’” but “the habeas court’s analysis is not limited to such evidence.” *House*, 547 U.S. at 538 (quoting *Schlup*, 513 U.S. at 324). “*Schlup* makes plain that the habeas court must consider “‘all the evidence,’ old and new, incriminating and exculpatory, without regard to whether it would necessarily be admitted under ‘rules of admissibility that would govern at trial.’” *Id.* at 538 (quoting *Schlup*, 513 U.S. at 327-328 (quoting Friendly, *Is Innocence Irrelevant? Collateral Attack on Criminal Judgments*, 38 U. Chi. L. Rev. 142, 160 (1970))). Simply put, “[j]ustice requires that this Court consider all available evidence uncovered following [the petitioner’s] trial that may impact his entitlement to habeas relief.” *Engel*, 304 S.W.3d at 126.

Second, “the *Schlup* standard does not require absolute certainty about the petitioner’s guilt or innocence.” *House*, 547 U.S. at 538. Rather, as always, “‘[r]easonable doubt’ ... ‘marks the legal boundary between guilt and innocence.’” *Jaynes*, 63 S.W.3d at

214 (quoting *Schlup*, 513 U.S. at 315). The standard is “probabilistic” and considers “what reasonable, properly instructed jurors would do.” *House*, 547 U.S. at 538. “The word ‘reasonable’ in that formulation is not without meaning.” *Schlup*, 513 U.S. at 329. “It must be presumed that a reasonable juror would consider fairly all of the evidence presented.” *Id.* In this respect, the Master does not engage in sheer speculation or convoluted reasoning, or accept tenuous inferences as true for the benefit of upholding a conviction.

Finally, “the gateway actual-innocence standard is ‘by no means equivalent to the standard of *Jackson v. Virginia*, 443 U.S. 307, 99 S. Ct. 2781, 61 L.Ed.2d 560 (1979),’ which governs claims of insufficient evidence.” *House*, 547 U.S. at 538 (quoting *Schlup*, 513 U.S. at 330). In other words, the habeas court does **not** review the evidence in the light most favorable to the State to determine whether there is merely constitutionally sufficient evidence to convict. To the contrary, “[b]ecause a *Schlup* claim involves evidence the trial jury did not have before it, the inquiry requires the federal court to assess **how reasonable jurors would react** to the overall, newly supplemented record.” *Id.* (emphasis added). “If new evidence so requires, this may include consideration of ‘the credibility of the witnesses presented at trial.’” *Id.* (quoting *Schlup*, 513 U.S. at 330); *see also Amrine*, 102 S.W.3d at 548 (“[B]ecause an actual innocence claim necessarily implies a breakdown in the adversarial process, the conviction is not entitled to the nearly irrebuttable presumption of validity afforded to a conviction on a direct appeal challenging the sufficiency of the evidence.”). The Warden suggests a recent 8th Circuit case, *Barton v. Stange*, 2020 WL 2315996 (May 17, 2020), is helpful. *Barton* is the review of a stay of execution issued by the United States District Court for the Western District of Missouri. The 8th Circuit

quashed the stay, and addressed his gateway claim of actual innocence claims much as this court addressed it in *State ex rel. Barton v. Stange*, 597 S.W.3d 661 (Mo. banc, 2020).

2. Nash Has Come Forward With New Reliable Evidence.

Nash argues that he has come forward with new reliable evidence that was not presented at trial: Ruth Montgomery's sworn retraction of her trial opinion (along with a variety of judicial admissions by the State about that opinion), and the DNA testing of Spencer's shoe, which has revealed DNA belonging to an unidentified third party male.

The Warden argues that the change in opinion by Montgomery is not new evidence. Nash suggests that Montgomery's withdrawn trial opinion was the glue that held together Nash's conviction. *See State v. Nash*, 339 S.W.3d 500, 511 (Mo. banc 2011) ("The jury, by its verdict, found that the State's expert's testimony suggesting that Nash's DNA from under Judy's fingernails that existed on the night before her murder would have been removed when she washed her hair."). Montgomery did not withdraw that opinion until a deposition in 2017. Nash suggests the retraction is both new and reliable.

On numerous occasions, courts have considered discredited forensic science as the basis for granting habeas relief based on a gateway claim of actual innocence. *House*, 547 U.S. at 554 (habeas petitioner presented successful actual innocence claim because "the central forensic proof connecting [him] to the crime ... has been called into question"); *Rivas v. Fischer*, 687 F.3d 514, 547 (2d Cir. 2012) (habeas petitioner presented successful actual innocence claim because "he has produced highly persuasive ... expert testimony, which casts considerable doubt on the 'central forensic proof' connecting him to the crime"); *Souter v. Jones*, 395 F.3d 577, 592-593 (6th Cir. 2005) (habeas petitioner

presented successful actual innocence claim where “[t]he retractions of Drs. Cohle and Bauserman not only serve to bolster the defense’s argument, but also undermine the State’s side by withdrawing their original trial opinions. Put another way, the new affidavits do not merely add to the defense, but also deduct from the prosecution.”).

In addition, Nash has presented DNA evidence concerning Spencer’s shoe, which was first discovered in 2013. The shoelace was removed from the shoe to strangle Spencer. Afterward, the shoe was thrown in the woods by the killer. The Warden has stipulated that both Nash and the investigator who collected the shoe have been excluded as the contributors of the DNA. (Ex. 2 (Joint Stipulation Regarding Admissibility of Shoe DNA Evidence)). This evidence is also new and reliable.

This new physical evidence of a third-party male’s DNA is a separate, established basis for actual innocence claims. *See, e.g., Floyd v. Vannoy*, 894 F.3d 143, 158 (5th Cir. 2018) (habeas petitioner presented successful actual innocence claim because “in light of this newly-discovered contradictory physical evidence, it is more than likely a reasonable, informed juror would reasonably doubt the credibility of Floyd’s confession”).

“When confronted with actual-innocence claims asserted as a procedural gateway to reach underlying grounds for habeas relief, habeas courts consider all available evidence of innocence. *House v. Bell*, 547 U.S. 518, 537–538, 126 S.Ct. 2064, 165 L.Ed.2d 1 (2006) (federal habeas courts evaluating gateway actual-innocence claims “must consider ‘ ‘all the evidence,’ ’ old and new, incriminating and exculpatory” (quoting *Schlup v. Delo*, 513 U.S. 298, 328, 115 S.Ct. 851, 130 L.Ed.2d 808 (1995))); *Ex parte Reed*, 271 S.W.3d 698, 733–734 (Tex. Crim. App. 2008) (Texas habeas courts must do the same (citing *House*,

547 U.S. at 537–538, 126 S.Ct. 2064)). That includes evidence “offered in ... prior [habeas] applications.” *Reed*, 271 S.W.3d at 734. (*Reed v. Texas*, 140 S. Ct. 686, 689 (2020))

Accordingly, Nash has satisfied his threshold burden of coming forward with new reliable evidence that was not presented at trial. *See Schlup*, 513 U.S. at 324.

3. Nash Has Satisfied the Actual Innocence Standard.

The Master next considers how a reasonable juror would react to all the evidence now available. As the Supreme Court instructs, “We note finally that the *Carrier* standard requires a petitioner to show that it is more likely than not that “no reasonable juror” would have convicted him. The word “reasonable” in that formulation is not without meaning. It must be presumed that a reasonable juror would consider fairly all of the evidence presented. It must also be presumed that such a juror would conscientiously obey the instructions of the trial court requiring proof beyond a reasonable doubt.” (*Schlup v. Delo*, 513 U.S. 298, 329, 115 S. Ct. 851, 868, 130 L. Ed. 2d 808 (1995)). There is significant and compelling exculpatory evidence, new and old, that raises a question as to Nash’s guilt. The State’s evidence against Nash also suffers from numerous logical gaps, all of which may cause a reasonable juror to question Nash’s guilt. The State’s remaining “incriminating” evidence is very weak, including what remains of Montgomery’s trial opinion.

The Master breaks the record evidence into three categories: (1) the pre-2008 evidence of Nash’s innocence; (2) the new evidence of Nash’s innocence; and (3) the alleged evidence of Nash’s guilt.

a. Pre-2008 Evidence of Nash’s Innocence

The Master observes that the Warden has no direct physical evidence that implicates Nash in Spencer's murder, other than arguably the presence of Nash's DNA under the fingernails of the victim. There are no eyewitnesses who place Nash at either crime scene of Spencer's abandoned vehicle or the isolated schoolhouse. There is no physical evidence at either crime scene that proves Nash's presence at either location at any particular point in time, much less at the time of the murder. Nash has never confessed to the murder, but rather, has maintained his innocence since 1982.

Although Spencer was shot with a shotgun, there is no evidence that Nash ever owned a shotgun or how he obtained a shotgun, on short notice, to commit a murder. Nash's ex-wife, daughter, and brother, credibly testified that Nash had never owned a shotgun and was not even a hunter, like others in the area. Nash likewise confirmed that he had never owned a gun when he testified. Thirty-eight years after the murder, the Warden has no explanation, or even a theory, how Nash supposedly obtained, and disposed of, a shotgun on the night of the murder, on short notice and without anyone noticing.

Consistent with Nash's lack of a shotgun, Nash was tested just hours after the murder for gunshot residue. The test was negative. Sergeant P.J. Mertens further testified that he observed no scratches or bruises, or any other evidence suggesting Nash had been in a struggle.

There were also fresh tire tracks at the abandoned schoolhouse. The Warden has stipulated that the width of these tire tracks is an entire foot wider than the tire tracks for

Nash's pickup and Spencer's car.⁸ There were no tire tracks that belonged to Nash's truck or Spencer's car at that location.

Nash's behavior was also what one might expect. On the evening before the murder, he had an argument with Spencer, but within only a short time, Janet Jones stated that Nash was expressing concern for Spencer's safety because of her drinking and driving. The fact that Nash went looking for Spencer is unsurprising; Jones testified that she did the same thing. Finally, Nash broke down crying when he learned of Spencer's death. The next time Jones saw Nash, he appeared "broken-hearted" to her.

All of this evidence points in favor of Nash's innocence.

b. New Evidence

i. New DNA Testing

Today, there is also compelling new, potentially exculpatory, DNA evidence from Spencer's shoe that Nash's original jury never heard. During the commission of the crime, Spencer was killed by a shoe lace removed from her right shoe. Her shoe, minus its lace, was found discarded over a fence. Male DNA has been found on that shoe. The DNA on the shoe does not belong to Nash. When the State suggested it might belong to the trooper who collected the shoe, Nash agreed to cross-reference the DNA profile against the trooper's DNA. The DNA on the shoe does not belong to the trooper.

⁸ While the State now argues that the tire tracks might belong to the ranchers who found the body, the State provides no evidence of this fact. It is pure speculation. It also seems unlikely that, if these tire tracks could have belonged to the ranchers, there was no further mention of the ranchers' vehicle in the police report. The ranchers would have been easily accessible to local police for a follow-up.

A review of the investigative history of this case reflects the accumulation of a relatively small amount of physical evidence which did not clearly point to any one suspect. The investigation was primarily carried on by the Missouri State Highway Patrol (MSHP) and somewhat secondarily by the Dent County Sheriff's Office. After an initial flourish of activity the case seemed to languish for a period in excess of 20 years. Steven Lawhead testified he reopened the investigation, while working for the Dent County Sheriff, in 2007-2008. Apparently the MSHP was also reopening its investigation at the request of a relative of the victim. Sergeant Scott Mertens, MSHP, was one of the investigators for the MSHP in 2007. Mertens acknowledged that over the 25 plus years a number of suspects had been looked at, but no one was arrested. (Ex 32. P.11 L.16-23) Mertens resubmitted a number of items, including the fingernails, to the lab for DNA testing. (Ex 32, P. 20 L. 12-20) Mertens acknowledged it would be important to the investigation if male DNA, other than from Nash, would be found on the victims' shoe. (Ex.32 P26, L. 13-25, P. 27 L.1-3) Shortly after the DNA testing revealed a mixture of Nash's and the victims DNA under her fingernails, Nash was charged in the death of Spencer. From the testimony of all the MSHP employees and investigators, the DNA evidence was a crucial fact in the decision to draft a probable cause statement, resulting in the arrest and charging of Nash. The existence of DNA on the shoe the victim wore of the night of her death, and which was removed from her body and found discarded near her body, which came from a male contributor other than Nash, was not known to the investigators making the decision to seek charges or the jury at Nash's trial. Mertens indicated that would have been important information to the investigators. In a case which had no physical evidence tying Nash to the crime, no

witnesses who place Nash at the scene, and the admitted limitation on DNA results involving two people who were cohabiting in an intimate relationship, this previously unavailable DNA evidence would weigh heavily in the mind of a juror considering reasonable doubt. This is male DNA taken from an item at the crime scene that Spencer's killer must have touched. It is the only male DNA found anywhere on the victim's clothing.

The discovery of this DNA evidence is comparable to the hair evidence in another murder case, *State v. Barriner*, 111 S.W.3d 396 (Mo. banc 2003). In *Barriner*, this court considered the likely impact of hair evidence found on the body of one victim and in a knot used to tie another victim. The source of the hairs was unknown, but they did not match the two suggested sources: the defendant or the victims.

Although this court was considering a different legal issue (the prejudicial effect of the exclusion of the hair evidence), the *Barriner* discussion makes several important points. While the issues in a review, based upon a failure to admit evidence, differ from the issues at bar, the analysis of the effect of scientific evidence upon the outcome of the case seems to provide some guidance in the task of determining the possible impact on a jury of newly discovered evidence. In making its prejudice analysis, the court in *Barriner* recognized, "If the proof of defendant's guilt was overwhelming, the state will have rebutted the presumption of prejudice. *Felder v. State*, 88 S.W.3d 909, 914–915 (Mo.App.2002). (*State v. Barriner*, 111 S.W.3d 396, 401 (Mo. 2003), as modified on denial of reh'g (Aug. 26, 2003)) In discussing the issue of "overwhelming evidence", the Court noted, "The excluded hair evidence was highly probative, while the evidence of Barriner's guilt was not overwhelming. Often, a confession will provide the state with an overwhelming case.

However, Barriner's confession was not videotaped or audiotaped, and Barriner did not put his statement in writing. The jury received evidence of Barriner's confession only through an officer's testimony, requiring the jury to rely upon the officer's credibility and accurate memory. The remainder of the evidence was circumstantial. There was no eyewitness of Barriner committing the murders. There was no physical evidence implicating Barriner found at the crime scene (such as fingerprints, footprints, blood, semen or hair) (*State v. Barriner*, 111 S.W.3d at 401. Here, even with an alleged confession by the defendant, the Court found the hair of undetermined origin could have affected the outcome of the trial. First, like the hair evidence in *Barriner*, the DNA evidence from Spencer's shoe is clearly admissible at retrial as "physical evidence that could indicate another person's interaction with the victim at the crime scene." *Id.* at 400. Second, because of the DNA's ability to indicate a third person's presence at the scene and interaction with the victim, the DNA evidence from Spencer's shoe has a high probative value. Third, *at a minimum*, the admission of this new DNA evidence would create a reasonable probability that the outcome of Nash's trial would be different.

The DNA from Spencer's shoe is particularly important because Nash was convicted based on DNA, albeit from Spencer's fingernails. The Master is thus confronted with two different sets of DNA, one from the nails and another from the shoe. The presence of the first set of DNA (Nash's) is completely explainable and even expected: he was romantically involved with Spencer and lived with her. The second set of DNA (another

man's) is not explainable. The Warden has not furnished any credible explanation of the source of this DNA.⁹

The focus of this case changed in 2008, when the Highway Patrol discovered Nash's DNA. Based on the evidence available in 2008 (before the discovery of Nash's DNA), two Dent County Sheriff's Deputies who investigated the case testified that they did not believe they had probable cause to arrest Nash and, in fact, did not even consider him their primary suspect. Instead, their investigations focused on Feldman and Heyer. An outside cold case unit did not even list Nash as the top suspect, but rather Feldman and Heyer. During the depositions of two Highway Patrol officers who were involved in the investigation that led to Nash's arrest, these officers testified that there was insufficient evidence to arrest Nash until the discovery of the fingernail DNA (combined with the hair washing theory).

But even with the discovery of the fingernail DNA, Nash's conviction at trial was hardly a foregone conclusion. *See Nash v. Russell*, 807 F.3d 892, 897 (8th Cir. 2015) (noting that "the jury certainly could have resolved the conflicting evidence in Nash's favor"). In an already weak case, the DNA found on Spencer's shoe could easily tip the balance in favor of Nash's acquittal for a reasonable juror. When the shoe DNA is placed into the total "mix" of evidence, including Nash's lack of a shotgun, his negative gunshot residue test, the lack of any eyewitness or other physical evidence against him, and all the

⁹ Initially, the State appeared to suggest that the DNA might have belonged to Spencer's podiatrist. The State offered no evidence to support this speculation. In any event, the suggestion is unpersuasive because Spencer's foot operation was on her left foot, and the DNA was found on Spencer's right shoe.

other evidence suggesting Nash's innocence, it is more likely than not that a reasonable juror would have reasonable doubt.

ii. Ruth Montgomery's Retraction

A fair review of the evidence leads a neutral observer to recognize that the DNA evidence was the key evidence in this case. All the witnesses agree that there was no active prosecution of Nash until the DNA under the victims' fingernails was analyzed. When the DNA came back as a mixture of the DNA of Nash and the victim the investigators still recognized that because the victim and Nash lived together, and were intimate, the presence of his DNA under her nails was not unexpected. When the nails were removed, no skin or blood was visualized under the nails. (Petitioners Uncontroverted Fact179 and RFA 268) When Nash had his hands swabbed for gunshot residue, no scratches were seen on his hands or arms. It was not until a MSHP investigator recalled that the victim had washed her hair and opined that any of the DNA of Nash existing under her nails, at that time, would have been washed away, was the probable cause statement prepared and prosecution begun. The Probable Cause Statement by Lt Folsom, MSHP, reflected the testing of the fingernails for DNA, the determination of the existence of unknown male DNA and the voluntary submission of a DNA sample by Nash, on March 13, 2008. March 19, 2008 it was determined that a mixture of the DNA of Nash and the victim was present under her nails. Nash was interviewed on March 26, 2008, in a voluntary setting, and "...offered no explanation as to why his DNA profile was identified..." March 27, 2008 the Probable cause statement was submitted which said, in part, "...this DNA (Nash) could not have remained present during hair washing..." (Ex 34) The Complaint was filed March 27,

2008. On April 15, 2008, Theodore Bruce, Assistant Attorney General, enters for the State. So within 8 days of the determination that the DNA of Nash exists under the fingernails of his live-in girlfriend, charges are filed. Within 3 weeks an assistant Attorney General enters and takes over the prosecution, ultimately trying the case, beginning in late October 2009. The DNA analysis was clearly critical evidence in this case, the jury requesting to review the DNA report during deliberation. (Trial Transcript p 907 Line 12) The erroneous understanding of the fingernail DNA began with the probable cause statement and carried through during Montgomery's testimony, the prosecution's closing statement, and the State's brief on direct appeal. This not only strengthens Nash's longstanding allegations of innocence, but weakens the State's tenuous case against him. *Souter v. Jones*, 395 F.3d 577, 592-593 (6th Cir. 2005) ("The retractions of Drs. Cohle and Bauserman not only serve to bolster the defense's argument, but also undermine the State's side by withdrawing their original trial opinions. Put another way, the new affidavits do not merely add to the defense, but also deduct from the prosecution.").

As Montgomery's lack of qualifications reveal, Montgomery was not an expert in this area.¹⁰ At any new trial, upon proper objection, Montgomery would not be allowed to testify regarding these matters concerning the "effect" of hair washing. As explained in detail below, Montgomery's opinions, old and new, are not admissible evidence that should be presented at a retrial. But in the interest of considering "all the evidence," however, the Master will consider how the "hair washing" theory would be presented to a juror today.

¹⁰ The Master does not question Montgomery's ability to amplify DNA in a laboratory, as she does in the course of her job duties. She just has no expertise in determining the effect of hair washing on DNA.

Based on the record developed before the Master, here are the concepts that the jury would hear:

- Romantic and cohabiting couples (such as Nash and Spencer) commonly have each other's DNA under their fingernails;
- The amount of Nash's DNA found underneath Spencer's fingernails – or even more DNA – is consistent with that romantic or cohabiting relationship;
- Montgomery is unable to say how much DNA would be washed away by hair washing – only more than nothing;
- Montgomery concedes that there would be enough of Nash's DNA left after Spencer's hair washing to identify him; and
- Montgomery sees no basis to infer that Nash and Spencer were in a violent struggle.

These concepts combined demonstrate that the presence of Nash's DNA has no probative value. It is like the police finding a defendant's fingerprints inside his own house. To assume that Nash's DNA came from a violent struggle is pure speculation and, in fact, conflicts with Montgomery's own opinion and the failure of the lab tech to find skin or blood under the nails when they were removed after autopsy. A reasonable juror could not draw a reasonable inference, based on the evidence, that this DNA is evidence of Nash's guilt and that fact is amplified by the presence of unidentified another male DNA contributor on her shoe.

Montgomery's references to "casual contact" and her position that this was not a "low level" amount of DNA have also been exposed as misleading. "Casual contact" means only a single touch, *not* a romantic or cohabiting relationship (which a lay juror might interpret as "casual"). (Hearing Transcript p189 L10-15) Montgomery has admitted that it is possible for DNA to accumulate from multiple "casual" touches. (Hearing

Transcript P189 L16-22) Likewise, Montgomery only considers a single touch to be “low level.”(Hearing Transcript p 226 L24-p 227 L4) When Montgomery says that the amount of Nash’s DNA was not “low level,” she means that it is not consistent with a single touch. Thus, for the Warden to argue that Nash’s DNA was not “low level” is to miss the point. No one is taking the position that Nash only touched Spencer, his girlfriend, one time or that he did not have plenty of opportunities to exchange bodily fluids. In fact, Montgomery has now stated that she thinks this amount of DNA is *most likely* from a fluid instead of skin cells, which further exposes the meaninglessness of her opinion. (Hearing Transcript P190 L6-18)

Nash argues the entire theory used to convict him of capital murder has no probative value. The Supreme Court previously held that Nash’s original jury must have believed Montgomery’s original opinion testimony to find him guilty. *Nash*, 339 S.W.3d at 511. That opinion testimony is no longer reliable. Even if a new jury still believed Montgomery’s *new* testimony at retrial (assuming that testimony was even received by a court), Montgomery’s opinions would simply be insufficient for a reasonable juror to find Nash guilty of capital murder.

The State has pointed out that the Supreme Court previously upheld Nash’s conviction against a sufficiency of the evidence challenge. This argument is unpersuasive for multiple reasons. First, the gateway actual innocence standard is “by no means equivalent” to the standard for a sufficiency of the evidence challenge. *House*, 547 U.S. at 538 (quoting *Schlup*, 513 U.S. at 330). Under that type of challenge, courts question whether a rational juror “could” convict, instead of whether it is more likely than not that

a reasonable juror “would” convict. As the Warden acknowledges, “[i]t is a much harder thing to prove that no reasonable juror *could* convict than that no reasonable juror *would* convict.” Reply to Opp. to Mot. for Scheduling Order, p. 2 (filed Nov. 8, 2019).

In determining whether a reasonable juror “would” convict, the Master does *not* view the evidence in the light most favorable to the State, ignoring all the evidence of Nash’s innocence. As the Supreme Court observed on direct appeal with respect to a sufficiency of the evidence challenge, “[i]t is not this Court’s role to reweigh the DNA evidence to contradict the jury’s conclusions.” *Nash*, 339 S.W.3d at 511. In a habeas case, that no longer holds true. The Master must also consider that a reasonable juror would have to weigh Montgomery’s revised opinion alongside the evidence of the shoe DNA, Nash’s lack of a shotgun, the negative gunshot residue test, the lack of scratches or marks on Nash, the tire tracks, and all the other evidence of his innocence.

Additionally, the Wardens reliance on the Supreme Court’s prior opinion is misguided because the State has admitted that the expert testimony used to convict Nash was *wrong*. The Master cannot reasonably see how the gateway innocence analysis can simply pretend the old, false evidence is acceptable and ignore Montgomery’s sworn retraction, let alone when the State has judicially admitted that Montgomery was wrong. Here contrary to many cases, the decision of the jury must rest on the interpretation of evidence, not just the presence of evidence. Montgomery now admits the interpretation she gave was incorrect. The Warden concedes that the Assistant Attorney General reinforced the effect of the error by making an argument, unsupported by any

evidence, that gave a more incorrect interpretation of the DNA evidence and the jury did not hear about DNA found on the victims shoes that did not belong to Nash.

The Warden has also pointed out that the Federal Courts previously denied Nash's gateway actual innocence claim. At that time, however, Montgomery had not yet retracted her trial opinion, and Sergeant Dunlap had not been cleared as the contributor of the shoe DNA. In fact, the federal courts had already identified these very problems, recognizing that there were "significant questions about the testimony" of Montgomery. *Nash*, 807 F.3d at 899. The Eighth Circuit then directed Nash to Missouri court to pursue habeas review (under very different standards), and presumptively to challenge the adequacy of Montgomery's opinions:

After careful review of the record, we conclude that Nash has not established grounds for federal habeas relief. However, as the district court noted below, the newly presented evidence in this case deserves 'serious consideration' in the state courts. Missouri provides a procedure for a prisoner to petition for habeas corpus relief in its courts. See Mo. Sup. Ct. Rule 91. We suggest, without weighing in on the merits, that state court would be a more appropriate forum for Nash's claims.*id*

Thus, it is clear that the Eighth Circuit believed that Missouri courts would have the final word on Nash's innocence.

c. The State's Other Evidence Is Very Weak.

On direct appeal, this court only said that the other evidence against Nash "bolstered" or "supported" the DNA evidence. *Nash*, 339 S.W.3d at 511. This court did not state that any of the other evidence was even constitutionally sufficient, which is consistent with the fact that Nash was not charged until the appearance of the DNA.

The Master concludes that reasonable jurors would still have reasonable doubt in light of very weak evidence like the fact that Nash was supposedly “shaking” when he spoke with Sergeant Folsom, or the fact that Nash’s timeline has been questioned based on hearsay contained in police reports written nearly a month apart. All of this “evidence” is consistent with the behavior of a concerned boyfriend and an innocent person who suddenly finds himself pulled back into a 26-year-old murder case. In another case, each piece of so-called “incriminating” evidence might be a blip in the record. The reason that the Warden places so much attention on issues like an allegedly inconsistent statement in a police report is not because that evidence is *strong*, but rather because the Warden has nothing else to rely upon.

For example, in *State v. Luna*, 800 S.W.2d 16 (Mo. App. 1990), the defendant was a farm worker who shared a farmhouse with two fellow workers. One of these roommates was found dead, with a knife in his chest and a shoelace around his neck. The court described the prosecution’s evidence as follows:

- (1) the defendant and [the victim] argued briefly the morning of the murder;
- (2) the beginning of the period of the estimated time of death fell close to the time that the defendant sought to use the [foreman’s] or the [farm owners’] telephones; (3) the defendant shivered and spoke more rapidly than usual when he asked to use the telephones; (4) the defendant had offered new shoelaces to [the other roommate] two weeks before the murder; (5) the defendant’s jeans bore two drops of blood matching both [the other roommates’] and the victim’s but not the defendant’s blood group, and [the other roommate] testified that only the defendant had worn those jeans; (6) the defendant’s legs and left arm bore bruises and scrapes; (7) evidence established that the defendant’s belt buckle could have caused the abrasions found on [the victim’s] back. *Id.* at 19.

The court held that this evidence was insufficient to convict the defendant of second-degree murder and reversed the conviction. With respect to the blood evidence in particular, the court stated: “We find this link too insubstantial to send a case of murder to a jury.” *Id.* at 20. More generally, the court explained: “Here, the prosecution, through no apparent fault of its own, could only present a very weak case with evidence too insubstantial to justify submission to the jury.” *Id.* at 21.

In a case citing *Luna*, *State v. Abdelmalik*, 273 S.W.3d 61(Mo App W.D. 2008), the Western District reviewed a fingernail DNA case, admittedly under a sufficiency of the evidence standard. In a case where DNA was the sole evidence pointing to the defendant, the Court noted that the technician who scraped the nails at the scene noted that the nails showed evidence of skin and blood, visible to the naked eye, in a crime that was marked by a violent altercation in which one of the victims nails was pulled off and a tooth knocked out. The Western District criticized the *Luna* decision, citing, “The court reached this decision by relying on the now discredited circumstantial evidence rule, which was expressly rejected by the Supreme Court of Missouri in *State v. Grim*, 854 S.W.2d 403, 407–08 (Mo. banc. 1993). *Id.* at 19. In so finding, the court noted that “[t]he blood on the defendant's jeans matching the victim's blood type provides the only substantial circumstantial link between the defendant and the victim's death.” *Luna*, 800 S.W.2d at 20 (emphasis added). However, the court further stated that even this link was too tenuous to support the conviction. *Id.* (*State v. Abdelmalik*, 273 S.W.3d 61, 64–65 (Mo. App. 2008)). In distinguishing another sufficiency case, which did have a DNA component, the *Abdelmalik* court noted,

“The evidence here is distinguished from that offered in *Freeman*. (*State v. Freeman*, 2008 WL 142299, later decided by the Supreme Court as *State v. Freeman*, 269 S.W. 3d 422(Mo. banc 2008)). The substantial amount of DNA evidence recovered from under D.F.'s fingernails was inconsistent with casual contact. This fact is important for two reasons. First, the placement of the DNA material shows that there was direct physical contact between Abdelmalik and the victim. The potential that the DNA was a result of an attenuated transference is unfathomable under these facts. Second, because the amount was inconsistent with casual contact, an inference of defensive scratching is proper. Additionally, unlike *Freeman*, the material giving rise to the DNA profile here was identifiable as skin and blood, which is consistent with the scratching theory. Because the location of the DNA material in this case was more likely the result of physical contact between the Abdelmalik and D.F., and the nature of the material and its concentration was consistent with a defensive struggle, this case is not controlled by the outcome in *Freeman*.” (*State v. Abdelmalik*, 273 S.W.3d 61, 65–66 (Mo. App. 2008))

While distinguishing an unpublished opinion, the Court observes the importance of the fact that the DNA was contained in skin cells and blood to support the distinction between casual contact and DNA transfer based upon a violent homicidal attack.

Nash points out that the timeline argued by the state at trial was that the victim was last seen alive shortly after 8:30 PM and that Nash called Jones and asked for a wakeup call. Nash is countering the argument that the request for a wakeup call was to establish an alibi, knowing that Spencer was already dead. Nash argues that it does not appear it was possible for Nash to commit the murder between the two telephone calls to Jones because of the enormous distance he would have to travel in the span of 15 to 45 minutes. Nash argues that once one reasonably includes time for Spencer’s killer to search for Spencer after she left Jones’ apartment at 9:15 (instead of her driving directly to that location), considers that Spencer’s abduction (if any) on the rural highway required more than a *de minimis* amount of time, and factors in the time necessary to commit the murder, which includes strangulation, dragging Spencer’s body 157 feet, shooting her, and disposing of

evidence, the amount of time necessary for Spencer's killer to make a roundtrip from Salem would take far longer than the time between the two phone calls. The logic of Nash's argument works only if the murder took place between the time of the two calls, for which there appears no substantial evidence.

The State's motive evidence is also weak. As the Master understands it, a reasonable juror would have to believe that Nash became so angry that Spencer was drinking and driving in his pickup that he decided to find a shotgun and murder her. That is not an explainable or plausible reaction, especially in light of Nash's lack of any criminal record. Nash's statement of "This is the last time you'll lie to me, bitch," is not only double hearsay (possibly exaggerated by Spencer in her recounting to Jones), but potentially misinterpreted. Not every sharply worded statement is a death threat. As Spencer told Jones, she thought the couple was breaking up. Spencer also did not fear for her life because she returned home to change in front of Nash. Moreover, during the same time that Nash would have been plotting the murder, he was simultaneously telling Jones that he was worried about Spencer getting into an accident because she was drunk. These discrepancies do not add up.

The State's case exemplifies a case of tunnel vision. After the State obtained the fingernail DNA sample, the State began to retrofit information to justify its case. From the beginning, in the absence of eyewitness or meaningful physical evidence, the State's case has demanded that jurors engage in countless strained inferences. Namely, the State asks jurors to infer that because 2.5 nanograms of Nash's DNA remained underneath Spencer's fingernails after Spencer washed her hair, and because Spencer's car was found abandoned

on the side of the road, “therefore” Nash somehow found a shotgun and used his pickup to drive Spencer’s car off the road to abduct her and take her to the abandoned schoolhouse where he brutally murdered her. Inferences like this stretch any notion of credulity and are simply unsupported by any particular piece of evidence. They are not inferences that a reasonable juror would, with the newly discovered evidence of DNA from an unidentified male on her shoe, and with a correct understanding of the persistence of DNA under fingernails after hair washing, make.

Accordingly, based on *all* the evidence considered under the dictates of *Schlup*, the Master concludes that it is more likely than not that any reasonable juror would have reasonable doubt. The Master now considers Nash’s substantive claims for relief.

C. Did the Presentation of Ruth Montgomery’s “Great Effect” Opinion Violate Nash’s Due Process Rights (Count II).

The Warden argues that Nash alleges the trial court committed a due process violation by admitting this testimony. But although Nash objected to this testimony as exceeding the scope of the expert’s deposition, he did not make a *Frye* objection. The trial court did not commit a due process violation by not *sua sponte* inserting itself into the trial and ruling on an objection that the defense did not make. *See Carter v. Armontrout*, 929 F.2d 1294, 1297 n.2 (8th Cir. 1991) (questioning whether a court could commit a due process violation by not interjecting itself to grant relief that was not requested). The Warden suggests for a due process violation to have resulted from an evidentiary ruling there must have been an evidentiary impropriety, an erroneous ruling, and the error must have been such that “absent the alleged impropriety the verdict probably would have been

different.” *Anderson v. Goeke*, 44 F.3d 675, 679 (8th Cir. 1995). Here, the Warden suggests, there was no impropriety for two reasons. First, there was no *Frye* objection. Second, Montgomery’s testimony before the Master indicated that her views on the lysing properties of detergent on cells, and on those properties making water soluble substances such as DNA more likely to be removed by water, are well published and generally accepted in the scientific community. The Warden asserts that the above underlies her conclusion that hair washing with detergent- based shampoo and manipulation of the scalp would have a *great effect* on the amount of DNA under fingernails. She could have testified the same way at a *Frye* hearing.

In a criminal case, when “evidence is introduced that is so unduly prejudicial that it renders the trial fundamentally unfair, the Fourteenth Amendment’s Due Process Clause provides a mechanism for relief.” *Payne v. Tennessee*, 501 U.S. 808, 825 (1991). In recent years, courts throughout the country have confronted instances in which seemingly established scientific principles may later prove incorrect. *See, e.g., United States v. Ausby*, 916 F.3d 1089 (D.C. Cir. 2019) (overturning murder conviction based on misleading hair comparison testimony); *Ex parte Chaney*, 563 S.W.3d 239 (Tex. Crim. App. 2018) (overturning murder conviction based on misleading bite mark comparisons); *Ward v. State*, 221 Md. App. 146 (2015) (in murder case, remanding for consideration of writ of actual innocence in light of misleading bullet lead comparison); *Han Tak Lee v. Houtzdale SCI*, 798 F.3d 159 (3d Cir. 2015) (overturning murder conviction based on faulty fire-science and gas chromatography).

Missouri Courts have recognized that although questions as to expert opinions generally go to weight and not admissibility, “Even though questions as to the sources and bases of the expert's opinion normally affect the weight, rather than the admissibility, of the opinion, an expert's opinion still “must be founded on substantial information, not mere conjecture or speculation, and there must be a rational basis for the opinion.” *McFarlane*, 207 S.W.3d at 62; *Rigali*, 103 S.W.3d at 845. The opinion should be excluded in cases where the sources relied on by the expert are so slight as to be fundamentally unsupported. *McFarlane*, 207 S.W.3d at 62.” (*Glaize Creek Sewer Dist. of Jefferson Cty. v. Gorham*, 335 S.W.3d 590, 594 (Mo. Ct. App. 2011))

In a Western District case dealing with expert opinion testimony in the area of hair analysis, the majority affirmed the conviction of the defendant. In her concurring opinion Judge Breckenridge wrote,

“Ms. Duvenci's testimony that, within a reasonable degree of certainty, the hairs found on the victim came from Mr. Butler, and her opinion that matching two hairs from two separate parts of the body was “like double significance of evidence,” are statements for which there is no scientific basis and that such evidence should have been excluded if a proper objection had been lodged, and that without said evidence there would not have been sufficient evidence to make a submissible case. Proof from which a reasonable juror could find guilt beyond a reasonable doubt is not established by the evidence that Mr. Butler was a resident of the trailer park who fit the general description of the assailant; that the hairs found on the victim's clothing matched Mr. Butler's head hair and unusual pubic hair, and the hairs could have come from Mr. Butler or another individual whose hairs exhibited the same microscopic characteristics; that Mr. Butler lacked an alibi; and that his defense theory of transference of hair to the victim's clothing was questionable. This evidence raises only a suspicion or conjecture that Mr. Butler was the perpetrator of the crimes and does not prove such beyond a reasonable doubt. See *State v. Scott*, 177 Mo. 665, 76 S.W. 950, 952 (1903). See also *State v. Stallings*, 77 N.C.App. 189, 334 S.E.2d 485, 486–87 (1985). Nevertheless, defense counsel did not object to the admissibility of Ms. Duvenci's positive identification and quantification testimony, so that evidence is properly considered in determining whether a submissible case

was made. When considering all the evidence that was before the jury without objection, I believe there was sufficient evidence of Mr. Butler's guilt beyond a reasonable doubt". (*State v. Butler*, 24 S.W.3d 21, 41 (Mo. Ct. App. 2000))

Judge Stith, in her dissent observed,

"We respectfully dissent from the per curiam affirmance. We disagree with Judge Lowenstein's opinion that the evidence was adequate to allow a jury to find Mr. Butler guilty beyond a reasonable doubt. While we agree that Mr. Butler failed to preserve his objection to the admission of the expert's opinion that the hairs found on the victim matched Mr. Butler's hair beyond a reasonable doubt, we find that, under *Callahan v. Cardinal Glennon Hosp.*, 863 S.W.2d 852, 860 (Mo. banc 1993), the question remains whether that aspect of her opinion testimony was so deficient in weight and credibility as to be entitled to little or no weight. We would find that it was entitled to no weight, since the expert admitted elsewhere in her testimony that the state of microscopic hair comparison is such that neither she nor other experts can state with certainty the likelihood that a hair will show up in a particular population, and that hair comparison analysis cannot be used to identify a particular individual. As a result, her personal opinion whether the hair was Mr. Butler's to a reasonable certainty was entitled to no weight. In this respect, we disagree with all the concurring opinions. In all other respects we agree with Judge Breckenridge's opinion that the remaining evidence showed only that Mr. Butler lived in the same trailer park as the victims, was familiar with the trailer park, and had hair which was not inconsistent with hairs found on the victim, one of which had spots that looked like the spots found on one of the victim's hairs. Contrary to Judge Lowenstein's opinion, and like Judge Breckenridge, for the reasons detailed below we do not find that this provides a sufficient factual basis for the jury to find beyond a reasonable doubt that Mr. Butler was the perpetrator of the crime." (*Id.* 45-46)

Finally, Judge Ellis, concurring in the dissent, but writing separately, pointed out,

"I concur in the ably written and tightly reasoned dissenting opinion of Judge Stith. I write separately merely to state that if Judge Breckenridge were correct in her view that *Callahan v. Cardinal Glennon Hosp.*, 863 S.W.2d 852 (Mo. banc 1993) was overruled sub silencio by *Washington by Washington v. Barnes Hosp.*, 897 S.W.2d 611 (Mo. banc 1995), and Mr. Butler's conviction must therefore stand, it would become an inescapable fact that Mr. Butler received ineffective assistance of trial counsel. Defense counsel acknowledged that he did not object to Ms. Duvenci's testimony as a matter of trial strategy. As demonstrated by Judge Stith's dissenting opinion and Judge Breckenridge's concurring opinion, but for such unsound trial strategy, Mr. Butler could not have been convicted. Accordingly, defense counsel's

trial strategy would not have conformed to the degree of skill, care and diligence of a reasonably competent attorney, and Mr. Butler would clearly have been prejudiced thereby. *State v. Colbert*, 949 S.W.2d 932, 940 (Mo.App. W.D.1997).” (*Id* at p.60)

Nash’s case does not involve a challenge to a deeply entrenched area of forensic science. It does not test the reliability of countless convictions throughout Missouri. The Warden admitted he is aware of no criminal case in the country that has involved this type of opinion regarding the effect of hair washing on the elimination of fingernail DNA.

Here, the State wrongly presented to the jury a single expert’s untested hypothesis, which she had developed for use in a single criminal case: Nash’s. Today, no one – including the Warden and that expert – contends that her opinion at Nash’s trial was correct. This speculative testimony was wrong, and under basic legal principles the opinion never should have been presented to a jury. While it is argued by the Warden that the use of a word to describe the effect of hand washing was not that meaningful and was disputed by the defense expert, this case is different than most DNA based cases. This case was tried early in the history of the concept of DNA as applied to determination of the presence of a person at the scene of a crime. DNA evidence is not commonly addressed by jurors in their everyday life. The jury was told, by all experts testifying at trial, it would not be unexpected that Nash’s’ DNA would be found under Spencer’s nails, because of their intimate cohabitation relationship. Thus, the key issue for the jury would be to interpret the *meaning* of the existence of the Nash DNA. The Jury was told, over objection, by the State expert, Montgomery, that the hair washing would have had a “substantial” effect on the persistence of Nash’s’ DNA and was told by the Assistant Attorney General, during closing, that the hair washing would have removed “all” the DNA.

Both of these statements were wrong, not supported by evidence and not supported by any scientific basis. It can be questioned “what does a word mean?” Here it cannot be said that for the 12 jurors who are unfamiliar with DNA and its existence under the nails of intimate cohabitants, that the choice of words by the two state actors did not taint Nash with an appearance of scientific evidence of his guilt, which is not supported by scientific evidence. The Master concludes that Nash’s due process rights were violated.

1. Ruth Montgomery’s Testimony Was Inadmissible Under *Frye*

Courts closely guard the admission of scientific evidence because “a hazard exists from ‘the misleading aura of certainty’ that surrounds scientific evidence.” *State v. Taylor*, 663 S.W.2d 235, 241 (Mo. banc 1984) (quoting *State v. Stout*, 478 S.W.2d 368, 372 (Mo. 1972)). When scientific evidence is insufficiently reliable, “the peril of prejudice and confusion resulting from the opinion testimony substantially outweighs any probative value that it might have.” *Id.*

The Warden suggests,

“For a due process violation to have resulted from an evidentiary ruling there must have been an evidentiary impropriety, an erroneous ruling, and the error must have been such that “absent the alleged impropriety the verdict probably would have been different.” *Anderson v. Goeke*, 44 F.3d 675, 679 (8th Cir. 1995). Here, the Warden argues, there was no impropriety for two reasons. First, there was no *Frye* objection. Second, Ms. Montgomery’s testimony before Special Master indicated that her views on the lysing properties of detergent on cells, and on those properties making water soluble substances such as DNA more likely to be removed by water, are well published and generally accepted in the scientific community. That underlies her conclusion that hair washing with detergent- based shampoo and manipulation of the scalp would have a great effect on the amount of DNA under fingernails. She could have testified the same way at a *Frye* hearing. There was no evidentiary impropriety here for both those reasons.” (Wardens Proposed Findings of Fact and Conclusions of Law)

Missouri courts will not allow a conviction to stand if it is based upon the presentation of improper scientific testimony. *State v. Taylor*, 663 S.W.2d 235 (Mo. banc 1984) (overturning conviction relying upon psychologist's diagnosis of rape trauma syndrome); *State v. Biddle*, 599 S.W.2d 182, 191 (Mo. banc 1980) (overturning conviction despite stipulation for admission of polygraph examinations); *Stout*, 478 S.W.2d at 371-372 (overturning conviction based upon improper testimony regarding neutron activation analysis with respect to blood sample); *see also Alsbach v. Bader*, 700 S.W.2d 823 (Mo. banc 1985) (hypnotically induced testimony inadmissible).

At the time of Nash's trial, Missouri followed the test articulated in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), for the admission of scientific evidence in criminal trials. *See State v. Daniels*, 179 S.W.3d 273, 281 (Mo. App. 2005). *Frye* requires that scientific testimony may be admitted only if the theory is "sufficiently established to have gained general acceptance in the particular field in which it belongs." *State v. Davis*, 814 S.W.2d 593, 600 (Mo. banc 1991) (quoting *Frye*, 293 F. at 1014). "The purpose of the rule is to prevent the jury from being misled by unproven and unsound scientific methods." *Alsbach*, 700 S.W.2d at 829. The requirement of scientific reliability is so fundamental to a fair trial that even "a stipulation cannot make admissible evidence which would otherwise be held inadmissible for lack of scientific reliability." *Biddle*, 599 S.W.2d at 188. "Only those principles and tests that have gained scientific acceptance in the scientific community are reliable." *Zink v. State*, 278 S.W.3d 170, 180 (Mo. banc 2009).

"The *Frye* standard allows the law to progress in cadence with the developments in the natural sciences." *Davis*, 814 S.W.2d at 600. "[C]ertain scientific processes are

inadmissible because the process is too new to obtain current acceptance within the scientific world but with the passage of time such process may gain general acceptance.”

Id. The word “may” is critical; not every hypothesis ultimately proves correct.

The Warden admits that cohabiting couples often have each other’s DNA under their fingernails. (Answer, ¶ 27). Indeed, every single witness has agreed on this point. Indeed, according to Montgomery herself, “the mere finding of Nash’s DNA under Spencer’s fingernails is ‘not a significant finding as far as a forensic expert is concerned’ without Montgomery’s additional *opinion* on the effect of Spencer’s hair washing on the elimination of Nash’s preexisting DNA.” (Ex. 43 (RFA) No. 239). The problem, however, is that Montgomery’s additional opinion was not only inadmissible, but was wrong.

2. Montgomery’s Theory Was Not Generally Accepted in the Scientific Community

The first fatal flaw is that Montgomery’s opinions were not generally accepted in the scientific community. At trial, Montgomery’s critical testimony was the following:

Q. Now, having detected that quantity of DNA, I want to ask you a question. Do you have an opinion, based on your training and experience, what effect an individual washing his or her hair would have on DNA – any DNA underneath the fingernails remaining after the washing?

A. I would expect that washing your hair, the mechanical manipulation of the scalp or the hair would remove DNA from underneath the fingernails. Shampoo is a detergent and that is actually one of the ingredients that we use to lyse open the cells, so cells would be lysed during that process.

Q. By “lyse,” what do you mean?

A. Broken open. You can actually break open the cells.

Q. Are we talking about breaking open the DNA?

A. Breaking open the cells, which would make the DNA easier to be washed away. I cannot give you a quantity that would or would not persist under the fingernails, but I would expect that it would have a great effect.

(Ex. 49 (Trial Tr.) 679:16-680:16).

To begin, this testimony concerns Montgomery's personal "expectation," not a statement of generally accepted scientific principles. Through its discovery responses, the State has now judicially admitted that Montgomery's opinion was *not* generally accepted in the forensic science community. (See Ex. 43 (RFA) Nos. 221-230). In particular, the Warden has admitted that, at the time of Nash's criminal trial, *none of the following principles were generally accepted in the forensic science community*:

- That hair washing with shampoo, a detergent-based shampoo, or a soap-based shampoo has a "great" effect on eliminating foreign DNA from underneath fingernails (Ex. 43 (RFA) Nos. 221-224);
- That hair washing with shampoo, a detergent-based shampoo, or a soap-based shampoo lyses human cells underneath fingernails (Ex. 43 (RFA) Nos. 225, 227, 229); or
- That hair washing with shampoo, a detergent-based shampoo, or a soap-based shampoo lyses human cells underneath fingernails and makes the DNA flow more easily (Ex. 43 (RFA) Nos. 226, 228, 230).

In sum, in clear violation of *Frye*, no aspect of Montgomery's testimony relating to the effect of hair washing on fingernail DNA was generally accepted in the scientific community. Moreover, she now admits such testimony was just various layers of "speculation." (Ex. 53 (Hearing Tr.) 128:18-129:3, 129:15-19, 130:10-12, 137:19-21).

3. There Was No Published Support for Montgomery's Theory.

Notwithstanding the Warden's unambiguous admissions that Montgomery's opinions were not generally accepted, it is also clear that they had no foothold whatsoever in the

scientific community. Similarly, in a civil setting, “Even though questions as to the sources and bases of the expert's opinion normally affect the weight, rather than the admissibility, of the opinion, an expert's opinion still “must be founded on substantial information, not mere conjecture or speculation, and there must be a rational basis for the opinion.” *McFarlane*, 207 S.W.3d at 62; *Rigali*, 103 S.W.3d at 845. The opinion should be excluded in cases where the sources relied on by the expert are so slight as to be fundamentally unsupported. *McFarlane*, 207 S.W.3d at 62.” (*Glaize Creek Sewer Dist. of Jefferson Cty. v. Gorham*, 335 S.W.3d 590, 594 (Mo. Ct. App. 2011)) “When an expert opinion is not supported by sufficient facts to validate it in the eyes of the law, or when indisputable record facts contradict or otherwise render the opinion unreasonable, it cannot support a jury's verdict. *J.Truett Payne Co. v. Chrysler Motors Corp.*, 451 U.S. 557, 562, 101 S.Ct. 1923, 1927, 68 L.Ed.2d 442 (1981) (referring to expert economic testimony not based on “documentary evidence as to the effect of the discrimination on retail prices” as “weak” at best).” (*Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 230, 113 S. Ct. 2578, 2591, 125 L. Ed. 2d 168 (1993))

“In determining whether a scientific procedure has gained acceptance within the scientific community, our courts frequently look for guidance in the decisions of other jurisdictions, as well as professional literature and surveys of the history of the process involved.” *Davis*, 814 S.W.2d at 600. The Master needs not look for guidance in the decisions of other jurisdictions. To the Warden’s knowledge, no other criminal case in the United States has involved an expert testifying about the effect of hair washing on eliminating preexisting DNA from underneath fingernails. (Ex. 43 (RFA) No. 306).

This is *not* a case in which there were maybe a handful of publications proposing a theory, but that theory had not yet achieved general acceptance. There were *no* publications espousing Montgomery's opinions. With respect to professional literature, the Warden admits that, to its knowledge, at the time of Nash's trial:

- There was no published scientific study quantifying the effect that a single hair washing with shampoo will have on eliminating foreign DNA from underneath fingernails (Ex. 43 (RFA) No. 183);
- There were no scientific journal articles, peer-reviewed publications, or other published materials regarding the effect of hair washing with shampoo on eliminating preexisting DNA from underneath fingernails (Ex. 44 (Interrogatories) No. 8);
- There was no published scientific study quantifying the effect that a single hair washing with detergent-based shampoo will have on eliminating foreign DNA from underneath fingernails (Ex. 43 (RFA) No. 185);
- There were no scientific journal articles, peer-reviewed publications, or other published materials stating or opining that a detergent-based shampoo will lyse cells (Ex. 44 (Interrogatories) No. 9);
- There was no published scientific study stating that hair washing with detergent-based shampoo will lyse human cells underneath fingernails (Ex. 43 (RFA) No. 233);
- There were no scientific journal articles, peer-reviewed publications, or other published materials relied upon by Ruth Montgomery to develop her opinion that hair washing would have a "great" effect on eliminating preexisting DNA from underneath Judy Spencer's fingernails (Ex. 44 (Interrogatories) No. 6);
- There were no scientific journal articles, peer-reviewed publications, or other published materials relied upon by Ruth Montgomery to develop her opinion that hair washing with a detergent-based shampoo should have a "great" effect on eliminating preexisting DNA from underneath Judy Spencer's fingernails (Ex. 44 (Interrogatories) No. 7);
- With respect to the Missouri State Highway Patrol itself, including but not limited to its Crime Laboratory Division, there were:

- No experiments regarding the effect of hair washing on eliminating preexisting DNA from underneath fingernails (Interrogatory No. 13);
- No unpublished studies regarding the effect of hair washing on eliminating preexisting DNA from underneath fingernails (Interrogatory No. 14); and
- No criminal investigations conducting an analysis on the effect of hair washing on eliminating preexisting DNA from underneath fingernails (Interrogatory No. 15).

Thus, there were no outside sources for Montgomery to rely upon to develop her opinion. As a result, Montgomery's "great effect" theory fell far below the standard of "general acceptance"; there was *no* acceptance. It appears that the original source of the opinion was, in fact, Dorothy Taylor, a non-scientist who repeatedly testified that she was not an expert. Taylor testified that she hatched the theory as she was reading a police report. That police report, dated two days after the discovery of Spencer's body, said nothing more than: "Judy had her hair style changed March 9, 1982, so she washed her hair and refixed it." (Ex. 45 (MSHP Supplemental Investigation Report No. 7, ¶ 3). Thus, Montgomery's "expert" opinion was the continuation of a theory by another non-expert.

This false concept infected the process from start to finish: it began with a false probable cause statement, it continued in false expert testimony, it was amplified by false statements in closing argument, and was repeated in false statements to the Supreme Court on appeal. At every stage, it is now admitted those statements were incorrect. The Warden argues that the discussion is just a matter of degree and the testimony of Montgomery, as to the breakdown of DNA caused by hair washing, could be understood by the jury as a question of the amount the DNA was reduced and was counterbalanced by the testimony of the defense expert. Here the DNA was the key piece of evidence and the state seems to

concede, at least as of this proceeding, the presence of some of the defendants DNA under the nails of the victim is consistent with innocence. Therefore, it is crucial to the jury to render a correct and fair verdict that they receive scientifically correct information as to the effect of hair washing. Here an expert opined, without scientific support, that the washing would have “great effect” and the last word on the issue was heard from the Assistant Attorney General, when he was allowed to argue in closing, over objection, that the hair washing would have removed *all* the Nash DNA.

4. Montgomery Was Not Qualified by Education or Experience on the issue of the effect of hair washing on DNA under the fingernails

“The test of whether a witness is qualified as an expert is whether the witness has knowledge or skill from education or experience that will aid the trier of fact.” *State v. Love*, 963 S.W.2d 236, 241 (Mo. App. 1997) (Stith, J.). “If a witness is not qualified, by either education or experience, as an expert in the area in which the expert proposes to testify, then the expert’s testimony will not assist the jury and therefore may be excluded, however expert the proposed witness may be in other areas.” *Id.*

For the reasons explained above, Montgomery had no “education,” considering that there are not any published materials that would serve as the basis for that education. Indeed, Montgomery testified during her deposition that she had only read a small number articles on the general subject of DNA persistence in the 24 hours before her deposition. These articles do not even concern the impact of hair washing in particular. Reading these articles shortly beforehand does not translate into “expertise.” In fact, *Montgomery herself* testified during her deposition before Nash’s trial:

I don't think that this body of evidence – this one publication speaks thoroughly to the question of hygiene's impact on the persistence of DNA in fingernail cases. ***This is the only publication that I could find that even addresses it.*** But generally scientists do not base their evidence on one publication or one piece of literature.

(Ex. 47 (Ruth Montgomery Dep.) 26:3-28:7, 30:22-31:2). The Warden has further confirmed (in discovery responses reviewed by Montgomery herself):

- Montgomery had never received any training about the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails (Ex. 43 (RFA) Nos. 203, 205, 207, 209);
- Montgomery had never ready any published or unpublished studies about the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating DNA from underneath fingernails (Ex. 43 (RFA) Nos. 211, 213, 215, 217).
- Montgomery had never conducted any scientific research into the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails (Ex. 43 (RFA) Nos. 187, 189, 191, 193); and
- Montgomery had never been involved in any other criminal investigations that analyzed the effect of hair washing, hair washing with shampoo, hair washing with detergent-based shampoo, or hair washing with soap-based shampoo on eliminating foreign DNA from underneath fingernails (Ex. 43 (RFA) Nos. 195, 197, 199, 201).

Thus, Montgomery was not qualified to testify as an expert on this issue, which was hatched by non-expert Dorothy Taylor, when she read in a police report that the victim washed her hair.¹¹

¹¹ Jones' recollection changed over the course of the criminal proceedings against Nash. She testified at the preliminary hearing that she had "no reason to think" Spencer did not use shampoo, but admitted that she "d[id]n't absolutely recall that detail." (Ex. 55 (Pr. Hrg. Tr.) App'x 1004). When asked whether Spencer walked "to the kitchen sink and pulled the sprayer out of the sink and wet her hair and began to wash it," she testified, "I don't remember the details." (Ex. 55 (Pr. Hrg. Tr.) App'x 1027). She was then asked at the preliminary hearing, "Do you remember anything about the hair washing other than what you have said today?" She answered "No." (Ex. 55 (Pr. Hrg. Tr.) App'x 1027). She said she did not "remember the details on the way it was restyled" and could not be sure that Spencer used a blow dryer. (Ex. 55 (Pr. Hrg. Tr.)

5. Montgomery's Opinion Has No Factual Foundation.

Beyond the issues under *Frye*, Montgomery's testimony lacked a factual foundation. "Where an expert's testimony is mere conjecture and speculation, it does not constitute substantive, probative evidence on which a jury could find ultimate facts...." *Mueller v. Bauer*, 54 S.W.3d 652, 657 (Mo. App. 2001) (citing *Gaddy v. Skelly Oil Co.*, 259 S.W.2d 844, 853 (Mo. 1953)).

The Warden admits that Montgomery's opinion that Spencer's hair washing had a "great" effect on eliminating Nash's preexisting DNA from Spencer's fingernails *depended on* Spencer's use of a detergent-based shampoo on the evening of March 10, 1982, *and* that the shampoo contained the same type of detergent that Montgomery uses to lyse cells in a laboratory setting. (Ex. 43 (RFA) No. 248).

No factual foundation was presented at trial. The Warden admits:

- There was no evidence presented at Nash's trial about whether the shampoo that Spencer used on the evening of March 10, 1982, contained detergents (Ex. 43 (RFA) No. 179);
- There was no evidence presented at Nash's trial about the brand or type of shampoo that Spencer used on the evening of March 10, 1982 (Ex. 43 (RFA) Nos. 176-177);
- Before her testimony at Nash's trial, Montgomery was not provided any evidence that Spencer used a detergent-based shampoo on the evening of March 10, 1982, as opposed to a shampoo that did not contain a detergent (Ex. 43 (RFA) No. 252);
- At the time of Nash's trial, Montgomery did not know the chemical composition of shampoos available in 1982 and whether they contained detergents (Answer, ¶ 53);

App'x 1027-28). While the hair washing ultimately has no probative value, any weight accorded to her recollection at trial – 27 years after the fact – is properly considered under *Schlup*, and the question of whether Spencer even used shampoo is debatable to say the least, let alone a detergent-based shampoo.

- There was no evidence presented at trial about the chemical composition of shampoos available in 1982 and whether they contained detergents (Answer, ¶ 53);
- There was no evidence at trial whether the shampoo Spencer had used in 1982 contained the same ingredients, strength, or concentration of the detergents that Montgomery uses in the lab for lysing (Answer, ¶ 54);

These deficiencies in the foundational evidence presented at Nash's trial cannot be cured. Even today, the Warden admits:

- The State does not know the brand of shampoo used by Judy Spencer on the evening of March 10, 1982 (Ex. 44 (Interrogatories) No. 1);
- Montgomery does not know the chemical composition of shampoos available in 1982, as opposed to those available today (Ex. 43 (RFA) No. 352);
- The State is aware of no scientific research that would support the assumption that a detergent-based shampoo in 1982 contained the same ingredients that Montgomery uses in a laboratory setting to lyse open cells (Ex. 43 (RFA) No. 248);
- The State is aware of no scientific research that would support the assumption that a detergent-based shampoo in 1982 contained the same concentration of the ingredients that Montgomery uses in a laboratory setting to lyse open cells (Ex. 43 (RFA) No. 249); and
- The State has no evidence that the specific shampoo Spencer purportedly used on the evening of March 10, 1982, had the strength or concentration of the lysing chemical Montgomery uses in her lab (Ex. 43 (RFA) No. 254).

Subsequently, during Montgomery's live testimony before the Master, Montgomery claimed that she had conducted additional research into the issue of when detergents were first introduced into shampoos, but she had to concede that she still did not know whether the shampoo used by Spencer (if any was used) contained detergents and, if so, what detergent and in what concentration. (Evidentiary Hrg. Tr. 197:1-21). The Master declines to assume that just because Montgomery claims that she performed some undescribed amount of research, during which she relied on unknown sources whose reliability is

unknown, that Montgomery now has any sort of expertise in the area of the history of shampoos and their ingredients. This is yet another example in which Montgomery appears overly willing to veer outside her area of expertise as a lab analyst.

Montgomery previously testified that the opinion on the effect of hair washing she gave at trial was in response to a hypothetical question of the type that she is usually asked at trial. There must, however, be a factual foundation for an expert opinion. *Williams v. Illinois*, 567 U.S. 50, 81 (2012) (“[I]f the prosecution cannot muster any independent admissible evidence to prove the foundational facts that are essential to the relevance of the expert’s testimony, then the expert’s testimony cannot be given any weight by the trier of fact.”); *McGuire v. Seltsam*, 138 S.W.3d 718, 722 (Mo. App. 2004) (“[O]pinions based upon assumptions not supported in the evidence should not be admitted into evidence.”). Because, as demonstrated above, there was no factual foundation in the trial record for Montgomery’s opinions, nor has a factual foundation been provided since trial, those opinions are not even admissible.

In sum, the factual foundation for Montgomery’s opinion was deficient from the beginning and remains deficient today.

6. The Warden and Montgomery Concede That Her Original Opinion Was Incorrect, and No One Endorses Her Original Opinion.

The Master further observes that everyone *agrees* that Montgomery’s opinion was wrong. Conceivably, a scientific theory that is not generally accepted at the time of trial may later be proved correct. That is not the case here. Montgomery’s hypothesis was not generally accepted at the time of trial, and it was later proved *false* by Montgomery’s own

admission. That is the reason why the *Frye* standard prohibits these opinions: to avoid premature scientific speculation. Beyond the failure to meet basic evidentiary standards, the undisputed *falsity* of Montgomery's opinion is further reason why Nash's trial was fundamentally unfair.

The Warden admits that "Ruth Montgomery's opinion at Nash's trial that Spencer's hair washing on March 10, 1982, had a 'great' effect on removing Nash's preexisting DNA from underneath Spencer's fingernails *is not supported by the current state of scientific knowledge.*" (Ex. 43 (RFA) No. 233) (emphasis added). As a result, the Warden no longer contends that Spencer's hair washing had a "great" effect on removing Nash's preexisting DNA from underneath Spencer's fingernails. (Ex. 43 (RFA) No. 274). Montgomery herself does not agree with the opinion. (*See* Ex. 43 (RFA) No. 243). In addition, the Warden has no additional expert who endorses Montgomery's original opinion that Spencer's hair washing had a "great" effect on removing Nash's preexisting DNA from underneath Spencer's fingernails. (Ex. 43 (RFA) No. 232).

Furthermore, Montgomery's current revised hair washing opinion is meaningless. Montgomery opines that Spencer's hair washing had "some" effect. This word is inherently indeterminate. *See Merriam-Webster Dictionary* ("1: being an unknown, undetermined, or unspecified unit or thing; 2a: being on, a part, or an unspecified number of something (such as a class or group) named or implied; 2b: being of an unspecified amount or number..."), *available at* merriam-webster.com/dictionary/some; Dictionary.com ("being an undetermined or unspecified one"), *available at* dictionary.com/browse/some.

Montgomery similarly attempts to define “some” effect as “more than no” effect.

Indeed, the only thing Montgomery’s revised opinion reveals is that the underlying science remains far too vague and uncertain for a courtroom, and that this theory should never reach the ears of a jury.

7. Nash Was Prejudiced.

When considering whether to overturn a conviction based on the improper admission of evidence, “the test is whether the prejudicial improper admission was outcome-determinative.” *State v. Barriner*, 34 S.W.3d 139, 150 (Mo. banc 2000). “[W]hen the prejudice resulting from the improper admission of evidence is outcome-determinative, reversal is required.” *Id.* “A finding of outcome-determinative prejudice expresses a judicial conclusion that the erroneously admitted evidence so influenced the jury that, when considered with and balanced against all of the evidence properly admitted, there is a reasonable probability that the jury would have reached a different conclusion but for the erroneously admitted evidence.” *Id.* (internal quotation omitted).¹²

Here, the “outcome-determinative” nature of Montgomery’s testimony appears on the face of this court’s opinion on direct appeal, which states that the jury necessarily credited Montgomery’s original testimony to find Nash guilty. *Nash*, 339 S.W.3d at 511. The Master has little difficulty concluding that the erroneous presentation of

¹² With respect to false expert testimony, some courts also apply the rubric of the U.S. Supreme Court’s *Giglio* and *Napue*, which is worded slightly differently. *See, e.g., Ausby*, 916 F.3d at 1095. Under this standard, “[a] new trial is required if ‘the false testimony could ... in any reasonable likelihood have affected the judgment of the jury...’” *State v. McClain*, 498 S.W.2d 798, 800 (Mo. banc 1973) (quoting *Napue v. Illinois*, 360 U.S. 264, 271 (1959)). The Master concludes that Nash has satisfied this standard as well.

Montgomery's false testimony prejudiced Nash and rendered his trial fundamentally unfair. This court held, on direct appeal, that Nash would not have been convicted but for this opinion. It was the single most important piece of evidence. The investigators testified that the hair washing theory was the reason why they decided to arrest Nash. Indeed, there was no other material probative evidence, as shown by the fact that Nash was not arrested for the previous 26 years.

Accordingly, the Master recommends that the Court grant Nash a writ of habeas corpus with respect to Count II of the Petition.

D. The Prosecution's Closing Argument Mischaracterized the Evidence and Further Prejudiced Nash (Count III).

In its pleadings and in its discovery responses, the Warden has also admitted that the prosecution's closing argument misrepresented Ruth Montgomery's testimony. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 316-322; Ex. 43 (RFA) Nos. 263, 304; Ex. 54 (Response to Order to Show Cause), App'x 980, 984; Answer, ¶¶ 35, 57, 84). The Warden argues,

"Nash argues the prosecutor's closing argument on hair washing violated due process. The circuit court found that claim is barred, and that in so far as the claim is alleging reversible error, it is without merit. Ex. E at 29–30. That analysis is correct. *See State v. Jordan*, 627S.W.2d 290, 293 n.3 (Mo. 1982) (jurors are instructed that argument is not evidence); *State v. Dominquez Rodriquez*, 471 S.W.3d 337 344–45 (Mo. E.D. 2015) (jury is presumed to follow their instructions). "A jury is presumed to be aware of and to have followed the instructions given by the trial court. [citations omitted] For this reason an improper argument will not be found to have prejudiced the defendant if the trial court has properly instructed the jury that arguments of counsel are not evidence." *State v. Langford*, 455 S.W.3d. 73, 77–78 (Mo. App. S.D. 2014). There is no question here that Nash objected to closing argument that he viewed as inconsistent with the evidence, and that the jury was instructed that argument was not evidence and to recall the evidence. Under

Missouri law, there was no trial court error here. There was certainly no due process violation.” (Wardens Proposed Findings of Fact and Conclusions of Law)

“The State has wide latitude in closing arguments, but closing arguments must not go beyond the evidence presented; courts should exclude statements that misrepresent the evidence or the law, introduce irrelevant prejudicial matters, or otherwise tend to confuse the jury.” *State v. Holmsley*, 554 S.W.3d 406, 410 (Mo. banc 2018) (quoting *State v. Deck*, 303 S.W.3d 527, 543 (Mo. banc 2010)). A defendant is prejudiced to the extent of requiring a new trial when “there is a reasonable probability that the outcome at trial would have been different if the error had not been committed.” *Id.* (quoting *Deck*, 303 S.W.3d at 540). A prosecutor arguing facts beyond the record is “highly prejudicial.” *State v. Storey*, 901 S.W.2d 886, 901 (Mo. banc 1995). “A party may argue inferences justified by the evidence, but not inferences unsupported by the facts.” *State v. Barton*, 936 S.W.2d 781, 783 (Mo. banc 1996). Not all misstatements in closing result in prejudice, “Here, the jury was properly instructed that the attorneys' remarks were not evidence. Then, immediately after the allegedly improper comment, the judge again instructed the jury to remember the evidence. Finally, Defendant's attorney clarified any remaining confusion in his closing argument by pointing out and correcting the prosecutor's alleged error. Under such circumstances, the prosecutor's comment did not have a decisive effect on the jury's decision and there is no prejudice to Defendant.” (*State v. Langford*, 455 S.W.3d 73, 78 (Mo. Ct. App. 2014))

Montgomery’s crucial testimony was her “great effect” opinion. Most prejudicially, the prosecution argued to the jury that Montgomery “**told you** that the fact that

[Spencer] had washed her hair would have wiped away *any* traces of DNA prior to that.” (App’x 510-11) (emphasis added). Montgomery’s “great effect” opinion had said no such thing. There is no basis in the record for this very serious mischaracterization of her testimony.

In fact, during opening statement, the prosecutor himself had not even argued that all the DNA would be washed away, but rather that Montgomery was “going to tell you that washing the hair would eliminate *just about all* the DNA underneath somebody’s fingernails. (Ex. 48 (Trial Tr.) 275:5-15). The evidence did not even come in according to these terms, but rather through Montgomery’s statement that hair washing would have a “great effect.” The prosecution’s closing statement then placed Montgomery’s vague opinion on steroids to argue that Montgomery had testified that *all* the DNA would have been eliminated.

Nash’s counsel made a timely objection, but the objection was overruled before defense counsel could complete his sentence. (Ex. 50 (Trial Tr.) 867:3-8). Even worse, Nash’s counsel was later chastised by the trial judge for continuing to interrupt the prosecution’s closing argument. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶ 324; Answer, ¶ 84). As a sanction, the judge ultimately added more time onto the prosecution’s closing statement because of the supposed interruptions, which had been justified. Viewed from a slightly different perspective, in *State v. Barton*,

“The actual language of the objection, “There is no such conclusion possible from that evidence,” is even more troublesome. By sustaining the objection, the judge not only precluded the defense from driving the point home, but effectively gave the prosecutor’s statement, that the defense’s argument was impossible, the court’s stamp of approval. See, e.g., *Bollenbach v. United States*, 326 U.S. 607, 612, 66

S.Ct. 402, 405, 90 L.Ed. 350 (1946) (“‘the influence of the trial judge on the jury is necessarily and properly of great weight,’ and jurors are ever watchful of the words that fall from him.” (quoting *Starr v. United States*, 153 U.S. 614, 626, 14 S.Ct. 919, 923, 38 L.Ed. 841 (1894))); *State v. Gonzalez*, 899 S.W.2d 936, 937 (Mo.App.1995) (“Defendant's motion to strike the improper argument, however, was overruled. So far as the jury was informed, the argument had the court's approval.”)(*State v. Barton*, 936 S.W.2d 781, 788 (Mo. 1996))

The effect of the action of the trial court, in chastising defense counsel for his objection, gave judicial support for the attorney general’s misstatement of the crucial fact in the case.

The Warden concedes that the prosecution’s argument was incorrect and that, in making the argument, the prosecution misstated the trial evidence. Montgomery has also testified that the State’s closing argument was “not an accurate representation of what I said” during the trial because “I said that I could not say that all of the DNA would be washed away.” The Warden concedes that the prosecutor, in fact, “misunderstood” Ruth Montgomery’s opinion in this respect.(Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 316-322; Ex. 43 (RFA) Nos. 263, 304; Answer, ¶¶ 35, 57, 84).¹³ In considering the proper effect of the misstatement, your Master is instructed by *State v. Cannady*. “In determining whether an improper argument was so clearly injurious that a new trial should be required, this court considers whether the trial court gave a cautionary instruction, whether the trial court gave a curative type instruction to disregard the improper comment and the strength of the State's case. *State v. Price*, 541 S.W.2d 777,

¹³ The Master again observes that the prosecution continued to propound this misstatement on direct appeal, again writing in the brief to the Supreme Court that Spencer’s hair washing would have removed “any” traces of Nash’s DNA. (Ex. 51 (Respondent’s Br.), App’x 623, 651).

779 (Mo.App.1976)”. (*State v. Cannady*, 660 S.W.2d 33, 40 (Mo. Ct. App. 1983)

This Court in *State v. Storey*, observed,

“A prosecutor's statement of personal opinion or belief not drawn from the evidence is improper. See *State v. Jackson*, 499 S.W.2d 467, 471 (Mo.1973). The arguments here are irrelevant. The prosecutor's “wonder” about his accomplishments (compared to Frey's), his feelings about Storey's family, and his opinion about getting out of an abusive relationship have no bearing on the jury's sentencing decision. See § RSMo 565.032 1986. Moreover, this form of argument essentially turns the prosecutor into an unsworn witness not subject to cross-examination. The error is compounded because the jury believes—properly—that the prosecutor has a duty to serve justice, not merely to win the case. See *Berger v United States*, 295 U.S. at 88, 55 S.Ct. at 633; Rule 4.3.8.” (*State v. Storey*, 901 S.W.2d 886, 901 (Mo. 1995))

“The State, during closing argument, may not argue facts outside the record because such arguments amount to unsworn testimony by the prosecutor that is not subject to cross-examination. *State v. Storey*, 901 S.W.2d 886, 900–01 (Mo. banc 1995). It is improper for the prosecutor to express opinions implying awareness of facts not available for the jury's consideration. *State v. Moore*, 428 S.W.2d 563, 565 (Mo.1968).” (*State v. Miller*, 372 S.W.3d 455, 475 (Mo. banc 2012)). Nash was severely prejudiced by the prosecution's misstatement. If **all** of Nash's DNA had been eliminated by the hair washing, the jury's only permissible inference was that Nash's additional 2.5 nanograms of DNA **must** have come from a violent interaction. In short, the prosecution embellished the central theory used to try Nash for capital murder to make the State's case sound far better than it actually was. This objection should have been sustained.

Earlier in closing, the prosecution also argued that “Ruth Montgomery **told you**, it was underneath all five fingernails.” (Ex. 50 (Trial Tr.) 866:8-9). This was wrong.

Montgomery had *swabbed* all five fingernails and then analyzed the combined sample. She never “told” the jury this information.

Nash’s counsel objected, but the trial court did not rule on the objection. Instead, the court indicated that the court was frustrated by defense counsel’s objection, stating: “Again, Counselor, the jury is reminded that your memory is what counts.” (Ex. 50 (Trial Tr.) 866:14-19). The Courts failure to sustain the objection is problematic, “Additionally, it is important to note that because the trial court sustained Defendant's objections, the prosecutor's comments did not carry the “imprimatur of the trial court”, reducing the potential for prejudice. See *State v. Reed*, 629 S.W.2d 424, 429 (Mo.App. W.D.1981)” (*State v. Dvorak*, 295 S.W.3d 493, 503 (Mo. Ct. App. 2009))

The Warden has judicially admitted that the prosecution’s argument was incorrect. (Ex. 1 (Petitioner’s Uncontroverted Facts), ¶¶ 328-330; Answer, ¶ 86). This erroneous argument about what Montgomery “told” the jury created the false impression that Nash was more likely involved in a struggle in which Spencer scratched him with her whole hand, compared to the explanation that some of Nash’s DNA has innocently found its way under one or more random fingernails. The objection should have been sustained. The Eastern District, in *State v. Nelson* observed, “The prosecutor's closing argument concerning defendant's statement to the police was improper. It was prejudicial because it focused on and denigrated the sole defense to the charge of murder in the first degree. The trial court's permitting the prosecutor to make such an argument, over defendant's objection, constituted reversible error.” (*State v. Nelson*, 957 S.W.2d 327, 330 (Mo. Ct. App. 1997)). As in *Nelson*, *Storey* and *Barton*, the above misstatement, by the Attorney General,

compounded by the action of the trial court in failing to sustain the objection, and take other curative actions, gave the jury the appearance of the approval of the court of this misstatement of the *most critical piece of evidence* in the case.

The prosecution continued its mischaracterizations of Montgomery's testimony, arguing to the jury that Nash would have needed to be present with Spencer for "three hours" after her hair washing for Nash's DNA to develop a mixed ratio. (Ex. 50 (Trial Tr. 868:2-5). Once again, Montgomery never said that, and there is no basis for this statement in the record.

On this issue, the Warden questions the soundness of the inference without conceding the error, but nevertheless concedes that a cohabiting couple may have a mixture of both partners' DNA underneath one or both of the partners' fingernails even if the couple has not been together for three consecutive hours. Thus, this statement was also incorrect. (Ex. 1 (Petitioner's Uncontroverted Facts), ¶¶ 331-332; Ex. 43 (RFA) No. 305; Answer, ¶ 87).

Nash was prejudiced by this misstatement because it added onto the prosecutor's illusion that Nash's DNA did not have an innocent explanation. If *all* of Nash's DNA had been eliminated through hair washing, and Nash and Spencer were not together for three hours after the murder, it meant that the only basis for finding Nash's DNA was that Nash must have killed Spencer.

At this point, when Nash's counsel attempted to object, the trial court finally stated that it would "reprimand" counsel for "hound[ing]" the prosecution. The trial court added additional time onto the prosecution's closing argument for the objections,

suggesting that the objection was not only overruled, but improper. (Ex. 50 (Trial Tr.) 868:7-869:9). This objection should have been sustained.

The Master concludes that the prosecution's mischaracterizations of Montgomery's testimony both "misrepresent[ed] the evidence" and "tend[ed] to confuse the jury." *Holmsley*, 554 S.W.3d at 410. The trial court erred in failing to sustain these objections. *See State v. Bearden*, 748 S.W.2d 753, 755 (Mo. App. 1988) ("Failure to sustain an objection to argument outside the evidence is prejudicial error.").

"Although in addressing the sufficiency of the evidence, this Court views the evidence in the light most favorable to the State, it does not do so when evaluating the potential prejudice of trial error." *State v. Banks*, 215 S.W.3d 118, 122 (Mo. banc 2007) (internal citation omitted). As a result, prejudice is more readily found in an otherwise close case. *State v. Brightman*, 388 S.W.3d 192, 203 (Mo. App. 2012); *see also State v. Hammonds*, 651 S.W.2d 537, 539 (Mo. App. 1983) ("The strength of the state's case is a prime factor in the determination of whether the error committed by the trial court resulted in a manifest injustice or a miscarriage of justice."); *United States v. Johnson*, 968 F.2d 768, 771 (8th Cir. 1992) ("If the evidence of guilt is overwhelming, an improper argument is less likely to affect the jury verdict. On the contrary, if the evidence of guilt is weak or tenuous, the existence of prejudice is more easily assumed.").

Here, the jury's verdict hinged upon the precision of Montgomery's testimony and the jury's acceptance of that testimony. *See Nash*, 339 S.W.3d at 511. Therefore, the prosecution's overstatement of the scope of that testimony misled the jury to believe her opinions were far more decisive and informative than they were.

The Warden also argues that the errors were unintentional. That is not part of the analysis. Whether done intentionally or unintentionally, the focus is on the prejudice to the defendant, Nash. If anything, the prosecution's own misunderstanding of Montgomery's testimony only underscores how easily the jury likely misunderstood the same opinions, making the jury even more susceptible to accepting mischaracterizations during closing argument.

The Warden has argued that the trial court's admonitions for the jury to remember the evidence cured any defect. To the contrary, as the Supreme Court has recognized, an argument may "be so improper that not even the sustaining of an objection and a purportedly curative instruction could cure the prejudice." *Banks*, 215 S.W.3d at 120 (quoting *State v. Burnfin*, 771 S.W.2d 908, 912 (Mo. App. 1989)); see also *State v. Williams*, 646 S.W.2d 107, 110 (Mo. banc 1983) (reversing conviction because "[t]he curative action taken by the trial court" in sustaining the objection and instructing the jury to disregard the prosecutor's statement "was not sufficient to cure the error created by the prosecuting attorney"). Here, the trial court did not even sustain the objection. Instead, the court either overruled Nash's objections or did not rule on them at all, and in any event threatened to reprimand Nash's counsel for objecting in the first place before granting the prosecution additional time as punishment for the interruptions.

The Master also rejects the Warden's argument that the trial court's prior recitation of MAI instructions about the fact that argument is not evidence cured any error. If this were true, in *any* case where a trial court recites these MAI instructions to a jury (which should be every case), it would immunize the prosecution from any consequences

of misstatements made during closing argument. To the contrary, there must be bounds on the prosecution's ability to make mischaracterizations with impunity. In the end, the Warden's cases only reflect a "presumption" that no prejudice occurs when the MAI instruction is given. The undisputed facts here overcome that presumption. Nash was prejudiced.

Accordingly, the Master recommends that the Court should grant Nash a writ of habeas corpus with respect to Count III of his Petition.

E. Nash Received Ineffective Assistance of Trial Counsel (Count V).

"An ineffective assistance claim asserts the absence of one of the crucial assurances that the result of the proceeding is reliable, so finality concerns are somewhat weaker and the appropriate standard of prejudice should be somewhat lower. The result of a proceeding can be rendered unreliable, and hence the proceeding itself unfair, even if the errors of counsel cannot be shown by a preponderance of the evidence to have determined the outcome." (*Strickland v. Washington*, 466 U.S. 668, 694, 104 S. Ct. 2052, 2068, 80 L. Ed. 2d 674 (1984))

To obtain habeas relief based on ineffective assistance of trial counsel, Nash must satisfy two elements. First, Nash must show that trial counsel's performance was deficient. *Hounihan v. State*, 592 S.W.3d 343, 347 (Mo. banc 2019). Trial counsel's performance is deficient when it "fails to rise to the level of skill that would be exercised by a reasonably competent attorney under similar circumstances." *Id.*; *see also Vaca v. State*, 314 S.W.3d 331, 335 (Mo. banc 2010) (to show that counsel was ineffective, the defendant must

demonstrate that his counsel's representation "fell below an objective standard of reasonableness").

Second, Nash must show that trial counsel's deficient performance prejudiced his defense. *Hounihan*, 592 S.W.3d at 347. "Prejudice transpires when there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different." *Id.* (internal quotation omitted). "A reasonable probability is a probability sufficient to undermine confidence in the outcome." *Id.* (internal quotation omitted).

The Warden argues, in his proposed Findings of Fact and Conclusions of Law, that,

"In order to make out a claim of ineffective assistance of a counsel, a petitioner must show both that counsel acted outside the wide range of acceptable professional conduct, and that but counsel's unprofessional actions there is a reasonable probability that the outcome of the proceedings would have been different. *Strickland v. Washington*, 466 U.S. 668, 687 (1984). Counsel has wide latitude in making tactical decisions, and beyond the requirement of reasonableness, specific guidance is not appropriate. It is rare that constitutionally competent representation will require one technique or approach. *Cullen v. Pinholster*, 563 U.S. 170, 195–96 (2011). A court must make a strong presumption that counsel made all decisions in the exercise of reasonable professional judgment. *Id.* at 196. The difference between the reasonable probability standard of *Strickland* and the more likely than not that the verdict was changed standard is slight, and matters only in the rarest case. *Harrington v. Richter*, 562 U.S. 86, 112 (2011)."

But, the admonishment of the Supreme Court, in *Strickland* must be noted, "In every case the court should be concerned with whether, despite the strong presumption of reliability, the result of the particular proceeding is unreliable because of a breakdown in the

adversarial process that our system counts on to produce just results.” (*Strickland* at p.696)

Additionally, the Warden argues that,

“Trial counsel was not ineffective for not seeking a *Frye* hearing on the question of what effect hair washing would have on DNA under the fingernails. Counsel researched the matter, studied scientific papers, and hired and consulted with an expert before trial. He believed a *Frye* objection would have been overruled. So, he planned to, and did, deal with the issue through impeachment, and presenting his own expert and scientific research. That was a reasonable decision, not ineffectiveness. And counsel was probably right that the testimony would not have been excluded based on *Frye* analysis.”

Your Master disagrees. The failure to object to the admission of purported expert testimony may serve as grounds for claims of ineffective assistance of trial counsel. *Butler v. State (Butler II)*, 108 S.W.3d 18, 26 (Mo. App. 2003); *see also State v. Galicia*, 973 S.W.2d 926, 931-32 (Mo. App. 1998).

Nash’s case is strikingly similar to *Butler II*, which has a lengthy procedural history. The defendant had been convicted of forcible sodomy, felonious restraint, and two counts of armed criminal action. *Id.* at 19. The State had little evidence implicating the defendant, so its case depended on the testimony of a forensic scientist about hair sample comparison. *See id.* at 21-22. That testimony, however, was not generally accepted in the scientific community. *See id.* Nevertheless, at trial, defense counsel failed to object to the lack of scientific foundation for this testimony. *Id.* at 23.

On direct appeal in *Butler I*, a fractured Court of Appeals, sitting en banc, had affirmed the conviction in a two-sentence per curiam opinion, which was accompanied by five concurring and dissenting opinions. *State v. Butler (Butler I)*, 24 S.W.3d 21 (Mo. App.

2000). As the various *Butler I* opinions observed, the defendant had not objected to the admissibility of the forensic science testimony, just like Nash's counsel failed to do. Instead, the defendant appealed the *submissibility* of the State's case in light of this inadmissible evidence presented to the jury without any objection, just like Nash's counsel did. The absence of any objection by defense counsel required the court to consider the otherwise inadmissible forensic evidence in determining whether there had been sufficient evidence to convict on direct appeal. That is what happened to Nash here.

In *Butler I*, then-Chief Judge Breckenridge wrote a lengthy concurrence describing how the expert testimony was obviously inadmissible, but the issue had not been preserved for appellate review. *See id.* at 35-45 (Breckenridge, C.J., concurring); *see also Butler II*, 108 S.W.3d at 23-24. Chief Judge Breckenridge wrote that the expert's "testimony that, within a reasonable degree of certainty, the hairs found on the victim came from Mr. Butler, and her opinion that matching two hairs from two separate parts of the body was 'like double significance of evidence,' are statements for which there is no scientific basis and that such evidence should have been excluded if a proper objection had been lodged, and that without said evidence there would not have been sufficient evidence to make a submissible case." *Butler I*, 24 S.W.3d at 41. Then-Chief Judge Breckenridge suggested that the defendant should file a Rule 29.15 motion raising ineffective assistance of counsel on this basis. *Id.* at 45.

Likewise, Judge Stith both wrote a dissenting opinion and joined a separate dissenting opinion, which stated: "As demonstrated by Judge Stith's dissenting opinion

and Judge Breckenridge's concurring opinion, but for such unsound trial strategy, Mr. Butler could not have been convicted." *Id.* at 60 (Ellis, J., dissenting).

The defendant's trial counsel testified during the Rule 29.15 proceedings that "he did not think any potential challenge to the admission of that testimony had much chance of success and that he thought he could surprise the expert by challenging that testimony on cross-examination." *Butler II*, 108 S.W.3d at 25. Following an evidentiary hearing, the motion court denied the defendant's request for relief. On appeal the second time around, the Court of Appeals reversed the denial of post-conviction relief in a unanimous opinion, finding that the motion court's denial was clear error. *Butler II*, 108 S.W.3d at 25-26.

The exact same thing occurred here. In this case, Nash's counsel failed to object at trial to the lack of scientific basis for Montgomery's "great effect" opinion under *Frye*. As a result, in the absence of a proper challenge, this court necessarily had to credit that testimony in determining whether there was constitutionally sufficient evidence to convict Nash. This court concluded that Montgomery's inadmissible testimony was the outcome-determinative factor in Nash's case.

In light of Montgomery's deposition, Nash's defense counsel, Mr. Carlson, was on notice of Montgomery's lack of qualifications and the lack of any general acceptance in the scientific community for Montgomery's opinion. (Ex. 36 (Carlson Dep.) 18:13-19:3, 25:23-26:22). There were many opportunities before and during trial to seek to exclude Montgomery's testimony, whether by motion in limine, objection, or by orally requesting a *Frye* hearing, but no motion, objection, or request was made.

During Mr. Carlson's deposition, he testified that he did not move to exclude Montgomery's testimony because "[j]unk science was being allowed in court all over the place in the state of Missouri during that period of time," and that he believed his objections only went to the weight of Montgomery's testimony instead of admissibility. (Ex. 36 (Carlson Dep.) 9:3-5, 11:22-12:10).

Mr. Carlson admitted that he did not consider requesting a *Frye* hearing or moving to exclude the opinion. (Ex. 36 (Carlson Dep.) 27:14-30:19). Mr. Carlson admitted that he did not make a "strategic decision" not to make a *Frye* objection to Montgomery's testimony. He further conceded that he could not think of any disadvantages to making the *Frye* objection. He agreed that jurors were allowed to consider any evidence presented to them, and that "the only 100 percent fail safe way to make sure that the jury did not believe Montgomery's testimony was to make sure she never testified." (Ex. 36 (Carlson Dep.) 55:5-7, 57:4-19, 70:1-19).

Mr. Carlson further testified that he would "expect" that Montgomery gave her opinions "to a reasonable degree of scientific certainty." Carlson did not recall whether he had asked her, but it is something that he would expect he would typically ask an opinion witness. (Ex. 36 (Carlson Dep.) 36:23-37:11).

The trial transcript further reveals that the State never laid any foundation for the admission of Montgomery's "great" effect opinion as reliable expert testimony. The State did not ask Montgomery whether her opinion was generally accepted in the scientific community. The State did not ask Montgomery whether there were any publications about the effect of hair washing specifically on the elimination of fingernail DNA. The State did

not ask Montgomery whether she had any education, experience, or training in this area. Montgomery also did not offer her opinion to a reasonable degree of scientific certainty. Rather, Montgomery simply testified that she would “expect” that hair washing would have a great effect. At no time did Nash’s defense counsel move to exclude this testimony, object to it, or request a *Frye* hearing outside the presence of the jury. Notably, Nash’s counsel did ask to voir dire *other* witnesses, which the trial court allowed.

Thus, just like in *Butler II*, Nash’s trial counsel knew that “the primary evidence of guilt” was the DNA evidence and that there was “no scientifically accepted basis for the forensics expert to offer that testimony.” *Butler II*, 108 S.W.3d at 26. Therefore, even though Nash’s counsel failed to recognize the merit of the challenge, “counsel clearly should have been aware that he was almost certain to succeed on a motion in limine under *Frye* and that the challenged testimony would be found inadmissible.” *Id.* Therefore, “[g]iven the existence of a meritorious objection ... , the State’s obvious need to rely upon [Montgomery’s opinion], and the inability of counsel to later challenge the reliability of that testimony in arguing the insufficiency of the evidence, the strategy adopted by counsel simply was not reasonable.” *Id.*

As in *Butler II*, any objection to this evidence under *Frye* was “almost certain to succeed.” *Id.* If unsuccessful in the trial court, it would have at least been preserved for Nash’s direct appeal (instead of having to wait a decade for habeas corpus review). There was certainly more than a “reasonable probability” of success. A competently crafted motion or objection would have exposed the deficiencies in Montgomery’s ability to testify about these matters. Additionally, a *Frye* hearing would have assisted the able trial judge

in evaluating the limits of the ability of Montgomery to provide testimony. Clearly, by training and experience, Montgomery was entitled to testify about the collection and analysis of DNA evidence. Much of Montgomery's testimony was not subject to objection. It was just when she attempted to opine as to the effect of hand washing on under-nail DNA and *quantified that effect*, did she testify outside the generally accepted scientific community. Since the trial, Montgomery has admitted that there is no scientific support for her opinion, given at trial, *quantifying the effect* of hair washing on under-nail DNA. She has rescinded the opinion she gave at trial *quantifying the effect* of hair washing. Trial counsel argued that the opinion given at trial differed from that given in pre-trial deposition. Had the *Frye* hearing been held, it is likely the able trial judge would have been able to determine the lack of scientific support for the opinion *quantifying the effect* of hair washing and appropriately determined the limit of her testimony. Therefore, trial counsel's performance, in failing to request a *Frye* hearing prior to or during the trial and in failing to make an appropriate objection to the testimony, at trial, fell below an objective standard of reasonableness.

The facts in this case are distinguishable from this Court's ruling in *Dorsey v. State*, 448 S.W.3d 276, 298 (Mo. 2014), as modified on denial of reh'g (Dec. 23, 2014),

“As to Mr. Dorsey's claim that counsel should have requested a *Frye* hearing for Mr. Wyckoff's testimony about the effect of chemical insults, there was no evidence at the evidentiary hearing showing that these studies to which Mr. Wyckoff referred were performed with unreliable scientific procedures or that the results of the studies are unreliable. Therefore, Mr. Dorsey fails to show a reasonable probability of a different outcome had counsel requested a *Frye* hearing”.

In the case at bar, it is undisputed that the opinion expressed was not supported by any published studies or studies performed by the witness herself.

Accordingly, the Master recommends that the Court should grant Nash a writ of habeas corpus on the ground of ineffective assistance of trial counsel under Count V of the Petition.

F. The Exclusion of the Feldman Evidence Under the Direct Connection Rule, as Applied in Nash’s Case, Violated Nash’s Right to a Complete Defense (Count IV).

On direct appeal, Nash argued that the trial court had misapplied the direct connection rule by excluding the Feldman evidence and brought a *facial* challenge to the direct connection rule—*i.e.*, arguing that Missouri’s direct connection rule was invalid under all circumstances. This *facial* challenge was doomed to fail. Even the U.S. Supreme Court case upon which appellate counsel relied for the *facial* challenge, *Holmes v. South Carolina*, acknowledged that rules like Missouri’s direct connection rule “are widely accepted.” 547 U.S. 319, 327 (2006). But *Holmes* also teaches that an application of an evidentiary rule that fails to serve its intended purpose of excluding evidence with “only a very weak logical connection to the central issues” unconstitutionally deprives the defendant of a meaningful opportunity to present a complete defense. *Id.* at 330-31.

Nash argues that, *as applied*, the trial court’s application of the direct connection rule deprived him of a complete defense.

The Warden argues, in his proposed Finding of Fact and Conclusions of Law,

“The Missouri Supreme Court rejected a *facial* challenge to the constitutionality of the direct connection rule on direct appeal. Ex. A *State v. Nash*,

339 S.W.3d at 513–514. But the Missouri Supreme Court also held that the trial court did not err in excluding the Feldman fingerprint evidence under *Missouri law*. *Id.* at 512–15. It is illogical to argue that the Missouri Supreme Court would find that the evidence was properly admissible under Missouri law, as it did, and that the rule does not facially violate the constitution, but would also find the evidence should be excluded under an as applied due process challenge. Nash cannot again challenge the Missouri Supreme Court’s earlier ruling that the evidence was properly excluded under the direct connection rule here. “Habeas corpus review does not provide duplicative and unending challenges to the finality of judgment so it is not appropriate to review claims already raised on direct appeal or through post-conviction proceedings.” *State ex rel. Strong v. Griffith*, 462 S.W.3d 732–34 (Mo. 2015)”

1. A Facial Challenge Is More Difficult Than an As-Applied Challenge.

“The distinction between a *facial* challenge and an *as-applied* challenge lies both in the remedy the parties seek and the analysis of the court.” *Bennett v. St. Louis County, Missouri*, 542 S.W.3d 392, 397 (Mo. App. 2017). “A successful *as-applied* challenge bars a law’s enforcement against a particular plaintiff, whereas a successful *facial* challenge results in complete invalidation of a law.” *Id.* (internal quotations omitted). A *facial* challenge to the constitutionality of a rule “is more challenging than an *as-applied* challenge.” *Id.*

In a *facial* challenge, the court must evaluate the rule “generally, instead of specifically to [the petitioner’s] particular set of circumstances.” *Id.*; see also *State v. Jeffrey*, 400 S.W.3d 303, 308 (Mo. banc 2013) (“Generally, to prevail in a *facial* challenge, the party challenging the statute must demonstrate that no set of circumstances exists under which the statute may be constitutionally applied.”).

On direct appeal, Nash’s counsel sought complete invalidation of the direct connection rule instead of arguing that the rule, *as applied*, violated Nash’s right to a

complete defense. As a result, the Supreme Court did not consider an *as-applied* constitutional challenge to the trial court's ruling in Nash's case. *See Nash v. Russell*, 807 F.3d 892, 898 (8th Cir. 2015) (holding that Nash failed to raise an *as-applied* challenge on direct appeal).

The Warden contends that “[it] is illogical to argue that the Missouri Supreme Court would find that the evidence was properly admissible under Missouri law, as it did, but would also find that the evidence would be excluded under an *as applied* due process challenge.” (Motion for Scheduling Order, p. 6). The Master disagrees. This is the posture that one would expect in most *as-applied* challenges to an established evidentiary rule. One would expect longstanding evidentiary rules to be valid under many or most circumstances, thus eliminating any reasonable chance of success on a *facial* challenge. Furthermore, if the trial court misapplied state law in interpreting the rule, an appellate court would normally avoid resolving the constitutional question altogether. An *as-applied* challenge thus *presumes* that the rule was correctly applied under state law, but nevertheless must bow to deeper constitutional concerns about the fairness of a trial.

Thus, contrary to the State's position that Nash's position is “illogical,” this is how an *as-applied* constitutional challenge operates in the context of valid evidentiary rules. *See, e.g., Holmes v. South Carolina*, 547 U.S. 319 (2006); *Crane v. Kentucky*, 476 U.S. 683 (1986); *Chambers v. Mississippi*, 410 U.S. 284 (1973). *Chambers* is a straightforward example. In that case, the trial court excluded evidence under the hearsay rule, “which has long been recognized and respected by virtually every State.” *Chambers*, 410 U.S. at 298. The Mississippi Supreme Court affirmed the exclusion of the evidence as hearsay. *Id.* at

293. Despite the fact that no one can reasonably argue that the hearsay rule is *facially* unconstitutional, the U.S. Supreme Court overturned the conviction because “[t]he hearsay statements involved in this case were originally made and subsequently offered at trial under circumstances that provided considerable assurance of their reliability.” *Id.* at 300. Therefore, the Court held “quite simply that under the facts and circumstances of this case the rulings of the trial court deprived Chambers of a fair trial.” *Id.* at 303 (emphasis added).

As explained below, the application of the direct connection rule, under the unique circumstances of this particular case, violated Nash’s constitutional right to a complete defense.

2. The Exclusion of the Feldman Evidence Violated Nash’s Right to a Complete Defense.

“Whether rooted directly in the Due Process Clause of the Fourteenth Amendment or in the Compulsory Process or Confrontation Clauses of the Sixth Amendment, the Constitution guarantees criminal defendants “a meaningful opportunity to present a complete defense.”” *Holmes*, 547 U.S. at 324 (quoting *Crane*, 476 U.S. at 690 (quoting *California v. Trombetta*, 467 U.S. 479, 485 (1984))). By a “complete defense,” the Constitution prohibits the suppression of exculpatory evidence under evidentiary rules that are either “arbitrary” or “disproportionate to the ends that they are designed to serve.” *Id.* at 325 (quoting *United States v. Scheffer*, 523 U.S. 303, 308 (1998)). These rules “may ‘not be applied mechanistically to defeat the ends of justice.’” *Rock v. Arkansas*, 483 U.S. 44, 55 (1987) (quoting *Chambers*, 410 U.S. at 302). In other words, “[i]n applying its

evidentiary rules a State must evaluate whether the interests served by a rule justify the limitation imposed” upon the defendant’s constitutional rights. *Id.* at 56.

For evidence of third-party guilt, the interest concerns “focus[ing] the trial on the central issues by excluding evidence that ***has only a very weak logical connection*** to the central issues.” *Holmes*, 547 U.S. at 330-31 (emphasis added). Courts identify at least three noteworthy aspects of the right to a complete defense as it relates to alternative perpetrators.

First, courts may not evaluate the strength of a defendant’s evidence by assuming that the prosecution’s evidence is trustworthy. *Id.* at 330; *see also Summers v. State*, 231 P.3d 125, 148 (Okla. Crim. App. 2010) (“One of the underlying principles in *Holmes* ... is that the defendant’s evidence should not be treated with more suspicion than is the State’s evidence, and also that in our system, the trier of fact is the most appropriate entity for deciding disputes about which evidence is most reliable or ‘trustworthy.’”).

Second, defendants do not have to “prove” that the alternative perpetrator committed the crime. *See State v. Ferguson*, 804 N.W.2d 586, 591 (Minn. 2011). Such a rule would be nearly impossible to satisfy. Rather, a defendant must have the opportunity to present evidence that raises a reasonable doubt in the mind of the jury about his guilt. *See id.*; *State v. Hedge*, 297 Conn. 621, 647 (2010); *Smithart v. State*, 988 P.2d 583, 588 (Alaska 1999).

Finally, the presentation of a complete defense includes the ability to present a coherent narrative, supported by available evidence, to the jury. *State v. McCullar*, 335 P.3d 900, 912 (Utah Ct. App. 2014) (citing *Old Chief v. United States*, 519 U.S. 172, 187

(1997)). To guard against wrongful convictions, a defendant must be allowed to do more than argue, in the abstract, that he is innocent and someone else must have committed the crime. Such a “naked proposition in a courtroom [is] no match for the robust evidence that would be used to prove it.” *Id.* (quoting *Old Chief*, 519 U.S. at 189). Indeed, if jurors’ “expectations are not satisfied, triers of fact may penalize the party who disappoints them by drawing a negative inference against that party.” *Old Chief*, 519 U.S. at 188 (internal quotation omitted). Thus, a defendant has the right to present his version of the facts to the jury so that the jury, not the trial court, may decide where the truth lies.

The exclusion of the Feldman evidence fails on all three points. At trial, the prosecution argued that the killer had abducted Spencer from her car, which was left abandoned 20-30 minutes away from her body:

And I don’t know – I can’t tell you at what point that night he found her. But at some point he found her, and in all likelihood, he found her driving on Highway FF and forced her off the road. She pulls off. Now, she tries to back up and can’t. And she’s not dragged out of her car. Judy Spencer’s a cautious person. You heard from the dispatcher. She called a couple of times to make sure she had an extra key to the car. She’s not getting in a car with some stranger. She got in the car with Donald Nash. And she’s not dragged out, because she gets her purse, she drops her keys in the console. The keys aren’t still in the ignition. She drops her keys in the console and gets in with Donald Nash.

(Ex. 50 (Trial Tr.) 853:11-24). Thus, the “logical connection” of Feldman’s unexplained fingerprint on that car to Spencer’s disappearance is undeniable.¹⁴ *See Holmes*, 547 U.S. at

¹⁴ Fingerprints always establish the identity of the person and presence at the scene, and stray fingerprints alone can result in a murder conviction in Missouri. *See State v. Maxie*, 513 S.W.2d 338, 343 (Mo. 1974) (murder conviction based upon fingerprint on cardboard box top in victims’ bedroom, when victims’ bodies were found in kitchen and living room, respectively); *see also State v. Schleicher*, 442 S.W.2d 19, 20-21 (Mo. 1969) (upholding burglary and theft convictions where two partial prints were “the only connection of defendant to the offense”).

330-31. The State's theory was that someone had abducted Spencer from that vehicle. In making this argument, however, the prosecution itself had zero evidence placing Nash at the car and thus relied upon pure speculation. Like most of the prosecution's case, the strained inference was that Nash was at Spencer's vehicle because of the fingernail DNA from her body, found many miles from her abandoned car. As a result, Nash was left hamstrung in contradicting the State's rank speculation that he was the one who abducted Spencer from her car, even though Nash actually had physical evidence implicating another suspect *at that location* to contradict the State's narrative. This was not even about "crediting" the prosecution's evidence over Nash's evidence – Nash was the only party who had *any* evidence that tied anyone to the abduction scene, yet he was not allowed to present it to the jury.

The State argued that this abduction had occurred because the circumstances of the vehicle were highly suspicious. The car was found in a ditch, with the dome light still on. These circumstances are equally suspicious in the context of Feldman. Any reasonable juror considering whether to convict a defendant of premeditated murder based on circumstantial evidence in a case involving a victim who was allegedly abducted from her car and found naked in a pit would certainly want to know that the fingerprints of a violent felon with a history of sexual assault and other sex crimes, who was seen by witnesses with the victim just days before the crime, were found on that abandoned car's window. At the same time, a reasonable juror might also penalize Nash because of Nash's failure to adduce evidence contradicting the State's theory that *he* abducted her. *See, e.g., United States v. Vallejo*, 237 F.3d 1008, 1023 (9th Cir. 2001) (defendant "was not allowed to provide an

answer for the jurors' question: 'If defendant did not know there were drugs in the car and did not place them there himself, who did?''").

The State's suggestion that Feldman might have left his fingerprints on the car because he might have pumped her gas in Rolla, dozens of miles away, is pure speculation. There is no evidence that Spencer ever visited that gas station. In fact, Spencer's checkbook specifically shows that no checks were written to the filling station in Rolla where Feldman worked in the previous month. (Ex. 29 (Checkbook registry for Judy Spencer (2/12-3/10))).

Furthermore, there is evidence that Feldman lied about ever traveling to Salem or knowing Spencer, as Tim Bell provided a statement from Freddie Whitaker stating that he saw Feldman and Spencer together in Salem in the days before her murder. There is no explanation for crediting Feldman's self-serving statements that he was not involved in the murder except that the State's evidence and Nash's evidence were subjected to different standards. This is not allowed under *Holmes*.

"[C]ourts have found outcome-determinative prejudice when a defendant is prevented from fully establishing an alternative perpetrator defense." *State v. McKay*, 459 S.W.3d 450, 459 (Mo. App. 2014); *see also State v. Woodworth*, 941 S.W.2d 679, 692 (Mo. App. 1997) (finding that exclusion of alternative perpetrator "could well have affected the outcome of the trial" where evidence against the defendant was "tenuous"). "A defendant in a criminal case has a constitutional right to present a complete defense. *State v. Walkup*, 220 S.W.3d 748, 757 (Mo. banc 2007) (citing *California v. Trombetta*, 467 U.S. 479, 485, 104 S.Ct. 2528, 81 L.Ed.2d 413 (1984)). When it comes to applying

evidentiary principles or rules, the erroneous exclusion of evidence in a criminal case creates a rebuttable presumption of prejudice. *Id.* (citing *Burton v. State*, 641 S.W.2d 95, 99 (Mo. banc 1982); *State v. Rhodes*, 988 S.W.2d 521, 529 (Mo. banc 1999)). The state may rebut this presumption by proving that the error was harmless beyond a reasonable doubt. *Id.*” (*State v. Miller*, 372 S.W.3d 455, 472 (Mo. 2012)). In a recent case, focused substantially on *Brady* issues, the court observed,

“While that is indeed true, the undisclosed fingerprint report would also have established that the second identifiable fingerprint found at the crime scene belonged to someone other than Irons or Stotler(victim). This is plainly exculpatory information, as it would have afforded Irons with forensic evidence supporting an argument that a third person was at the scene on the day of the crime, bolstering his general contention that he did not commit the crime. It was one thing for Irons to know that identifiable fingerprints found at the scene did not belong to him. It would have been quite another thing for Irons to know that an identifiable fingerprint found at the crime scene belonged to person other than Irons and Stotler. Forensic evidence that a third person was at the scene is exculpatory and far more persuasive than simply arguing the negative inference that because Irons's prints were not found at the scene, he could not have committed the crime.” (*State ex rel. Schmitt v. Green*, WD83688 (April 28, 2020))

Here, in not quashing the findings of the habeas court, the Western District found a *Brady* violation and that the existence of a fingerprint not belonging to the defendant at the scene would have had the effect of “bolstering his general contention that he did not commit the crime.” *Id.* The exclusion of this exculpatory fingerprint and other evidence pointing to Feldman as Spencer’s killer, in circumstances where the fingerprint was in the car from which Spencer was abducted and the alternate perpetrator had been seen with Spencer in the days prior to her abduction, violated Nash’s right to present a complete defense.

3. **The Application of the Direct Connection Rule in Nash's Case Was Not Consistent With Its Normal Use.**

It bears further mentioning that the trial court's application of Missouri's direct connection rule in Nash's case was not entirely consistent with the purpose of that rule. While this court upheld the exclusion of the Feldman evidence, under an abuse-of-discretion standard, it appears that the trial court's ruling likely existed at the outer fringe of the direct connection rule, which further demonstrates why the trial court's ruling is vulnerable to an *as-applied* constitutional attack in this case.

The primary rationale of Missouri's direct connection rule has been to exclude attenuated evidence that demonstrates only motive, opportunity, or both. *See State v. Rousan*, 961 S.W.2d 831, 848 (Mo. banc 1998) ("Appellant complains of trial court error in sustaining ... the state's objection to appellant's attempt to show that Charles Lewis, IV, was engaged in a struggle with his father for control of the family business and had a ***motive*** for the murders.") (emphasis added); *State v. Wise*, 879 S.W.2d 494, 510 (Mo. banc 1994) ("[A]ppellant sought to show that Mr. McDonald had a ***motive and opportunity*** to murder Mrs. McDonald" and claimed lack of access to divorce files precluded discovery of a link to the actual crime) (emphasis added); *State v. Easley*, 662 S.W.2d 248, 251 (Mo. banc 1981) ("Defendant's theory at trial was that Don Melching, from whom he had purchased the building and who retained the mortgage, could have had a ***motive*** for arson.") (emphasis added); *State v. Umfrees*, 433 S.W.2d 284, 286 (Mo. banc 1968) (attempting to show third-party admission to establish that third party "had a ***motive***") (emphasis added).

Indeed, this court acknowledged this principle on Nash’s direct appeal: “To be admissible, *evidence that another person had an opportunity or motive for committing the crime* for which a defendant is being tried must tend to prove that the other person committed some act directly connecting him with the crime.” *Nash*, 339 S.W.3d at 513 (emphasis added). At the time, however, this court was focusing on the *facial* validity of the rule to all criminal defendants, and not an *as-applied* challenge.

In *State v. Barriner*, the Court stated “[w]hen the evidence is *merely* that another person had opportunity or motive to commit the offense, or the evidence is otherwise disconnected or remote (and there is *no evidence* that the person committed an act directly connected to the offense), the minimal probative value of the evidence is outweighed by its tendency to confuse or misdirect the jury.” 111 S.W.3d 396, 400 (Mo. banc 2003) (emphasis added). Thus, the direct connection rule sets a higher threshold for presenting evidence of a third party’s “motive or opportunity” to commit the charged crime – because this evidence carries the “potential for confusion or misdirection.” *Id.* at 400 n.3.

But the Feldman evidence was not mere motive or opportunity evidence. It was *physical* evidence *directly* found at a crime scene. Fingerprints found at a crime scene on crime scene evidence are “connected” to the crime. To hold otherwise without further proof merely assumes the State’s version of events, which is disallowed under *Holmes v. South Carolina*, 547 U.S. 319 at 330. *Barriner* thus establishes a different threshold for *physical* evidence of third-party guilt. Deeming a pair of stray hairs discovered on the bodies of two murder victims admissible, the Court acknowledged: “*Even if this evidence fails to directly connect* another person to the murders, physical evidence obtained from

murder victims' bodies lacks the same potential for confusion or misdirection caused by evidence found at a remote location or isolated evidence of another person's motive or opportunity." *Id.* As the Court clarified, the hair evidence in *Barriner*

was **not** evidence of motive or opportunity, and it was not disconnected or remote. Instead, the hair evidence was **physical** evidence that could indicate another person's interaction with the victims at the crime scene.

State v. Bowman, 337 S.W.3d 679, 687 (Mo. banc 2011) (rebuffing defendant who offered only opportunity evidence and no physical evidence tying third party to murder) (emphasis added). Thus, physical evidence from a crime scene inherently carries higher assurances of its trustworthiness, shielding it from "mechanistic" applications of the direct connection rule. *See Chambers v. Mississippi*, 410 U.S. 284 at 302.

Thus, the rationale of exclusion under the direct connection rule does not apply to a case, like Nash's, which combines probative **physical** evidence with additional evidence of motive (a tendency toward sexual violence) and opportunity (evidence that Feldman knew Spencer and was with her in Salem in the days before her murder). Therefore, the exclusion of the Feldman evidence clearly was disproportionate to the ends the rule was intended to serve.

The Feldman evidence in Nash's case is much like the evidence of third-party guilt in *State ex rel. Koster v. McElwain*, 340 S.W.3d 221 (Mo. App. 2011). In that habeas corpus case, the Missouri Court of Appeals upheld the circuit court's grant of the writ by considering the victim's purse, which was believed to have been discarded by the killer, as evidence of a third party's guilt. The State had argued to the jury that the victim's son,

Dale Helmig, had tossed her purse containing cancelled checks off a bridge shortly after committing the murder. Yet one of these checks cleared the bank after the victim's purported time of death; and Ted Helmig, her husband, had admitted retrieving the victim's mail after her death and opening her bank statement to look at her canceled checks. *Id.* at 249.

The *McElwain* court reasoned that “the check’s travels defeated the theory of the State’s case as to ‘when’ the purse was thrown into the river.” 340 S.W.3d at 249, n.26. Ted Helmig thus “became connected to a key piece of evidence in the crime—the purse where the cancelled checks were found.” *Id.* These facts did not prove unequivocally that Ted Helmig was the murderer, but they established a sufficient connection to the crime to satisfy the direct connection rule:

[T]he fact that there may be other explanations for the discovery of the cancelled checks with the purse besides an inference that Ted Helmig threw the purse and the cancelled checks in the river sometime following his murder of Norma Helmig does not relieve us of the obligation to acknowledge that Ted Helmig has now been connected to the purse—material evidence in Norma Helmig’s murder case.

Id. at 250.

Similarly, the Feldman evidence contradicts the State’s narrative that Nash abducted Spencer at that car. Like the canceled checks, this evidence may not prove unequivocally that Feldman was the murderer; but, consistent with the presentation of a complete defense, Nash’s jury should have been allowed to hear it.

Accordingly, the Master recommends that the Supreme Court should grant Nash a writ of habeas corpus with respect to Count IV of the Petition.

G. Nash’s Appellate Counsel Was Ineffective (Count V).

Count V consists of two components: ineffective assistance of trial counsel and ineffective assistance of appellate counsel. (Petition, ¶¶ 98-101). Ineffectiveness of trial counsel was addressed above. Here, counsel at the trial and on direct appeal was the same.

The standards for ineffective assistance of appellate counsel are virtually the same as ineffective assistance of trial counsel, but the first element is tweaked to accommodate the differing obligations of trial and appellate counsel. See *Hounihan v. State*, 592 S.W.3d 343, 347, 349-50 (Mo. banc 2019). Namely, “[w]hen alleging ineffective assistance of appellate counsel, the error on appeal must have been so obvious that a competent and effective lawyer would have recognized and asserted it.” *Id.* at 347 (internal quotation omitted). “[F]ailure to raise a claim that has significant merit raises an inference that counsel performed beneath professional standards.” *Id.* at 349 (quoting *State v. Sumlin*, 820 S.W.2d 487, 490 (Mo. banc 1991)).

Nash had the same trial and appellate counsel. Thus, the same counsel who had failed to object to Montgomery’s testimony at the trial court level also failed to challenge the admission of her testimony during the appeal.

The Warden suggests, in his Proposed Findings of fact and Conclusions of Law,

“In order to make out a claim of ineffective assistance of a counsel, a petitioner must show both that counsel acted outside the wide range of acceptable professional conduct, and that but counsel’s unprofessional actions there is a reasonable probability that the outcome of the proceedings would have been different. *Strickland v. Washington*, 466 U.S. 668, 687 (1984). Counsel has wide latitude in making tactical decisions, and beyond the requirement of reasonableness, specific guidance is not appropriate. It is rare that constitutionally competent representation will require one technique or approach. *Cullen v. Pinholster*, 563 U.S. 170, 195–96 (2011). A court must make a strong presumption that counsel made all decisions in

the exercise of reasonable professional judgment. *Id.* at 196. The difference between the reasonable probability standard of Strickland and the more likely than not that the verdict was changed standard is slight, and matters only in the rarest case. *Harrington v. Richter*, 562 U.S. 86, 112 (2011).

The United States Supreme Court has recognized that experienced appellate counsel emphasize the importance of winnowing out weaker arguments on appeal and focusing on one central issue if possible or at most on a few key issues. *Jones v. Barnes*, 463 U.S. 745, 751–52 (1983). The process of winnowing out weaker claims on appeal and focusing on stronger claims, far from being evidence of incompetence, is a hallmark of effective appellate advocacy. *Smith v. Murray*, 477 U.S. 527, 536 (1986).

Trial counsel was not ineffective for not seeking a *Frye* hearing on the question of what effect hair washing would have on DNA under the fingernails. Counsel researched the matter, studied scientific papers, and hired and consulted with an expert before trial. He believed a *Frye* objection would have been overruled. So, he planned to, and did, deal with the issue through impeachment, and presenting his own expert and scientific research. That was a reasonable decision, not ineffectiveness. And counsel was probably right that the testimony would not have been excluded based on *Frye* analysis. Ms. Montgomery was well qualified, and her opinions on a detergent lysing cells and making DNA more easily removable are generally accepted in the scientific community. Those scientifically accepted principles support the conclusion that hair washing with a detergent based shampoo and scalp manipulation would have had a particular effect on DNA under fingernails. The expert was not required to rely on studies that do not exist on the quantity of DNA present before and after hair washing.”

The Warden further suggests,

Appellate counsel would have had little chance of success arguing that a prosecutor’s inaccurate understanding of the DNA testimony in argument created reversible error where, as here, the jury was instructed that argument is not evidence and the jury is presumed to follow that instruction. Counsel testified that it is his practice to review the record and the case law and to determine what claims he thought would succeed on appeal. In light of Missouri case law and the trial record, it was an objectively reasonable decision not to pursue the matter on appeal.”(Wardens Proposed Findings of Fact and Conclusions of Law)

The inadmissibility of Montgomery’s opinion, as to the effect of hair washing on DNA under the fingernails, was clear. The State laid no foundation for the opinion based on actual science or her training. (There was none.) The State did not even ask whether

the scientific principles were generally accepted in the scientific community. (They were not.) Montgomery also did not even testify that she was offering her “great effect” opinion “to a reasonable degree of scientific certainty.” (She was not.)

Under Missouri law, even “a stipulation cannot make admissible evidence which would otherwise be held inadmissible for lack of scientific reliability.” *State v. Biddle*, 599 S.W.2d 182, 188 (Mo. banc 1980). This evidence, which came in without objection, was inadmissible, and its inadmissibility should have been raised on direct appeal. Nash’s appellate counsel failed to bring this challenge.

Nash’s appellate counsel also failed to bring a challenge based on the prosecution’s mischaracterizations of Montgomery’s testimony during closing argument, even though he believed the trial court’s actions were prejudicial. With respect to both of these issues, Mr. Carlson did not recall why he did not challenge Montgomery’s opinion on appeal and did not remember considering raising a challenge to the prosecution’s closing statement. He could not say that the failure to raise these challenges on appeal was a strategic decision. (Ex. 36 (Carlson Dep.) 44:15-47:8, 68:10-2, 68:10-69:2).

Finally, Nash’s appellate counsel brought an obviously doomed-to-failure *facial* challenge to the direct connection rule instead of a much more likely to succeed *as-applied* challenge. This was an enormous burden to carry because “[a] *facial* challenge to a legislative Act is ... the most difficult challenge to mount successfully.” *United States v. Stephens*, 594 F.3d 1033, 1037 (8th Cir. 2010) (quoting *United States v. Salerno*, 481 U.S. 739, 745 (1987)). The challenge was doomed, considering that Nash’s appellate counsel relied on a U.S. Supreme Court case stating that “rules regulating the admission of evidence

proffered by criminal defendants to show that someone else committed the crime with which they are charged ... are widely accepted.” *Holmes v. South Carolina*, 547 U.S. 319, 327 (2006). The U.S. Supreme Court even footnoted a Missouri case, citing *State v. Chaney*, 967 S.W.2d 47, 55 (Mo. banc 1998), which recites the direct connection rule. In short, there is little doubt that the direct connectional rule would survive a *facial* challenge—*i.e.*, it is not unconstitutional in *all* of its applications.

Instead of challenging every single application of the direct connection rule, Nash’s appellate counsel should have only challenged one application—the application in Nash’s case. During his deposition, Mr. Carlson could not remember whether he brought an *as-applied* or *facial* challenge to the exclusion of the Feldman evidence, but agreed that a *facial* challenge is more difficult “because you essentially have to prove that it’s unconstitutional in every case.” He had no memory why he did not bring the argument as an *as-applied* challenge, although his “practice is to make both arguments, because if you miss one, it can be a problem,” including because one might lose on a *facial* challenge but win on an *as-applied* challenge. (Ex. 36 (Carlson Dep.) 47:21-49:9).” The Southern District, in *Seals v. State*, 551 S.W.3d 653 (Mo. App. 2018) commented,

“As to Buffaloe’s (appellate counsel) performance, the motion court found, without further comment, that Buffaloe “made a strategic decision not to include the claim.” Appellate strategy, however, is still subject to the objective standard of reasonableness under the circumstances. *Baumruk v. State*, 364 S.W.3d 518, 525 (Mo. banc 2012); *Tate v. State*, 461 S.W.3d 15, at 22. Indeed, “[t]he relevant question for the motion court is not whether counsel’s choices were strategic, but whether they were reasonable.” *Sanders v. State*, 535 S.W.3d 403, 410 (Mo. App. S.D. 2017). Nothing in the record reflects any reasonable basis for Buffaloe’s decision not to request reversal of the attempted victim tampering conviction where Buffaloe had requested reversal of the second-degree domestic assault conviction. Buffaloe did not offer a basis, nor did the motion court, nor the State on appeal.

Here, the claimed error was sufficiently serious that it created a reasonable probability that had it been raised, the outcome of the appeal would have been different. Buffalo's failure to raise this issue under these circumstances was not a reasonable legal strategy.” (*Seals v. State*, 551 S.W.3d 653(2018))

By all accounts Mr. Carlson is an experienced criminal attorney. It also appears he has significant experience doing criminal appeals. Had he indicated a strategic reason for not raising the issues on appeal, the outcome of this point might be different. Candidly, Carlson gives no strategic reason why he failed to raise the issue as to the improper argument on closing by the Attorney General, the admission of the opinion testimony of Montgomery, which was unsupported by scientific evidence, or why he chose to make an appeal only on the *facial* basis, rather than both *facial* and *as applied*, in his appeal of the trial courts application of the direct connection rule, to exclude evidence of Feldman.

On this basis, the Master concludes that Nash’s appellate counsel was ineffective. All of these challenges have “significant merit” and should have been raised on appeal. Under any of these errors, individually or collectively, “there is a reasonable probability that the outcome on appeal would have been different.” *Hounihan*, 592 S.W.3d at 349-50.

Accordingly, the Master recommends that the Court should grant Nash a writ of habeas corpus with respect to his claim of ineffective assistance of appellate counsel under Count V of the Petition.

V. CONCLUSION

The Master has heard testimony presented on March 3, 4 and 5, 2020 and has reviewed 1,823 pages of exhibits submitted by Nash and 1,107 pages of exhibits submitted by the Warden. I have read the transcript of the hearing held before me consisting of 390

pages. I have reviewed and adopted portions of the Proposed Findings of Fact and Conclusions of Law, submitted by each side.

Nash has filed a Writ of Habeas Corpus, in this court, sounding in five Counts. Count I Freestanding Claim of Actual Innocence, Count II Due Process-Unreliable and Inadmissible “Scientific” Testimony, Count III Due Process-Prosecution’s Mischaracterization of “Scientific” Testimony in Closing Argument, Count IV Right to a Complete Defense-Exclusion of Feldman Evidence and Count V Ineffective Assistance of Trial and Appellate Counsel. On October 1, 2019 the Court issued the following Order:

Now at this day, it is ordered that the Honorable Richard K. Zerr, Senior Judge, is hereby appointed, with his permission, as Master of this Court to hold pretrial conferences, to take evidence on the issues raised in the pleadings filed herein regarding the claims set forth in counts II through V of the petition for writ, with full power and authority to issue subpoenas, compel production of books, papers, and documents and the attendance of witnesses; to hear and to determine all objections to testimony in the same manner and to the same extent as this Court might in a trial before it; to arrange for the reporting and transcribing of the testimony; and to report the evidence taken, together with the Master’s findings of fact and conclusions of law on said issues.

The parties concede that the claims sought to be asserted are procedurally defaulted. “The cumulative effect of *Simmons*, *Clay*, and *Jaynes* is to permit review of procedurally barred claims in a habeas proceeding if: (1) the claim relates to a jurisdictional (authority) issue; or (2) the petitioner establishes manifest injustice because newly

discovered evidence makes (a “gateway of innocence” claim); or (3) the petitioner establishes the presence of an objective factor external to the defense, which impeded the petitioner's ability to comply with the procedural rules for review of claims, and which has worked to the petitioner's actual and substantive disadvantage infecting his entire trial with error of constitutional dimensions (a “gateway cause and prejudice” claim). Thus “[a] showing either of cause and prejudice or of actual innocence acts as a ‘gateway’ that entitles the prisoner to review on the merits of the prisoner's otherwise defaulted constitutional claims.” *Amrine v. Roper*, 102 S.W.3d 541 at 546 (Mo. 2003)”. (*State ex rel. Koster v. McElwain*, 340 S.W.3d 221, 244–45 (Mo. Ct. App. 2011), as modified (May 3, 2011)). As set forth and detailed above, your master finds that Nash has presented evidence, discovered since the trial on the merits, which, considered with the other evidence at trial, and after proper argument and instruction, it is more likely than not that no reasonable juror would have convicted Nash. Nash has established Gateway Actual Innocence providing an ability to consider his other claims.

With respect to Claim II, violation of Nash’s right to due process based on the State’s presentation of the expert’s unreliable and erroneous opinion to the jury, which has never been generally accepted in the scientific community, as set forth in greater detail above, your Master finds that the testimony of Montgomery, as to the effect of hair washing on the presence of DNA under the fingernails of persons who are cohabiting, in an intimate relationship, was not supported by any generally recognized scientific theory and was inadmissible under *Frye*. Montgomery concedes the lack of support for the opinion expressed and has since retracted the opinion expressed at trial.

Since all experts who acknowledged that the DNA of one would be expected under the nails of the other, in the case of two persons who cohabitated in an intimate setting, and the effect of hair washing on fingernail DNA was the key factual finding to be made by the jury, your Master finds that the Due Process rights of Nash were violated by the presentation of this crucial piece of scientifically unproven and unreliable evidence to the jury. The testimony of Nash's expert did not eliminate the harm and Nash was prejudiced by the admission.

With respect to Claim III, violation of Nash's right to due process based on the prosecution's mischaracterization of the trial expert's now-disavowed opinion during closing argument and the trial court's error in overruling Nash's timely objections, your Master finds that the action of the Assistant Attorney General, in misstating the opinion of Montgomery, during closing, violated Nash's due process rights. The action of the Assistant Attorney General, in incorrectly arguing the opinion of Montgomery, that hair washing would remove *all* of Nash's DNA from the victims finger nails, was so harmful that your Master finds, coupled with the failure of the trial court to sustain the objection made by Nash's counsel, that it tipped the scales and denied Nash a fair trial. (See *Norman*, *Divorak* and *Taylor*, above). This misstatement of the testimony of the states key witness, as to the key factual determination to be made by the jury,-what was the effect of the washing of hair on the DNA under the victims nails, undermines the faith that we should all have that the jury decided the case only upon the admissible evidence submitted at trial

Claim IV, violation of Nash's right to a complete defense based on the

exclusion of physical evidence that another person committed the murder, relates to the exclusion of evidence by the trial court under the direct connection rule. Your Master has reviewed this claim on an *as applied* versus *facial* basis. *As applied* to this case, the direct connection rule resulted in the exclusion of fingerprint evidence, found on the victim's car, from being submitted to the jury. This Court, on direct appeal, found, "The trial court's decision to exclude Nash's evidence as to Feldman is a ruling that this Court reviews to determine if the trial court abused its discretion. See *State v. Forrest*, 183 S.W.3d 218, 223 (Mo. banc 2006). The trial court has broad discretion in evidentiary rulings, and an abuse of discretion will not be found unless the ruling is clearly against the logic of the circumstances and is so unreasonable as to indicate a lack of careful consideration. *Id.* Evidentiary errors require reversal if they are prejudicial to the defendant because they deprived him of a fair trial. *Id.* at 223–24. An error is not prejudicial if there is no reasonable probability that it affected the outcome of the trial. *Id.* at 224." (*State v. Nash*, 339 S.W.3d 500, 515 (Mo. 2011)) In a case decided by this court about a month before the Nash direct appeal, this court again reviewed the direct connection rule. Judge Teitelman, writing for the majority, noted,

" in *State v. Barriner*, 111 S.W.3d 396, 400 (Mo Banc 2003) the trial court excluded evidence that hair not belonging to the victims or the defendant was found on victim's body and on the rope that bound the other victim. The hair evidence was not evidence of motive or opportunity, and it was not disconnected or remote. Instead, the hair evidence was physical evidence that could indicate another person's interaction with the victims at the crime scene. *Id.* at 400. Thus, the trial court erred in excluding Barriner's evidence showing a possible alternative perpetrator's connection to the murders." (*State v. Bowman*, 337 S.W.3d 679, 687 (Mo. 2011)).

Here, given the retraction of the opinion of the state DNA expert, and the discovery of the new DNA evidence found on the victims' shoe, your Master does not find the evidence of Nash's guilt to be overwhelming. As such, since the evidence excluded was directly connecting the alternate perpetrator to the scene of the abduction of the victim your Master finds the application of the direct connection rule deprived the defendant of his ability to present a complete defense.

As to Claim V, ineffective assistance of trial and appellate counsel, including counsel's failure to challenge the admission of the expert's erroneous opinion on direct appeal, your Master has reviewed the portions of the trial transcript relating to the alleged failure of trial counsel to render effective representation. Your Master has reviewed the filings in the direct appeal of Nash's conviction. Your Master has viewed and reread the deposition testimony of trial and appellate counsel, presented at hearing held in this matter. As noted above, there is no question that Mr. Carlson is an experienced trial and appellate counsel. Mr. Carlson was invested in his client and worked hard to try to assure his client received a fair trial. Justice O'Connor, writing for the majority, in *Strickland v. Washington* observed, "In every case the court should be concerned with whether, despite the strong presumption of reliability, the result of the particular proceeding is unreliable because of a breakdown in the adversarial process that our system counts on to produce just results". (*Strickland v. Washington*, 466 U.S. 668, 696, 104 S. Ct. 2052, 2069, 80 L. Ed. 2d 674 (1984)) She went on to recognize,


“Some errors will have had a pervasive effect on the inferences to be drawn from the evidence, altering the entire evidentiary picture, and some will have had an isolated, trivial effect. Moreover, a verdict or conclusion only weakly supported by the record is more likely to have been affected by errors than one with overwhelming record support. Taking the unaffected findings as a given, and taking due account of the effect of the errors on the remaining findings, a court making the prejudice inquiry must ask if the defendant has met the burden of showing that the decision reached would reasonably likely have been different absent the errors.” (Id at p 695-696).

Your Master finds that trial counsel was ineffective in failing to request a *Frye* hearing, either prior to trial or during trial when, counsel alleges, Montgomery substantially altered her opinion from that expressed in deposition. The presence of Nash’s DNA under the nails of the victim was the most significant evidence and the jury’s determination of the *meaning* of the presence of that DNA would determine whether Nash was acquitted or convicted. If a *Frye* hearing were held the trial judge would have had a better opportunity to see the issues, as to the admissibility of the testimony, prior to its admission at trial. Also, the witness would have been committed to a particular opinion and any variance from that expressed opinion would have been immediately evident and able to be challenged more effectively. In addition, the failure to timely object at trial, the failure to raise on appeal the admission of the Montgomery opinion testimony, and the decision to challenge the direct connection rule only *facially* on appeal, effected the rights of Nash, negatively. Importantly, counsel indicated that the actions complained of were not the product of trial strategy, other than the decision to

challenge Montgomery opinion testimony by cross examination and impeachment. This strategy, not to request a Frye hearing, was an error by counsel which provided no clear benefit to Nash .Your Master finds that because of the decisions made by counsel, both as trial counsel and appellate counsel, as set forth above, that there is a reasonable probability that the outcome of the trial and appeal would have been different, but for the errors of counsel. The movant was prejudiced by the errors of counsel.

As set forth above, it is the recommendation of your Master that the Court grant the Writ of Habeas Corpus and that the conviction for Capital Murder be set aside, that Nash be immediately admitted to a reasonable bond, on conditions which recognize the limited financial ability of Nash after many years in prison, but which adequately assure his appearance and provide protection for society, pursuant to Supreme Court Rule 33.01, and that the Court establish a date before which Nash is to be retried by the Prosecuting Attorney of Dent County

Respectfully Submitted



Hon. Richard K. Zerr, Special Master

June 12, 2020
Date

APPENDIX

Exhibit	Description
Nash's Exhibits	
1	Petitioner's Uncontroverted Facts
2	Joint Stipulation Regarding Admissibility of Shoe DNA Evidence
3	Stipulation on Tire Tracks
4	Missouri State Highway Patrol Investigation Report dated March 11, 1982
5	Photograph of Tire Tracks and Drag Marks
6	Missouri State Highway Patrol Supplementary Investigation Report No. 3 dated March 12, 1982
7	Missouri State Highway Patrol Supplementary Investigation Report No. 5 dated March 12, 1982
8	Missouri State Highway Patrol Supplementary Investigation Report No. 9 dated March 15, 1982
9	Missouri State Highway Patrol Supplementary Investigation Report No. 12 dated March 23, 1982
10	Pathologic Diagnoses of the Body of Judy Lynn Spencer
11	Photograph of Judy Spencer's right shoe without shoelace
12	Photograph of Judy Spencer's left shoe with shoelace
13	Blood Alcohol Analysis dated March 19, 1982
14	Gunshot Residue Analysis dated March 25, 1982
15	Gunshot Residue Kit Analysis dated March 24, 1982
16	Maps of Dent County and Salem, Missouri

17	Missouri State Highway Patrol Report of Investigation dated July 18, 1996
18	Johnson County, Iowa criminal case regarding Lambert Anthony Feldman
19	Lambert Anthony Feldman criminal records
20	Lambert Anthony Feldman criminal records (additional)
21	Medical Examiner/Coroner Certificate of Death for Lambert Anthony Feldman
22	Quincy Police Department Supplemental Report regarding Lambert Anthony Feldman suicide
23	Freddie E. Whitaker signed statement
24	Missouri State Highway Patrol Report of Investigation dated September 11, 2009
25	Declaration of Tim Bell
26	Memorandum regarding interview with Jennie Boxx
27	Medical Examiner/Coroner Certificate of Death for Lambert Anthony Feldman (duplicate)
28	Certificate of Death for Judy Spencer
29	Checkbook registry for Judy Spencer (2/12 – 3/10)
30	Transcript of Videotaped Deposition of Jeanetta McDonald
31	Transcript of Videotaped Deposition of Dorothy “Dottie” Taylor dated January 30, 2020
32	Transcript of Videotaped Deposition of Scott Mertens dated January 30, 2020
33	Answers to Petitioner’s First Set of Requests for Admissions Directed to Respondent (partial)
34	Probable Cause Statement dated March 27, 2008

35	N. Flanagan, et al., <i>The transfer and persistence of DNA under the fingernails following digital penetration of the vagina</i> (2011)
36	Transcript of Videotaped Deposition of Frank Carlson dated February 11, 2020
37	Missouri State Highway Patrol Supplemental Investigation Report No. 19 dated April 5, 1982
38	Memorandum requesting Major Case Prints
39	Missouri State Highway Patrol Investigation Report dated April 7, 1982 and additional materials regarding Alfred J. Heyer
40	Missouri State Highway Patrol Report of Investigation dated September 11, 2009 (duplicate)
41	Draft Affidavit for Probable Cause to Issue Felony Arrest Warrants for Alfred John Heyer III
42	Declaration of Steven Lawhead
43	Respondent's Answers to Petitioner's First Set of Requests for Admission Directed to Respondent (complete)
44	Respondent's Responses to Petitioner's First Set of Interrogatories Directed to Respondent
45	Appendix to Petition for Writ of Habeas Corpus pages 1-100
46	Appendix to Petition for Writ of Habeas Corpus pages 101-200
47	Appendix to Petition for Writ of Habeas Corpus pages 201-300
48	Appendix to Petition for Writ of Habeas Corpus pages 301-400
49	Appendix to Petition for Writ of Habeas Corpus pages 401-500
50	Appendix to Petition for Writ of Habeas Corpus pages 501-600
51	Appendix to Petition for Writ of Habeas Corpus pages 601-700

52	Appendix to Petition for Writ of Habeas Corpus pages 701-800
53	Appendix to Petition for Writ of Habeas Corpus pages 801-900
54	Appendix to Petition for Writ of Habeas Corpus pages 901-1000
55	Appendix to Petition for Writ of Habeas Corpus pages 1001-1056
Warden's Exhibits	
A	<i>State v. Nash</i> , 339 S.W.3d 500 (Mo. banc 2011)
B	<i>Nash v. Russell</i> , No. 4:12CV1783 TIA, 2015 WL 476054 (E.D. Mo. Feb. 4, 2015)
C	<i>Nash v. Russell</i> , 807 F.3d 892 (8th Cir. 2015)
D	Transcript dated July 19, 2018, Circuit Court of St. Francois County
E	Amended Findings of Fact, Conclusions of Law, and Judgment, <i>Nash v. Payne</i> , No. 16SF-CC00233
F	Report of Dr. Moses Schanfield dated April 7, 2014
G	Petition for Original Writ of Habeas Corpus, <i>Nash v. Payne</i> , Case No. ED107437
H	Suggestions in Support of Petition for Writ of Habeas Corpus, <i>Nash v. Payne</i> , Case No. ED107437
I	Response to Order to Show Cause Why a Writ of Habeas Corpus Should Not Be Granted, <i>Nash v. Payne</i> , Case No. ED107437
J	Reply in Support of Petition for Writ of Habeas Corpus, <i>Nash v. Payne</i> , Case No. ED107437
K	Order dated June 21, 2019, <i>Nash v. Payne</i> , Case No. ED107437
L	Appellant's Brief, <i>State v. Nash</i> , No. SC90649 (direct appeal)
M	Respondent's Brief, <i>State v. Nash</i> , No. SC90649

N	Appellant's Reply Brief, <i>State v. Nash</i> , No. SC90649
O	Volume 1 of Legal File, <i>State v. Nash</i> , No. SC90649
P	Volume 2 of Legal File, <i>State v. Nash</i> , No. SC90649
Q	Volume 3 of Legal File, <i>State v. Nash</i> , No. SC90649
R	Volume 4 of Legal File, <i>State v. Nash</i> , No. SC90649
S	Volume 5 of Legal File, <i>State v. Nash</i> , No. SC90649
T	Volume 6 of Legal File, <i>State v. Nash</i> , No. SC90649