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IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF LANE

ELIZABETH DIANE DOWNS Petitioner, vs. STATE OF OREGON, Defendant.	Case No. 22CV16308 Honorable Judge Erin Fennerty PETITIONER'S MOTION FOR DNA TESTING OF EVIDENCE POST-CONVICTION DNA TESTING, ORS 138.692 ORS 20.140-State fees deferred at filing

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I. MOTION

Petitioner, Elizabeth Diane Downs, through her attorneys, Venetia Mayhew and Mieke De Vrind, move this Court to Order the Oregon State Crime Laboratory to test DNA on four pieces of evidence relating to her 1984 Murder conviction: Beer cans and bubble gum found at the crime scene near where casings were found, the passenger side rock-panel blood spatter from petitioner's car as well as an envelope containing dried flakes of blood.

This motion is based upon ORS 138.692 which allows for DNA testing of specific evidence if the motion is made for the purpose of: (1) demonstrating innocence of the petitioner; (2) the identity of the perpetrator of the crime was at issue in the underlying prosecution; (3) the reasonable probability that, had exculpatory results been available at the time of the underlying prosecution, petitioner would not have been prosecuted or convicted of the offense. As described below, petitioner meets all four criteria.

DDA JoAnn Miller opposes the request.

II. EVIDENCE TO BE TESTED

Petitioner requests the following evidence in the possession of Lane County Sheriff and the Oregon State Police to be tested for DNA:

1. Bubble gum and beer cans in the possession of Lane County Sheriff. *Pet. Ex. 1*[1] at 5 (Ex.15&16).

2. Rock Panel and small envelope containing dried flakes of alleged blood which are in the possession of the Lane County District Attorney. *Pet. Ex. 2*[2] at 6, para. 1, 12.

III. OVERVIEW

[1] Department of State Police Crime Detection Laboratory Report dated June 10, 1983.
[2] Order of the Honorable Judge Ancer L. Haggerty dated June 6, 1998.

Petitioner, Elizabeth Diane Downs was convicted of one count of Murder and two counts of Attempted Murder in June 1984. *Pet. Ex*. 3.[3] She has been incarcerated for forty-two years for a crime of which she has always claimed she is a victim—not its perpetrator. She believes that the person who shot her and her three children on May 19, 1983, on a wooded rural backroad near Eugene, Oregon was likely a man named James Clair Haynes of Eugene, who is now deceased.

The Lane County Sheriff is in possession of beer cans and bubble gum that were discarded on the ground at the site of the shooting and found by police. According to criminalist Jim Pex's testimony at trial, it appeared that the beer cans were discarded close in time to the offense. The beer cans and bubble gum may contain DNA evidence from Mr. Haynes. This will corroborate petitioner's version of events that petitioner and her children were shot by a then unknown man. This will not only implicate Haynes as the shooter but will also exonerate petitioner.

Petitioner also requests DNA testing of the rock panel bloodstains on her car's passenger side door because she believes that the State's analysis wrongly concluded that it was evidence that she was the shooter. State experts asserted that the only possible explanation for blood spatter on the rock panel was that her daughter Cheryl Downs was shot outside the car rather than inside, as petitioner always claimed. However, the state's assertion is not scientifically accurate and violates current Blood Spatter Analysis (BSA) standards. The state ignored another likely explanation for the blood spatter at that location. Once petitioner arrived at the hospital with her children, medical professionals urgently removed the severely injured and bleeding

[3] Jury Verdict Forms dated June 16th & June 17th, 1984.

children, Christie and Cheryl, through the passenger side door. Both children had documented lung injuries that can induce choking on blood. The blood stains, if indeed human, could have been Christie's or Cheryl's expirated blood. Testing the rock panel blood stains for DNA will determine who, if anyone's, blood it is.

Testing this DNA evidence could prove petitioner's innocence. Testing is especially fitting because the State's most crucial evidence—toolmark evidence, which has been the State's insurance against petitioner's innocence claim for forty years—is now inadmissible in Oregon because it has been discredited as junk science and documented as having caused uncountable wrongful convictions over the past several decades.

The gun used to shoot petitioner and her children was never located despite a vast outpouring of effort and resources to locate it. The State relied on proving petitioner's guilt with evidence that two .22 caliber cartridges which were found in a .22 caliber rifle in petitioner's apartment, had identical extractor marks to those located in empty casings at the site of the shootings. The State argued that this proved petitioner's culpability stating that the cartridges in petitioner's gun were previously in the chamber of the murder weapon. The process behind this analysis has been determined by Oregon courts to be scientifically invalid. It has been proven to be about as reliable as tossing a coin to determine if the casings match. Without this evidence, it is unlikely the State would have secured a conviction against petitioner.

Other essential evidence to the State was the testimony of petitioner's surviving nine-year-old daughter Christie Downs who told the jury that it was her mother, petitioner, who shot her. Christie's testimony was compelling, emotional, and tragic. Yet it was almost certainly the product of a manufactured memory. The State argued that although Christie initially said she could not remember what happened, once she felt safe living with foster parents and had worked

with a psychologist for several months, she revealed what she knew. However, Christie only developed her "memory" after state actors made considerable efforts to conjure a memory from her during dozens of interviews over a period of months. Multiple outside influences likely impacted Christie's perception of her mother as perpetrator.

According to internationally renowned memory consolidation expert Dr. James McGaugh, and memory and perception scientist Dr. Daniel Reisberg, it is highly improbable that Christie Downs had the ability to recover a memory of the shooting. It is very likely Christie's memory consolidation was disrupted and that the memories were never created. The State's theory, that her "memory," was revealed after counseling and several other outside influences, contradicts well established long-standing memory science.

A further factor that led to petitioner's conviction was the prosecution's effective strategy to convince the jury that petitioner **had** to be guilty of shooting her children, because of her demeanor after the crime and her prior life choices. This narrative was magnified by an unprecedented amount of local and national media that sensationalized the case and demonized petitioner.

The State accused petitioner, for example, of being cool-headed and too calm after the shooting, of enjoying attention when questioned, of being too light-hearted after learning of her daughter Cheryl's death, of not crying enough publicly, and of being a "deviant sociopath," when she had no such diagnosis. Indisputably, petitioner did not present herself as a model of traditional 1980s femininity. She was promiscuous. She was outspoken. She was argumentative. She employed an intellectual approach when discussing the crime, and when challenged by reporters and police. In fact, petitioner is highly intellectual, and her approach was likely a

defense mechanism to avoid her overwhelming emotions. Her efforts to appear tough were the result of an attitude instilled in her by her parents.

Petitioner was a young highly inexperienced woman thrust into intensely stressful circumstances. She talked to media excessively and was also combative with them because she felt attacked. As effective as the State was in painting petitioner in an extremely negative light, by producing a mountain of irrelevant evidence of her poor choices and failings as a wife and mother—which went almost entirely unchallenged by her attorney —none of this was evidence of her guilt in this crime.

Petitioner has already served 42 years in prison for the offense. Testing the DNA evidence, in light of all the problematic aspects of petitioner's conviction, is an act of due diligence. Petitioner urges this Court to Order that the State test the requested DNA evidence to prove her innocence.

IV. PROSECUTION OF DIANE DOWNS

A. Initial Facts of the Crime

On May 19, 1983, petitioner, Elizabeth Diane Downs, arrived in her red Datsun Pulsar at the McKenzie-Willamette Hospital Emergency room in Eugene at 10:30 p.m., honking her horn to get immediate attention. *Pet. Ex. 4*[4] at 511-512. Her three children had been shot. *Id.* Emergency room personnel rushed to the scene and took them into the Emergency Room after briefly working on them in the car. *Id.* at 511-520. Seven-year-old Cheryl Downs was pronounced dead from two bullet wounds in her back. *Id.* The other two children, Christie, aged eight, and Danny, aged three, were near death. *Id.* Christie was shot twice in the chest, one bullet through her left arm. *Id.* at 603-604. Danny was shot once in his back. *Id.* Petitioner was also

[4] Trial Transcript.

shot in her left forearm. *Id*. at 523. Christie and Danny were rushed to emergency surgery where they were both treated. *Id.* Both children survived with serious injuries. Petitioner received first aid for a gunshot wound to her left arm. *Id.* at 523.

Petitioner, a postal worker, and her three young children, had recently moved to the Eugene area from Chandler, Arizona. *Id.* at 918. On the night of the incident, they drove to a new friend's house to give her information about a horse for sale. *Id.* at 919. Later, on their way back home, they drove down the Old Mohawk Road. *Id.* at 920. Petitioner saw a man standing in the roadway waving an arm so that she would stop and she did so obediently. *Id.* She told police that he was a white man in his late 20s around 5 ft 9inches tall, weighing about 150 to 170 pounds, with dark hair above the shoulders. *Pet. Ex. 4* at 920.

Detective Tracy testified that petitioner told him that she got out of her car and asked the man what the problem was. *Id.* at 921. He jogged over toward her and said, "I want your car." Petitioner responded, "you've got to be kidding." *Id.* According to Tracy, the man shoved petitioner toward the back of her car and then put his hand inside the door and shot the children who were inside the vehicle. *Id.* Christie was in the rear right seat, and he shot her first. *Id.* He next shot Danny in the left rear seat. *Id*. Finally, he shot Cheryl, who had been laying asleep on the floor of the right front seat covered with a postal sweater. *Id.* Petitioner was not sure how many times the man fired at each child. *Id.*

Detective Tracy also testified that petitioner said that the suspect again demanded said, "I want your car." *Id.* at 922. At that point he was roughly four to five feet from her. *Id*. She pretended to throw her car keys away and swung her arm from left to right to make him believe she was doing that. *Id.* He turned in the direction of the car and fired at her twice, hitting her

once in the arm. *Id.* at 921. Petitioner was able to jump in the car and drive away toward Eugene where she knew there was a big hospital. *Id.*

Once her two surviving children, Danny and Christie, were receiving medical treatment at the hospital, petitioner was persuaded by police to take them to the scene of the shooting to show them exactly where it had taken place. *Id.* at 922. She gave the sheriff's office a detailed description of the assailant and a yellow car she remembered seeing parked down the road from where they were shot. *Id*. at 885. She assisted in preparing a composite drawing of the assailant which was widely distributed in the Eugene-Springfield area and was picked up by the media. *Id.* at 248.

Police received hundreds of phone calls and other contacts relating to the composite picture of the shooter. They responded to some of the calls but not to others. Petitioner's trial attorney, James Jagger, was contacted by many people who informed him that they had contacted police about sightings and were frustrated by the lack of follow-through. *Pet. Ex. 5*[5] at 3.

At a pre-trial hearing on the matter, Detective Roy Pond testified that he had received about 100-150 contacts in response to petitioner's description of the assailant and the car and he had prepared 30-50 reports reflecting those contacts. *Pet. Ex. 4* at 172-173. He destroyed all other notes including ones that did not yield a report. *Id.* The court only ordered the state to provide one report to the defense which related to a contact that petitioner already knew about. *Id.* at 229. During trial, the court released a further three reports to petitioner. This only occurred

[5] Affidavit of James Jagger dated May 7, 1984.

after the court became concerned about Deputy Pond's demeanor on the stand and demanded to review the existing reports. *Id.* 2677.

After the state had completed its case, petitioner called three people to testify whose names were provided in the four reports. Norman Preston Hilliard and Jim Bob McCain testified to seeing a man who matched the composite between 9:20 and 9:30pm by the shooting scene. *Id.* at 2428, 2440. Basil Wilson testified that he had seen a man matching the description appear at a country club about a mile and a half from the shooting scene at 9:00pm and enter the Club at 9:30pm on the night of the crime. *Id.* at 2451.

During her federal habeas proceeding more than 15 years later, petitioner's investigators discovered a significant number of reports at the Sherriff's office that were not provided to the defense during her underlying case. *Pet. Ex. 6*[6] at 3. This included a binder labeled as "Shaggy Hair Suspect Leads," with a significant number of notes and reports describing leads about people or cars matching petitioner's descriptions. *Pet. Ex. 7*[7] at 1-42. There were notes regarding approximately 100 contacts about suspects or vehicles never provided to trial counsel during discovery. *Id.* Furthermore, investigators found eight pages of handwritten notes describing phone messages of possible suspects license plates. *Id.* at 231-236. There is no evidence that any of these leads were followed up by police, and none of this evidence was provided to the defense before petitioner's trial. *Id.*

It is thus indisputable that significant evidence relating to the possible identity of the shooter was intentionally withheld from petitioner and her defense team. The lack of interest in pursuing these leads is baffling in light of the fact that police found evidence that someone drank

[6] Affidavit of William J. Teesdale dated March 13, 1998.
[7] Undisclosed reports for an Evidential Hearing/Opposition to Government's Motion To Dismiss.

multiple cans of beer and dropped bubble gum where the shooting occurred, on the side of the Old Mohawk road, close in time of the shooting.[8] *Pet. Ex. 4*. at 1085.

B. Police Investigation Into Petitioner

Investigating officers almost immediately identified petitioner as the primary suspect in the case. *Pet. Ex. 4* at 931. They became suspicious of petitioner because they felt that she was too lighthearted upon learning of her daughter Cheryl's death and went on to display a pattern of making jokes at times that felt inappropriate to them. *Pet. Ex. 4* at 850, 930. Officers felt that petitioner seemed to be enjoying the attention. *Id.* at 244-45. Emergency hospital staff found her too calm and described her as "cool-headed" and "composed." *Id.* at 522. Detectives described that upon questioning petitioner, she had talked about her boyfriend Robert Knickerbocker rather than the facts surrounding the shooting. *Id.* at 896.

When petitioner did describe the shooting to police officers, her story changed over time. *Id*. at 249-252. For example, petitioner gave police the order in which the children were shot initially, but later said she could not remember who was shot after Christie. *Id.* at 250. Petitioner initially said that the suspect stuck his arm in the vehicle to shoot the children, but she later stated that he could have climbed in the car completely. *Id.* She changed her story about the description of the assailant, and the moment when she realized she too had been shot. *Id.* at 904.

A .22 caliber gun was used in the shooting but was not found at the crime scene and despite a vast outpouring of resources over a period of months, the gun used to shoot petitioner, and her children was never located. *Id.* at 313. Immediately after the crime, petitioner informed police that she owned a .22 caliber rifle which she kept at her house. *Id.* at 898. She volunteered

[8] Pex testified that when examining the cordoned off crime scene area: "I found some beer cans that looked like they hadn't been there very long, and I found some bubble gum laying beside the road. *Pet. Ex. 4* at 1085.

to sign a waiver so that the police could search the property and take possession of the gun. *Id.* At the house, police found many letters to her boyfriend Robert Knickerbock, as well as a diary in which she had written her feelings about him. They also found her .22 rifle and cartridges in the magazine. *Id.* at 904.

Oregon State Crime Lab criminalists examined the crime scene and petitioner's car. They determined from blood spatter evidence analysis that Cheryl Downs was not shot in the car as petitioner described but was shot outside the car at least once. *Id.* at 1608. They concluded that petitioner's version of events did not hold up due to this discrepancy. Experts also examined the casings found at the crime scene and compared them to the cartridges in petitioner's 22. rifle found at her home. *Pet. Ex. 4* at 1217. They concluded that the casings found at the crime scene had matching markings to the cartridges in petitioner's rifle which proved that the cartridges in petitioner's rifle in her home had once been in the murder weapon. *Id.* This became the State's most powerful evidence of petitioner's culpability.

Police also spoke with various witnesses who provided them evidence which challenged petitioner's timeline of events. For example, her friend Heather Plourd, who Diane and her children visited prior to the crime, had a next-door neighbor who remembered hearing a door slamming as she set her coffee maker and testified that was at around 9:40 p.m. rather than closer to 10:00 p.m. as petitioner asserted.[9] *Id.* at 440. This became the undisputed timeline even though petitioner believed she left there later. A man who was driving on the same route as petitioner was driving to the hospital told police that he was caught behind her on the dark curvy road heading to Eugene. *Id.* at 453. He claimed that petitioner was driving at a snail's pace—less than

[9] While neighbor Dolores Holland testified that she remembered the door slam at 9:40 p.m. at trial, she initially told investigators it was at 9: 50 p.m.

ten miles an hour, for the duration of the over two minutes he drove behind her. *Id.* at 454. This became unequivocal proof that petitioner drove slowly because she was waiting for her children to die. Petitioner denied that she drove slowly and the man's testimony that he drove by petitioner at around 10:15 p.m. not far from the scene was ignored evidence that petitioner's timeline was likely accurate. *Id.* at 455.

It was not until many months later that her recovering daughter Christie developed a latent memory—after considerable questioning and therapy—that her mother had shot her. This disclosure finally provided the state enough evidence to indict petitioner[10]. *Pet. Ex. 8*[11] Petitioner was finally indicted on February 28, 1994, on one count of Murder, two counts of Attempted Murder, and two counts of Assault in the First Degree nearly nine months after the shooting. *Pet. Ex. 9*[12].

C. The State's Case At Trial

At trial, petitioner was convicted of all counts. *Pet. Ex. 3*. The jury struggled to reach a verdict and deliberated for three long days. The jury informed the court that they reached a verdict on the four counts relating to the surviving children Danny and Christie but could not meet the required unanimity standard for the Murder count. *Pet. Ex. 10*[13]. The jury told Judge Foote they had reached an impasse and that the individual jurors were entrenched in their positions and did not see themselves reaching a unanimous decision. *Id.* However, Judge Foote ordered the jury to continue deliberations into the night until they reached a decision. *Id.* In the early hours of Sunday morning after an 18-hour day of deliberations, they jury returned a verdict

[10] Hugi first convened a grand jury in June 1983 but did not return an indictment until February 1994.
[11] Christie Downs' Grand Jury Testimony dated January 27, 1984.
[12] Indictment dated February 28, 1984.
[13] Juror Note #9 dated June 16, 1984.

of guilty on the Murder count. *Pet. Ex. 11*[14] at 575. The jury informed the court that the non-Murder counts were not unanimous. *Id.* at 576. The State agreed in petitioner's 1991 post-conviction trial that the four counts relating to Danny and Christie were 10-2 convictions. *Pet. Ex. 12*[15] at 39.

The State's theory of the crime cited that petitioner was obsessed with her boyfriend Knickerbocker who did not want children. *Pet. Ex. 4* at 248, 287-288. Petitioner therefore plotted to kill her three young children in order to be free to be in a relationship with him. *Id.* at 305. The prosecutor, Fred Hugi, alleged that petitioner orchestrated a situation so that she and her children were alone at night on a deserted road in rural Oregon. *Id.* at 308. She stopped the car and then shot all three of her children. Afterwards, she shot herself in the arm and disposed of the gun on the way to the hospital so that police and hundreds of volunteers were never able to find it. *Pet. Ex. 4.* at 303. Then petitioner drove extremely slowly waiting for her children to die before she arrived in Eugene at McKenzie Willamette hospital at around 10:30 p.m. *Id*.

V. KEY EVIDENCE AGAINST PETITIONER

The following sections address the key evidence at trial that led to petitioner's wrongful conviction. First, section (A) describes the state's reliance on toolmark evidence, now inadmissible scientific evidence in Oregon. Section (B) addresses Christie Downs' memory of her mother shooting her. Memory scientists conclude her brain most likely never consolidated her memories of the shooting due to the injuries she sustained. Her latent memory was most likely suggested to her over a period of months. Section (C) discusses the blood spatter evidence that was submitted. This was based on a false premise, and examiners missed a more likely

[14] Transcript of proceedings attached to DNA Motion.
[15] Londhal Memorandum In Support of Summary Judgment dated May 9, 1991.

theory. The process through which these conclusions were drawn were not well documented. Section (D) discusses prosecutor Fred Hugi's effective strategy to demonize petitioner by making her motive her entire life story which gave him the chance to introduce an enormous amount of evidence that had no bearing on her culpability but served to prejudice her. And Finally, section (E) addresses the State's emphasis on petitioner's demeanor after the crime and how it was used as evidence of her guilt.

A. **Toolmark Evidence**

Certainty over the toolmark evidence has long been the State's trump card against any claim that petitioner is innocent. This confidence was displayed by AAG Londahl during petitioner's federal habeas trial in 1999 in response to petitioner's attorney, Wendy Willis' innocence arguments. Willis discussed nine-year-old Christie Downs' initial lack of memory about what had happened to her, then her later confusion, and a later alleged memory of her mother's culpability after a multitude of police and therapy interviews. Pet. Ex. 13[16]. Given what was described as the "taint" on Christie Downs' memory, and James Haynes' many confessions to multiple affiants, Willis argued that there should at minimum be an evidentiary hearing on the affiants claims. *Id.* at 29-32. Londahl responded with a statement that put an end to Willis' argument.

> "She now alleges that James Haynes confessed to something. But he didn't put a Ruger shell in her rifle found in her house matching the exact markings on the 22 bullets that were found on the Old Mohawk Road." *Id.* at 33.

At her criminal trial, the state had extremely limited forensic evidence of petitioner's culpability. It was undisputed that petitioner was with her children when they were all shot and that she drove her car, injured, to the Eugene hospital afterward. The gun used by the shooter

[16] Transcript of Habeas Petition Oral Argument dated January 25, 1999.

was never found. *Pet. Ex. 4* at 313. There were no fingerprints tying petitioner to a crime, nor was there any gun residue found on petitioner's hands when tested soon after the incident which could have been evidence of her shooting a gun. *Id.* at 387-388.

The State had to rely on the testimony of two experts, Jim Pex, and John Murdock, who followed the Association of Firearm and Toolmark Examiners ("AFTE") method to identify cartridge cases found at the scene as being discharged from a gun located in petitioner's home.

The importance of this evidence to the State's case was emphasized by the prosecutor at trial. In closing he repeatedly returned to this crucial evidence:

> The police went to her apartment. They removed the diary which you have in evidence, which you've all read by now. The Glenfield Rifle that had the two cartridges in it that had been in the murder weapon, had been in the weapon that murdered Cheryl and seriously injured Christie and Danny. *Pet. Ex. 11* at 9.

and

> What we know for sure is that the two casings were found in the roadway at this point here and these casings match the ones inside the car that killed the kids and they matched the one that killed Cheryl. They match the one in her rifle in her bedroom closet. *Id.* at 30.

and

> I've got Jim Pex, John Murdock, and Bart Reid all saying that in fact the casings found in the car match the cartridges found in Mrs. Downs rifle." *Id.* at 15.

and

> If in fact the cartridges that were in her rifle which she possessed and had sole control over matched the ones that shot and killed her children and all of these things happened to come from a .22 Ruger and she's seen with a 22. Ruger the night she leaves Arizona for Oregon, then there's no way out for Mrs. Downs. *Id.* at 16.

Considering that this case hinged on the certainty of the toolmark evidence, the Oregon Court of Appeals recent decision in *State v. Adams*, 340 Or App 661, 663, 572 P3d 291, 292 (2025), discrediting the method used in this case (which has been confirmed by forensic scientist Matt Noedel), should alone warrant petitioner's requested DNA testing. Unlike more recently

convicted individuals, petitioner's case is too old for her to seek a reversal through post-conviction based on this new case law.

i. State v. Adams

The AFTE theory is described at length in *State v. Adams. 340 Or App 661 (2025)*. The initial premise is that unique marks are left inside every firearm during the manufacturing process. *Id.* at 668. Those marks are called "toolmarks." *Id.* Because the tools break down during manufacturing, the marks they leave change from firearm to firearm. *Id.* When each firearm is discharged, the bullets and cartridge cases have microscopic features created by the toolmarks. *Id.* The theory suggests that because the toolmarks are unique to each firearm, the microscopic features on each discharged bullet or cartridge must be unique too. *Id.* Thus, because bullets and cartridges have unique marks, the resulting marks on each bullet or cartridge case after firing or discharging are also distinct. *Id.* The theory claims these distinct marks allows a trained examiner to differentiate between bullets fired by one firearm versus another. *Id.* at 669.

The method requires examiners to compare the bullets, casings, and cartridges to determine whether there is a "sufficient match" to support an identification. The evaluator uses a microscopic evaluation to make a subjective interpretation of the correspondence of features on the ballistics evidence.[17]

In *Adams,* a forensic examiner used the AFTE method to analyze a Taurus handgun found in the defendant's residence and the cartridge casings found at the crime scene. *Id.* The examiner concluded the weapon seized from the residence was the same as the weapon fired at

[17]The detailed methodology is described by the National Institute of Justice. Nat. Inst. Just., Recovered Firearm Without Related Evidence (July 23, 2023), https://nij.ojp.gov/nij-hosted-online-training-courses/firearms-examiner-training/module-11/recovered-firearm-without-related-evidence#comparison-process.

the crime scene, based on the cartridges. *Id.* The examiner's conclusion was confirmed by a second examiner and was admitted at trial.

On appeal, the issue was whether the state failed to establish that the AFTE method is scientifically valid and thus that evidence based on it is admissible under *State v. O'Key*, 321 Or 285, 899 P2d 663 (1995) and *State v. Brown*, 297 Or 404 687 P2d 751 (1943). *Id.* The court determined that the state did not meet its burden to show that AFTE is scientifically valid, or more specifically "that it is capable of measuring what it purports to measure and is able to produce consistent results." *Id.*

The Court found the method does not actually "measure the degree of correspondence between shell casings or bullets." *Id.* Instead, the decision about whether bullets or cases match hinges entirely on "subjective, unarticulated standards and criteria arrived at through the training and individualized experience of the practitioner." *Id at* 295. Additionally, the Court found the method was not replicable or reliable. Because the standards are subjective and unarticulated, the method does not produce consistent results:

> "Multiple practitioners may analyze the same items and reach the same result, but each practitioner reaches that result based on application of their own subjective and unarticulated standards, not application of the same standards." *Id.*

As a result, the Court determined admitting this evidence was an error by the trial court. *Id.* at 314. The Court found the error was not harmless and reversed and remanded. *Id.*

ii. <u>The ATFE theory and method has resulted in uncountable numbers of wrongful convictions</u>.

An Amicus Curae brief submitted in the *State v. Adams* case by the Oregon Forensic Justice Project, summarized the history of scientific studies that led to understanding just how unscientific the process is, as well as the damage wrought through the wrongful convictions that

have resulted.[18] According to the brief, a series of reports written by separate panels of impartial scientists over the last seventeen years all agree that the foundation for scientific validity has not been established for firearms identification. *Id.* at 26. The first report published in 2008 by the National Academy of Sciences addressed the question of whether firearm tool marks are unique—"whether a particular set of toolmarks can be shown to come from one weapon to the exclusion of all others." The NAS answered the question in the negative. *Id.* at 21.

The second report issued by a different panel of NAS experts a year later evaluated concepts of repeatability and reproducibility. *Id.* at 21-22. The NAS was concerned about the subjectivity of the AFTE "sufficient agreement" standard. *Id.* at 22. The subjectivity is twofold. *Id*. First the ATFE examiner decides when marks "match. Second, the ATFE examiner decides how many marks need to match before there is an identification. *Id.* NAS concluded that

> "the decision of the toolmark examiner remains a subjective decision based on unarticulated standards and no statistical foundation for error rates." *Id.*

A third report was issued in 2016 by the President's Counsel of Advisors on Science and Technology (PCAST). *Id.* PCAST, like NAS conducted extensive research and identified the problem with a method based completely on the "subjective experience of each firearms examiner." *Id.* at 23. This study focused on the error rate and concluded that existing studies seriously underestimated the rate at which examiners wrongly concluded that bullets or casings were fired from the same gun when they were not. *Id.* They concluded that the analysis falls "far short of the scientific criteria for foundational validity." *Id.* Since this study, there have been additional studies which suggest that error rates could be as high as 53% for bullets and 44% for

[18] Brief for Forensic Justice Project as *Amicus Curae* Supporting the Defendant, 1, *State v. Adams,* 340 Or App 661 (2025).

casings—that examiners barely have a 50/50 chance of making drawing the correct conclusion. *Id.* at 24.

According to the brief, there are at least 35 likely or known misidentifications that have been now documented. It writes that:

> Those numbers likely represent only a small fraction of the total number of misidentifications and wrongful convictions attributable to firearms identification. Firearm examiners have, in fact, admitted as much, acknowledging the existence of an unknown number of largely undocumented and untraceable misidentifications. *Id.* at 3.

iii. <u>Toolmark expert Matt Noedel's analysis of the ATFE analysis in Downs</u>

Petitioner consulted forensic scientist Matthew Noedel to evaluate the methodology of the AFTE analyses conducted by Pex and Murdock. *Pet. Ex. 14*[19]. Mr. Noedel is a distinguished member of the Association of Forearm and Tool Mark Examiners. *Id.* at 1. He has over 38 years of experience as a professional forensic scientist and provides training for prosecution and defense attorneys throughout the United States and Internationally. *Id.* He conducts annual proficiency training in firearm and tool mark analysis and is a member of the ATFE. *Id.*

Mr. Noedel reviewed original examination notes, reports, and testimony. He confirmed that Murdock used ATFE theory of identification and following the same criteria now ruled inadmissible in *State v. Adams*. *Id*. at 5. Pex's analysis lacked sufficient documentation, and the images of his microscopic comparison are of insufficient quality to determine the amount of agreement. *Id.* at 2.

The toolmark evidence that has always been the State's fail-safe against any claim of innocence. Without this discredited and now inadmissible evidence to rely on, the case against

[19] Declaration of Matt Noedel dated September 30, 2025.

petitioner is severely weakened and her innocence claim and request for DNA testing should be taken seriously.

B. Christie Downs' Testimony

The State did not have enough evidence to indict petitioner until after her daughter Christie Downs identified her as the shooter nearly eight months after the incident. *Pet. Ex. 8*. Over the course of those many months after the shooting, the State subjected Christie to countless interviews and therapy sessions in an effort for her to tell them what happened, despite Christie initially saying she did not remember what happened.

i. Evolution of Christie's Memory Return

When Christie arrived at the hospital on the night of May 19, 1983, she was near death. According to medical records she was bleeding at an "alarming rate" and had been in a state of hypoxia for an unknown amount of time. *Pet. Ex. 15*[20]. On May 20, she experienced seizures that nearly completely deprived her of her ability to speak. *Pet. Ex. 16*[21]. On May 26, a staff psychologist from the hospital indicated that Christie did not know what had led to her hospitalization. *Pet. Ex. 17*[22].

On May 27, 1983, Dr. Steven Wilhite attempted to learn about if Christie had any recall from the night of the shooting. He interviewed Christie as follows:

> WILHITE: Do you know what happened to you?
> CHRISTIE: No (shaking her head negatively)
> WILHITE: Do you know what happened to your brother and sister?
> CHRISTIE: No.
> WILHITE: Do you know whether your brother is?
> CHRISTIE: Yes (nodding in the affirmative)
> TRACY: Did you go for a ride in the country before you came into the hospital?
> CHRISTIE: I don't know.
> WILHITE: Do you know how you got hurt?

[20] Christie Downs 5-19-1983 Medical Report.
[21] Christie Downs 5-20-1983 Medical Report.
[22] Christie Downs McKenzie-Willamette Memorial Hospital Progress Notes.

CHRISTIE: No (shaking head negatively)
WILHITE: Do you know how your brother got hurt?
CHRISTIE: No.
WILHITE: Do you know how your sister got hurt?
CHRISTIE: No.
WILHITE: Do you know where she is?
CHRISTIE: No (started crying). *Pet. Ex.18* [23].

About a month later, on June 16, 1983, Christie was again questioned, this time for over two hours, by Paula Krogdahl, a counselor who was hired by the District Attorney's office to question Christie about who shot her and her siblings. Krogdahl began the interview by demanding to know how Christie was hurt. *Pet. Ex. 19* [24] at 2. Significant questioning focused on petitioner, such as whether petitioner owned guns, whether petitioner hit Christie, and if petitioner hurt Christie when she was misbehaved. *Id*. at 3. Christie provided little information but when asked who shot her and her siblings. Christie said, "I don't know…I think…I think…" *Id.*

On June 22, 1983, a doctor from the hospital contacted child trauma psychologist Dr. Carl Peterson to work with Christie. Peterson first met with Christie on June 25, 1983. According to Peterson, Child Protective Services requested that he provide Christie with a "safe therapeutic environment to help her work through and resolve the trauma." *Pet. Ex. 4* at 697. Based on the content of the letter sent to him by Susan Staffel, the CPS case worker, the intended focus was more to help the criminal case. *Pet. Ex. 20* [25]. The body of the letter clearly indicated that remembering what happened was a priority. The first paragraph emphasized the significance of the fact that her mother was the suspected perpetrator, and the second paragraph addressed

[23] May 27, 1983 Dr. Wilhite Interview with Christie Downs at McKenzie Willamette Hospital.
[24] Paula Krogdahl interview of Christie Downs dated June 16, 1983.
[25] Susan Staffel Letter dated June 27, 1983.

Chrisie's inability to remember the night of the shooting. *Id*. The third and final paragraph was an official referral. *Id*. *See also Pet. Ex. 4* at 744-46.

By July 11, 1983, petitioner was allowed no further contact with either of her children who she had visited and remained in touch with during their hospitalization. *Pet. Ex. 21*[26].

From then onwards, Christie had weekly sessions with Carl Peterson. *Pet. Ex. 4* at 696. According to Peterson's trial testimony, he always believed that Christie remembered the event, but he felt that she put the memories into a "vault because it was unsafe to bring them out." *Id.* at 699. Essentially, he explained that Christie was suppressing these memories. Then in early January 1984, Christie "went through the specific events of the night" with her foster parents, the Slavens. *Id.* at 702. Dr. Peterson explained that he "unlocked the safe and the memories came out in various places…initially with the Slaven household and then some other people." *Id.*

Almost as soon as Christie implicated her mother in the crime, she was called to testify at Grand Jury as follows, in the last week of January 1984 and an indictment immediately followed:

> Q: Do you remember any man being there that night?
> A: No.
> Q: Were you able to see who shot Cheryl?
> A: Yeah
> Q: Were you able to see who shot Danny and you?
> A: (Nods affirmatively).
> Q: could you tell us who that was?
> A: My mom.
> Q: All right. And what's her name
> A: Huh?
> Q: What's her name?
> A: Elizabeth Diane Downs.
> Q: Has anybody told you to make up a story about this?
> A: No.
> Q: And has anybody told you to say anything that's not true?
> A: No.
> Q: And how do you know this, that she is the one who did this?
> A: I was watching. *Pet. Ex. 8*.

[26] Susan Staffel Interoffice Memo dated July 11, 1983-no contact order.

ii. Carl Peterson Cross-Examination

Carl Peterson, Christie Downs psychologist and key State witness, testified in depth about the more than six months process he went through with Christie before she—according to Peterson—felt safe to express her memory. But the testimony defense counsel elicited on cross examination makes it impossible to believe that Peterson's agenda was not heavily tainted by bias against petitioner and determination to have Christie remember that her mother committed the crime.

For example, Peterson conceded that Christie frequently made clear that she did not remember what happened and appeared to be possibly influenced by the beliefs of other people, that her mother was guilty.

> DEFENSE: Christie at some of the time that you were involved with her expressed to you that she didn't know who had hurt her and in conjunction with that wondered if it must have been her mother because in this case and some other people were telling her that they thought she had done it, correct?
> PETERSON: She said, "it seemed like it might have been my mother," I think were her words at one point. And a number of times were places about where she made those kinds of references.
> DEFENSE: Did she say kind of words to the effect that, "Now, my mom can't be with her boyfriend because she thinks – because he thinks she done it"?
> She further indicated that her mom is not able to go back to Arizona because some of the people there think she done it and then at the conclusion of that Christie stated, "It almost seems like she done it." That would be pretty roughly the way she said it?
> PETERSON: That would be the order in which she said it, yes. That's the testing of waters that I think she was doing to see if it was safe to let those memories be known.
> DEFENSE: It's also possible that she was relaying exactly what she said, that it almost seems like she did it because some other people are saying she did it?
> PETERSON: That's possible. I don't have any evidence to support that, but that's possible.
>
> *Pet. Ex. 4* at 720-721.

Later, when questioned about certain information that was withheld from Christie, Peterson admitted that after Christie asked why petitioner had only visited her twice in hospital, he never corrected Christie that petitioner had visited her on many occasions before she was banned from seeing Christie. *Id*. at 780. He admitted that he never relayed to Christie that her mother denied the shooting. *Id*. at 781. He never discussed with Christie that there were other theories about what had happened, such as an unknown male who may have been the perpetrator. *Id.* Defense counsel also forced Peterson to admit that it would have been easy for Christie to believe that her mother must have done the shooting because everyone of importance in her life was still able to visit her—including her father and grandparents, but petitioner was not. *Id.* at 780.

Peterson admitted that by the time that Christie was able to relay her "memory" in mid-January, Christie had discussed her mother's culpability with Susan Staffel from Child Protective Services, Evelyn Slaven her foster mother, Ray Slaven, and Ray Broderick, a prosecutor with the district attorney's office.[27] *Pet. Ex. 4* at 824. He also admitted that days prior to her grand jury testimony, Dr. Peterson decided that he should work with Christie to create a list of safe people and not safe people. They placed petitioner on the not safe list. *Id.* at 825.

Peterson also agreed that he possessed no expertise concerning whether Christie's memory was an actual memory or whether it was created by some "other input that maybe is not an actual factual perception." *Id.* at 731. He also admitted that a couple of weeks before trial he had consulted with Doug Hintzman at the University of Oregon Psychology Department about memory repression and suppression, because he did not possess the expertise to know which

[27] According to prosecutor Fred Hugi's 1991 PCR deposition, Broderick staged a re-enactment of the crime with Christie during this process.

theory might be applicable if either. *Id*. at 733-40. When asked about his own expertise on memory and perception, Peterson admitted that it is "not in his realm of expertise" and that he did not have 'expertise on how memories are stored or the perceptions." *Id*. at 705-706.

Nonetheless, Christie's testimony was likely powerful and heartbreaking to the jury and became strong evidence of petitioner's culpability.

iii. Post-Conviction and Federal Habeas Claims Relating to Christie

On post-conviction, petitioner raised one claim relating to Christie's testimony which was denied on Summary Judgment. (*Pet. Ex. 22*[28] at 5-6). During her federal habeas case, petitioner's attorney Wendy Willis forcefully litigated Christie's memory evidence, and claimed Christie was coerced to testify to petitioner as her shooter. *Pet. Ex. 23*[29] at 2-3. Willis pointed to Christie's compromised mental state, including her disclosures under the influence of a drug, Dilantin, that causes mental confusion *Id.* at 19-20. Nonetheless, Willis's attempts to depose Christie were denied, and Christie's memory was not subject to additional examination. *Pet. Ex. 24*[30] at 8.

iv. Dr. James McGaugh and Dr. Daniel Reisberg's Conclusions 2025

Two leading experts on memory, Dr. James McGaugh and Dr. Daniel Reisberg, evaluated Christie's memory for this proceeding. Dr. McGaugh is the foremost expert in the field of memory consolidation. *Pet. Ex. 25*[31] at 3-50. Dr. Reisberg is a leading expert on perception, memory, and cognition. *Pet. Ex. 26*[32] at 3-23.

In his report, Dr. McGaugh explains some of the extensive scientific evidence concerning the formation and assessment of memory:

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[28] Post Conviction Relief Findings-Of-Fact dated January 6, 1992.
[29] Habeas Petition dated July 8, 1988.
[30] Order Denying Deposition of Christie Downs dated January 6, 1998.
[31] Declaration and Report of Dr. James McGaugh.
[32] Declaration and Report of Dr. Daniel Reisburg.

> Experiences create memories that are initially fragile and subsequently, over time become lasting or consolidated. Emotionally stressful experiences create strong lasting memories. They do not create either a temporary or lasting inability to remember such experiences.
>
> Brain injury occurring shortly after an experience can block the formation/consolidation of memory of the experience. Such memories do not recover either over time or with intensive efforts to induce recovery.
>
> Individuals can be induced to state that they remember events that never occurred. The creation of false memories can result from repeated suggestions to subjects that they can and should remember the events that never occurred. *Pet. Ex. 25* at 51-52.

According to McGaugh, without the brain damage Christie sustained, the shooting would have created a "very strong memory." *Id*. at 52. Her initial lack of memory "strongly suggests that she did not have a memory of the shooting experience." *Id*. Rather, he believes, the "shooting caused effects on her brain processes that blocked the formation of memory of the experience" and since her memory was never created, it would be impossible to recover it. *Id.* Reisberg draws the same conclusion as McGaugh. *Pet. Ex*. 26 at 28.

Reisberg writes that Christie's initial response to the representative from the District Attorney's office right after the crime, that she did not remember what occurred was likely the disclosure that represented the truth. This is because like Dr. McGaugh, Dr. Reisberg concludes that Christie's severe injuries prevented her brain from ever consolidating a memory of the shooting. Reisberg explains that:

> Consolidation literally involves the creation of new neural connections, so that we can sensibly speak of the brain going through a process –again: extending over hours – of "rewiring." Consolidation does not require any attention or mental effort, or any further thought about the target events. Consolidation does, however, require a stable and well-functioning biological environment. If, therefore, the person is under enormously high stress, or not receiving adequate oxygen, or suffering from a diminished blood supply, the process of consolidation cannot go forward, and so no enduring memory is established."[33]

[33] *Id.*

> "There is no question that injuries like C.D.'s would likely have interrupted the process of consolidation. On this basis, it is not at all surprising that, in the months after the shooting, C.D. had no memory for the events of 5/19/83. That is precisely what we would expect, given the nature and extent of her injuries, injuries that would likely have // disrupted consolidation, leaving her with no enduring memory for the horrible events she experienced. I*d.* at 26.

Dr. Reisberg examined the prosecution's theory that Christie did not reveal her memories of the shooting for nearly eight months is because she did not feel safe to do so for a long while. Reisberg argues that the "notion that people can as an act of self-protection block or suppress painful memories is widely endorsed in commonsense discussions of memory, but that sharpy contracts with scientific findings." *Id.* at 27. According to Reisberg, "the scientific evidence overwhelmingly" supports the notion that after a traumatic experience, people have too much memory if anything. *Id.* at 28. Reisberg concludes that the questioning of Dr. Peterson and others are exactly the sort of influences that could have led Christie to create a false memory. *Id.* at 29.

He also notes that at trial there were a number of assertions made that are contrary to the actual science. In closing Hugi argued, wrongly, that "it is not easy to tamper with memory in general" and that "long range memory is hard to change." *Pet. Ex. 11* at 39.

Dr. Reisberg says that these claims are "difficult to reconcile" with the science available in 1984 or now. *Id.* at 28. Yet it is what the jury was told.

C. <u>Blood Spatter Evidence</u>

Convincing the jury that Cheryl Downs was shot outside of the car was of great importance to the State's case. The blood spatter on the passenger door rock panel was tangible physical evidence, of which the State had very little. The State used this evidence to prove that petitioner's story of where the children were shot was a lie and thus, she committed the crime. This was evidence that prosecutor Fred Hugi emphasized and re-emphasized in his closing argument.

> We were talking about blood spatter evidence which was outside of the vehicle. We discussed that pretty thoroughly and that's important of course because it proves that Cheryl was outside the vehicle when she was shot and if that's true that proves Mrs. Downs recollection or stories of lies about this event are just that and it makes her guilty of this crime. It's an important piece of evidence. (*Pet. Ex. 11* at 450).

and

> Say Mr. Pex is a little bit sloppy, and he misses the blood spatter on the outside of the car or doesn't, with his microscope make these marks match up? She's home free. (In context of if Christie had not been able to testify*). Id.* 506.

and

> We heard testimony on blood spatter from Mr. Pex whose conclusion is that Cheryl was shot outside the car by a gunshot. *Id*. at 12.

and

> Why is that so important? Who cares if there's blood on the outside of a car really? It's real important because if Cheryl was shot outside the car, where does that fit into any of Mrs. Downs' stories. It's never there. *Id*. at 13.

i. <u>Jim Pex Analysis</u>

Jim Pex the Oregon State Crime Lab criminalist who undertook the blood pattern analysis (BPA), testified that he noticed fine droplets of blood spatter on the passenger door rock panel during his first daytime examination of petitioner's car several days after the shooting when accompanied by his colleague Charles Vaughn. *Pet. Ex. 4.* at 1089. He tested one droplet of blood to confirm it was human blood, rather than animal. *Id.* at 1090. Having confirmed the singular droplet of blood was from a human, he considered the location of the children in the car. *Id*. at 1091. He concluded, without further testing, that the blood had to be Cheryl Downs' since she was the only child seated in the front of the car. *Id*. He assumed that the blood had to be the result of Cheryl being shot at least once outside of the car. *Id.* at 1102. Since it made most sense to Pex that it would be Cheryl's blood, he proceeded to try to prove it. Pex, however, based this assumption on a scientifically incorrect conclusion about high velocity blood spatter. At trial he testified:

> "It is what we would refer to as a high velocity blood spatter pattern, one that could only be created by the discharge of a firearm. There's also minute droplets

that correspond with this in the door threshold which means the door also had to be open at that time." *Id.* at 1090.

Pex's conclusion that the only possible explanation for bloodstains on the rock panel was that Cheryl was shot outside with the door open, is wrong.[34] Forensic scientist Karen Green has undertaken an analysis of the blood spatter evidence in this case. She writes in her report that "simply because an observed pattern has the characteristics of a high velocity impact event it is not appropriate to conclude that it must have originated from a gunshot." Pet. Ex 27[35] at 6. This is because "high velocity is certainly encountered in gunshot events, but it is not limited to them."[36]

Green observes that "a pattern resulting from the expiration[37] of blood can contain similar characteristics." Expiration stains can range from heavy large stains to light mist-like stains comparable to those found in gunshot situations. *Pet. Ex. 27* at 6. "At times these stains can mislead the analyst, and their similarities demand proper evaluation."[38]

Green argues that given the fact that least two of the children "sustained wounds to the lungs" and that two of three children were removed through the passenger side door where the blood spatter at issue was located, this alternative explanation should have been considered. *Id.* at 6. She notes that when LCSO Sgt. Rutherford went to secure the car when it was parked in the hospital parking lot, "he observed medical supply wrappings and supplies on the rear

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[34] When challenged during cross examination by defense counsel James Jagger on the fact that high velocity blood spatter can be caused by things other than a gunshot, Pex avoided answering the question entirely by pivoting back to discussing medium velocity. *Id*. at 1262.

[35] Declaration and Report of Karen Green.

[36] Bevel Gardner, *Bloodstain Pattern Analysis: With an Introduction to Crime Scene Reconstruction 3rd Edition.* CRC Press, 2008 at 201-202.

[37] ASB defines an expiration pattern as being a "blood stain pattern resulting from blood forced by airflow out of the nose, mouth, or a wound." Pet 29 at 5.

[38] Bevel Gardner, 2008 at 225.

floorboards. *Id*. This suggests that aid was rendered in that area, furthering the possibility of artifact bloodstains unrelated to the shooting event*." Id.*

Pex's trial testimony reveals that once he had drawn the initial incorrect conclusion that the blood spatter could only be from a gunshot, his only consideration was how to show that the blood spatter on the rock panel came from Cheryl Downs being shot outside of the car.

His results would seem implausible. For Pex's theory to be correct, the shooter would have either needed to throw their body across the inside of the car from the driver's side to the passenger side to be able to reach Cheryl Downs on the ground outside of the car, or the shooter would have needed to crouch in an unnatural pose to place the gun where it needed to be to match Pex's point of origin[39]. Below are photos he took to demonstrate what position Cheryl and the gun would have needed to be in for his theory to be correct. Nonetheless this was the analysis presented to the jury.

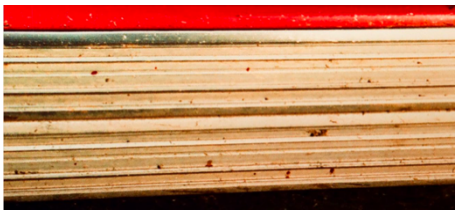


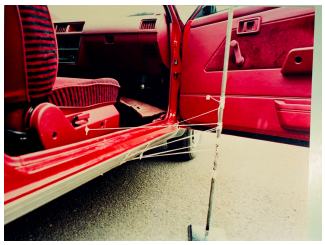
(Please refer to *Pet. Ex*. 28[40]).

Karen Green is unable to complete a thorough analysis of Pex's work because he produced insufficient documentation and data. *Pet. Ex. 27* at 10. Pex testified that he made no

[39] Pex also concluded that the gunshot was from very close range. *Pet. Ex. 4* at 1197.
[40] Photo Exhibit.

written notes of his calculations during the stringing process from which to analyze his conclusions. *Pet. Ex. 4* at 1250. The "string method" which Pex used to determine the origin of the bloodstain pattern on the rock panel would have required Pex to select "several clear and well-formed blood stains on the panel—these are stains that have an elliptical shape and obvious directionality. *Pet. Ex*. 27 at 8. Strings would be placed to extend along from the angle of impact towards the source of the blood. Green has been unable to identify any well-formed stains on the rock panel, maybe because the corrugated metal of the rock panel was an unreliable surface. *Id.* at 9. Since Pex does not seem to have taken close-up photos of the stains that would have allowed for independent measurements, the problem is magnified. *Id.*





Left: Rock panel. Middle: Stringing process. Right : Area of origin. Please refer to *Pet. Ex. 28*.

Furthermore, Green cannot know what stains Pex used to determine the area of origin because based on the only photos that appear to exist, Pex covered the stains with tape and string so there is no way to determine what stains he relied upon. *Pet. Ex. 27* at 9.

Adding to concerns about Pex's testing, evidence appears to be missing. Despite the Oregon State Crime Lab and the Lane County District Attorney's office providing petitioner with all the materials in their possession, Green could not locate any notes or reports indicating whether the human blood sample has ever been source tested or even if the sample remains. *Id.* at 5. Green could not locate any notes, photos, or reports to indicate when the panel was removed

from the vehicle nor evidence that it was listed as a lab exhibit at trial. *Id.* It appears that Pex transported evidence to Herbert MacDonnell, a leading blood spatter expert in New York on June 12, 1984. *Id.* at 6. Pex documents that it was returned on June 18, 1984, but there are no notes or chain of custody describing what exhibits exactly were transported or what was done with them. *Id.* Nonetheless, the actual rock panel from the vehicle should exist and assuming it has properly stored, it should be available for DNA testing. *Id.*

Ultimately, Green concludes that Pex's belief that the blood spatter could only have been created by a gunshot is invalid and his claim that the "observed stains around the passenger door originated from a single event or from a single person is unsupported." *Id.* at 10.

i. <u>Blood pattern analysis as a credible scientific method</u>

While BPA has not been ruled categorically inadmissible evidence, there have been studies over the last two decades that raise serious concerns about the ways in which practitioners draw conclusions. A 2009 study authored by the National Academy of Sciences criticized BPA and stated: "The uncertainties associated with blood pattern analysis are enormous" and "in general, the opinions of bloodstain pattern analysts are more subjective than scientific.[41] In addition, many BPA cases are prosecution driven or defense driven, with targeted requests that can lead to context bias." *Id.* The 2016 President's Council of Advisors on Science and Technology report concluded that blood spatter lacked sufficient validity and could be subjective.[42] It recommended that objective studies be undertaken, and error rates be disclosed in court.

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[41] Aug. 2009, *Strengthening Forensic Science in the United States: A Path Forward*, Committee on Identifying the Nees of the Forensic Sciences Community, National Research Council, Aug. 2009. at 200 *See.* chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf.

[42] *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*, Executive Office of the President. President's Council of Advisors on Science and Technology Sept 2016, See chrome-

In 2022, the National Institute of Justice released the first large-scale rigorous evaluation of the accuracy and reproducibility of practicing BPA analyst conclusions.[43] The study was limited to practicing BPA analysts from 14 different countries of which 57% were from the United States. *Id.* at 2. They were provided with blood stain patterns that were "broadly representative of operation casework" to assess. *Id.* Each sample was shown through multiple images. *Id.* The study had three approaches to collect their assessments of the mechanisms that caused each sample. *Id.* Practitioners responded to either questions, short text summary conclusions, or classification prompts for which answers could be either definitive, included or excluded. *Id.* A response of "included" meant that there was insufficient support for either a definitive or excluded decision. *Id.* Reproducibility was assessed on all samples, but accuracy was assessed only for bloodstains where the cause was known. *Id*. One difference from casework was that practitioners were not given any facts about the case to draw from (or be influenced by). Their responses were only based on the photos of the bloodstains. *Id.*

Relevant to petitioner's case is one bloodstain sample caused by expirated blood coughed up for the purpose of the study. *Id.* The participants were asked to agree or disagree about whether the pattern resulted from a gunshot or club. *Id.* 16 participants wrongly agreed that the blood stain was a gunshot or club. Twenty-three practitioners were unable to draw a conclusion, and only four correctly concluded that the blood stain was not from a gunshot or club. *Id.* Thus, based on receiving no further contextual information about the source or circumstances of the bloodstain, less than 10% of the participants were able to recognize that the bloodstains were not from a gunshot.

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extension://efaidnbmnnnibpcajpcglclefindmkaj/https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf.

[43] *Accuracy and reproducibility of conclusions by forensic bloodstain pattern analysts*, Hicklin, Winer, Kish, Parks, Chapman, Dunagon, Richettelli, Epstein, Ausdemore, Busey, Forensic Science Int. Vol 325, Aug. 2021.

The study noted that BPA has "no standardized criteria for determining types or quantities of characteristics needed to make a given decision" so "consensus among analysts is the only available means of assessing whether an indeterminate response is appropriate." *Id*. Furthermore, the "BPA has developed multiple standards and recommendations for terminology' which means there is no "pre-existing widely used BPA conclusions standard that could be adopted for use in this study." *Id*.

In assessing results, the study explained that "even for the simplest bloodstain patterns there is notable disagreement; when provided a classification prompt of spatter on samples consisting of a single drop of blood on a non-porous horizontal surface (a drip stain) out of 105 responses, 42 were definitive and 46 were excluded. *Id.* at 6. They noted that errors were "disproportionately associated with some pattern types, which may in part be explainable by semantic issues." *Id.* The study also revealed that "participants exhibited a continuum of performance; errors were widely distributed among participants, and all participants who completed more than 50 samples made multiple errors." *Id.*

Ultimately the study determined that "conclusions by BPA analysts were often erroneous and often contradicted other analysts. *Id.* at 7. Disagreements with respect to the meaning and usage of BPA terminology and classifications suggest a need for improved standards. *Id.* Both semantic differences and contradictory interpretations contributed to errors and disagreements which could have serious implications if they occurred in case work*."Id.* This 2022 study reveals that BPA is not reliably reproducible, and analysis relies on subjective interpretations made by individual practitioners that regularly contradict what other practitioners conclude.

The standards, procedures, and analysis used by the 2022 participants was based on more sophisticated and standardized methods than were used in the early 1980s when Jim Pex drew

his conclusions about the blood spatter on the rock panel. The 1980s were early days in BPA with cruder techniques and less procedural safeguards than exist now.

iii. The Rapid Expansion of Blood Pattern Analysis Testimony in the 1970s and 1980s

Modern day blood pattern analysis in criminal cases was pioneered by Herman MacDonell.[44] In 1971 he wrote a report after receiving a Department of Justice grant entitled "Flight Characteristics and Stain Patterns of Human Blood."[45] This became known as the founding text of modern American BPA.[46] Even then, MacDonell openly acknowledged that his methods could not be quantified, and he made little attempt to express data in a statistical manner. *Id.* at 7. After his report was written, he left his fulltime job and began working as a BPA instructor and forensic expert for hire. *Id.* at 8. Within a couple of years MacDonell received grants and began teaching police officers across the country on how to analyze bloodstain patterns. *Id.* He established his own school (out of his basement) and accredited officers upon completing a 40-hour training that he had devised. *Id*. This led to a swift expansion of expert BPA testimony introduced in criminal cases in states across the country by the mid to late 1970s.[47] It was not until 1980 that the first State Supreme Court ruled that blood pattern analysis was admissible expert testimony. *State v. Hall*, 297 N.W.2d 80 (1980). The judges did not weigh in on its accuracy, but instead on Herbert MacDonell's credentials as its leading expert, emphasizing the fact that he held training programs, ran organizations, and held annual

[44] MacDonell was ultimately discredited and incarcerated for child sexual abuse in 2011. *See* John Zick, "*MacDonell gets probation, pleads to lesser chargers in sex case."* The Leader, July 1, 2013, https://www.the-leader.com/story/news/2013/07/01/macdonell-gets-probation-pleads-to/44399208007/.
[45] Flight Characteristic and Stain Patterns of Human Blood, Herbert L. MacDonell (1970).
[46] Leora Smith, '*How a dubious forensic science spread like a virus*", ProPublica, Dec 13, 2018https://features.propublica.org/blood-spatter-analysis/herbert-macdonell-forensic-evidence-judges-and-courts/.
[47] MacDonell only ever failed five people over the more than 1000 he trained over the next couple of decades. *Id.* at 5.

seminars. *Id* at 85. One judge dissented, writing that he could not agree that "reliability of a novel scientific technique can be established solely on the basis of the success of its leading proponent peddling his wares to consumers." *Hall* at 93. The Tennessee's highest court soon after affirmed MacDonell's testimony in the 1982 case, *State v. Melson*, writing that he "obviously knew whereof he spoke." *State v. Melson*, 638 S.W.2d 342 (1982). A couple of years later, when a defendant argued that an officer who studied under MacDonell did not have sufficient understanding of science to testify as an expert, an Illinois Appellate Court responded, "We again reject the defendant's argument that this area of expertise requires substantial training in physics."[48] Other state appellate courts soon followed, affirming its admissibility based on the decisions made in these early cases.

Jim Pex testified that he began working at the Oregon State Crime Lab in 1978. *Pet. Ex. 4* at 1010. When describing his BPA training, Pex said that he attended a Portland blood spatter seminar in 1979 conducted by a "gentleman" who had studied with Mr. McDonell in New York where he was based. *Id*. at 1613. In 1980, Pex worked a Lane County homicide case alongside McDonell. *Id*. In 1983, Pex himself went to New York in 1983 and took the MacDonell course. *Id.* at 1614.

When listing his credentials at trial, Pex also mentioned receiving specialized training from Lt. Charles Vaughn who at the time was head of the Oregon State Forensic Crime Lab. *Id.* at 1081. Pex relied on Vaughn's blood spatter expertise in drawing his conclusions about the blood spatter evidence in petitioner's case. Pex testified that Charles Vaughn was at Cheryl's autopsy, and that Vaughn and he together examined petitioner's car and identified the blood spatter on the rock panel it several days after the shooting. *Id.* at 1089.

[48] *People v. Knox*, 459 N.E.2d 1077, 121 Ill.App.3d 579, 76 Ill. Dec. 942 (Ill. App. 1984).

However, Vaughn's expertise in blood pattern analysis at the time was dubious. Two weeks after the shooting in petitioner's case, another shooting Murder occurred in Lane County in which two men, Christopher Boots and Eric Proctor, were wrongfully convicted in part on the strength of Vaughn's BPA. *Pet. Ex. 29*[49]. Nearly a decade later, Boots and Proctor's convictions were overturned, and they were found Actually Innocent after an informant came forward to authorities claiming that a different man had confessed. In the ensuing investigation, Vaughn's BPA testimony as well as gunshot residue led to their wrongful conviction. *Id.* at 1-2.

There is nothing on the record to suggest that Pex was not sincere in his efforts to undertake BPA in this case, nor anything to suggest he did not believe his own conclusions. But when looking at the whole record, it is evident that his analysis was not reliably undertaken or documented, and most likely was not accurate. Pex premised his theory on an incorrect belief that the spatter could only come from gunfire. He tested a singular tiny droplet on the rock panel to determine if it was human blood but did not check whether it was blood related to this crime. Both he and Vaughn missed the fact that the blood could have been expirated blood—and thus failed to consider that expirated blood on the rock panel made considerable sense.

Studies over the last 15 years have repeatedly raised the alarm about the subjectivity of BPA. The 2022 study reveals this further. Every participant made significant errors, disagreed with each other over even simple stains, and the large majority mistook expirated blood for a gunshot. In the 1980s, when petitioner's crime occurred, blood pattern analysis was in its infancy, and was led by the charisma of just one man, who if nothing else, was an exceptional salesperson. At some point in 1983—the year of this analysis—Pex completed the 40-hour training course, but his failure to adequately document or properly photograph his work reveals a

[49] *Oregon Innocence Project-Proctor-Boots.*

slapdash approach that is highly concerning both regarding the quality of the training offered and of Pex's work.

The blood spatter evidence was crucial to the State's case because it forensically tied petitioner to having committed this crime. Considering that Pex's entire theory was based on an incorrect assumption that the spatter could only be produced from a gunshot, and because Pex did not even consider the expiration theory, and because he did not properly document his work in reaching his conclusions, and because there is missing evidence that prevents an independent analysis of his conclusions now, petitioner requests this court Order the rock panel DNA be tested to determine whose DNA, if any, can be found there. Furthermore, petitioner requests the rock panel be made available for forensic scientist, Karen Green's examination.

D. <u>State's Case Against Petitioner: Her Motive</u>

From the beginning of his lengthy opening statement to the end of his emotional closing argument, Hugi's trial strategy was to condemn and vilify petitioner to such a degree that the jury had no choice but to believe that she committed the crime. He achieved this by making petitioner's alleged motive a centerpiece of his case. According to Hugi:

> "In this case the defendant's motive – it's the state's theory - - is based on a large amount of stress that developed in her mind over her lifetime. And this stress started when she was a child, and it developed through her life until the evening of May 19th it couldn't be contained anymore, and it erupted and came out. *Pet. Ex. 4* at 262.

By asserting such an incredibly broad motive—essentially petitioner's entire life story — Hugi was able to bring into evidence anything and everything that might possibly show petitioner in a negative light to the jury, and he did—irrespective of its irrelevance to deciding whether she shot her children that night.

During trial, Hugi elicited testimony from petitioner's ex-husband Steve Downs about her deeply regretted abortion several years before, *Pet. Ex. 4* at 982 her promiscuity, both during and

after their troubled marriage, *Id.* at 987-993, the fact that she briefly joined the Air Force when Christie was only six months old, *Id*. at 978- 981, and his perception that petitioner was volatile. *Id.* at 1005-1008.

Hugi also introduced testimony that a previous neighbor felt petitioner's children were not dressed in warm enough clothing for the Arizona winter and that she did not supervise them appropriately at times.[50] *Pet. Ex. 4* at 1599-1601. He focused testimony about petitioner having been paid as act as a surrogate mother and carry a baby for another couple *Id*. at 994-999, 1000, 1013, 1029, her aspirations to try and establish her own surrogacy business, *Id.* at 1029, 1491, her efforts to become a doctor, *Id.* at 1011, and in closing derided her for fact that she had taken flying lessons. *Pet. Ex. 11* at 62. Hugi even suggested to the jury that because petitioner was the victim of childhood sexual abuse, she was a candidate to murder her children. *Pet. Ex. 4* at 2239.

Hugi also claimed a more straightforward motive, that petitioner shot her children so that she could be with her boyfriend who in part had left petitioner due to not being interested in helping raise them. Hugi tied this to his bigger theme by arguing, somehow, that the impact of petitioner's abortion and surrogacy played into this motive:

> The State's theory on motive simply stated is that this defendant's love – the evidence will show that her love for Knick [her boyfriend] exceeded that for her children. She couldn't stand this pain and agony of waiting for him. She refused to believe that she had been used, and the only obstacle that she could see in her mind was the children. The evidence shows the effect of the abortion and surrogate program had on her and her sensitivity. The plan that emerged was probably one that seemed reasonable at the time. A situation where an outside force would remove the children from the situation, and she took precise and definite steps to make that happen. *Id.* at 305.

[50] Notably, Dan Sullivan, the neighbor's testimony referred to when the children were in the care of Steve Downs not petitioner. He also commented that Steve did not give the children much affection *Id.* at 1602. But the damage was done.

Hugi's emphasis on petitioner's motive in order to convince the jury of her guilt —even though motive was not an element of the charges in her indictment—was so outsized that he spent considerably more time in his opening statement reading aloud embarrassingly personal samples of petitioner's love poetry and letters to her boyfriend Robert Knickerbocker, than he did describing the State's entire factual case, which included details and timeline of the shooting, the aftermath at the hospital, the police investigation, petitioner's suspicious behavior, the forensic investigation and results.[51]

By the time it came to closing argument, Hugi could not hide his personal animus, nor how his prosecution relied so heavily on vilifying petitioner. Hugi told the jury that, "she failed in her marriage, failed in her relationships with men. She's never followed through and completed anything." *Pet. Ex. 11* at 62. He argued that "what she is good at is one-night stands and affairs where there's no commitments required on her part." *Id.* at 539. He condemned petitioner for having ambition beyond a traditional role of motherhood by telling the jury that: "She's not content to be just a housewife or a mother. She wants to be the postmistress, the doctor, the pilot, no follow through. Everything is just a lot of grand schemes and - - and planning ones to have the big house with the nanny." *Id*. at 540. He followed soon after with the ultimate condemnation, stating, "She's ambitious." *Id.* at 544.

Hugi's strategy of making petitioner's entire life story her motive made it impossible for petitioner to escape conviction. If petitioner's life made her guilty, then she was guilty. Petitioner *was* non-traditional, especially for the early 1980s, a time in American history when there was pushback from the excesses of the 1960s and 70s toward a more traditional set of cultural values.[52]

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[51] 31 pages of the transcript were dedicated to Hugi reading aloud letters and poetry. *See* Pet. Ex.4 at 268-285, 288-292, 294-304. Whereas 23 pages were dedicated to explaining the crime and investigation. *Id*. at 240-262.

[52] Lawrence H. Ganong & Marilyn Coleman, *The Content of Mother Stereotypes*, 32 SEX ROLES 495, 496 (1995); Deborah Anthony, *The Law of Motherhood in the Gender-Dependent Application of Criminal Responsibility for*

Petitioner *did* have ambitions for herself beyond being a mother. Petitioner was outspoken, intellectual, and independent. She chose to be a surrogate mother and tried to establish a surrogacy business, seeing a way to help others, and to earn a good income. Hugi was aided in his narrative by the unprecedented amount of national and local media that feverishly covered petitioner's every move and perceived cultural transgression even before she was indicted and throughout trial.[53]

Today, petitioner would be viewed as a victim of domestic violence. In 1984, it was barely noticed. During his testimony Steve Downs casually described a couple of examples of his incredibly violent attacks on petitioner safe from any negative scrutiny or consequences[54], men.[55]

Petitioner's childhood was hard in many ways that deeply affected her. Petitioner could be impulsive and doubtless her life was stressful. But none of these features about her life were evidence that should have been relied on to convict her of Murder.

Failing to Protect Children, 24 GEO J. OF GENDER & L. 1, 19 (2022). Caroline Rogus, *Conflating Women's Biological and Sociological Roles: The Ideal of Motherhood, Equal Protection, and the Implications of the Nguyen v. INS Opinion*, 5 JOURNAL OF CONSTITUTIONAL LAW 803, 815;Ganong & Coleman supra note 10 at 496.

[53] *See* "*20/20 special explores the notorious case of Oregon child-killer Diane Downs,* The Oregonian, March 20, 2019. https://www.oregonlive.com/entertainment/2019/03/2020-special-explores-the-notorious-case-of-oregon-child-killer-diane-downs.html. "*Most Infamous Alleged Mommy Murderers in History*, ABC News, May 11, 2010. https://abcnews.go.com/2020/infamous-cases-moms-allegedly-murder-kids/story?id=10588541https://abcnews.go.com/2020/infamous-cases-moms-allegedly-murder-kids/story?id=10588541.

[54] Steven Downs testifying about an incident of violence "We started to get physically at it. And naturally I'm stronger than she is and first I put my hand at her throat and threw her down on the bed. She had a waterbed. I think it is a waterbed. And then we just got really into it. I don't know, I got really mad and I just pounded her, pounded her head. And her brother Paul was there. And Cheryl come running in there because Diane was screaming and we were yelling and Cheryl saw me hitting her mother and there was blood because I hit her in the face and she was bleeding." And describing a second event: "Her sister always created a lot of friction with me. And her sister started it and she got involved and I ended up pushing her. I pushed her back. I thought I'd really hurt her bad by breaking a bone or something and I was worried about it but it turned out she wasn't hurt that badly, bruised maybe, but not hurt. *Pet. Ex 4* at 1025-26. It is notable that the only two occasions of violence Downs admits to in trial are times when there were other adult witnesses to his violence. Downs has been consistent that he beat her up regularly.

[55] See Steve Downs testimony. *Id.* at 988-989, 983.

Hugi's argument that petitioner's motive to kill her children was her obsession with her boyfriend Knickerbocker was not born out by the evidence. In all the love poetry and letters that were read in court and used against petitioner as evidence of her guilt, not one contained any sentiments that petitioner wanted to be rid of her children or conveyed any resentment toward them.[56] *Pet. Ex. 4* at 268-285, 288-304. Petitioner's tone was generally positive. She tried to persuade Knickerbocker of how good it would be if he moved in with her and her children in Oregon. She wrote about how well-behaved the children were and what little trouble they would be to him—not dissimilar to how any single mother might write to a man who she hoped to have a relationship with, in these circumstances. On cross-examination, Knickerbocker testified that there were many reasons why he did not want to move to Oregon, most significantly, he loved his wife more than petitioner, which petitioner really knew was the main reason they were not together.[57] *Pet. Ex. 4* at 1471. But since petitioner's many life choices, experiences, and less than morally upright behavior was supposedly the fuel for committing the crime, and most of it was true, then it naturally followed that petitioner was guilty.

E. The Vilification Of Petitioner: Her Demeanor

Prosecutor Fred Hugi also made petitioner's demeanor an important part of his case at trial. Police initially became suspicious of petitioner immediately after she arrived at the hospital due to her demeanor and lack of emotion. In opening Hugi told the jury that petitioner inappropriately made jokes, had no concern for her children's welfare, nor showed any grief about what their suffering. *Pet. Ex. 4* at 247. He emphasized testimony where she was described

[56] Knickerbocker also testified that petitioner never conveyed to him that she felt her children were an obstacle to their relationship. *Pet. Ex*. 4 at 1520.

[57] Other reasons included that Knickerbocker liked the hot dry climate of Arizona. He had roots and a job there that he did not want to give up. *Pet. Ex. 4.* at 1513.

as being lighthearted or making jokes. *Id*. at 248-250. Through this evidence, Hugi was able to frame petitioner as callous, indifferent, cold-hearted, and therefore clearly guilty.

Undoubtedly, petitioner did not behave as would normally be expected when she arrived at the hospital with her severely injured children. Emergency room doctor Dr. Mackey testified that he would normally expect to "see a lot of crying and screaming and hysterical behavior and difficulty believing that something could have happened, asking why did it happen, why did it have to happen?" *Id.* at 529. Dr. Miller, one of the other doctors who assisted the children, explained that parents are normally, "fainting or sobbing uncontrollably and not being able to give answers to questions about allergies" or being "rather uncontrollably hostile." *Id*. at 565.

Petitioner however, displayed a "remarkable degree of control in contrast to other parents in similar situations." *Pet. Ex. 4* at 564. Dr. Mackey found petitioner "unbelievably composed" and found it hard to believe he was talking to a family member. *Id.* at 522. She was "very calm, very rational." She "was very factually oriented." He found that she was, "almost on an intellectual level." *Id.* Dr. Miller was also struck by how "attentive she was, perfectly able to answer my questions and keep on-track with what was going on" which was "remarkably unusual for this situation." *Id.* at 564. When Dr. Mackey told petitioner she would need surgery on her arm the next day, she responded by asking whether she would be able to work, because she had to get back to work. *Id.* at 524.

Police officers also found petitioner inappropriately lighthearted and disconnected from the reality of what was happening. Deputy Sheriff Richard Tracy spent two and a half hours with petitioner that night, unlike the doctors who only had brief interactions. Tracy observed that petitioner appeared to be very articulate, calm and "non-emotional." He asked her soon after the

beginning of this interview if she had a high IQ. She explained that she did. *Id*. at 895-6. Officer Richard Charbonneau said that petitioner made several "lighthearted comments' such as telling him that "she wasn't going to let him ([the shooter] take my new car." Before getting in car with him, she asked him if he had insurance "because if she died, she was going to sue him." And she said that "if she died, she would have to haunt him" *Id*. at 850.

But even so, some people noticed a disguised anguish. Rosie Martin a nurse who spent time with petitioner when she first arrived at the hospital noted that petitioner appeared "anxious' to have to visit the crime scene but was "willing." *Id.* at 507. Dr. Mackey observed her as calm and self-assured, but he also admitted on cross that he had not been aware that petitioner had tried to be with her children in the trauma room and was rebuffed. *Id.* at 534. Richard Charboneau described her lighthearted comments, but then noticed her hand was shaking when she pointed at a diagram of the scene. *Pet. Ex. 4* at 855. Sergeant Rutherford remembered that petitioner appeared 'distracted" at the hospital and told him that "she wasn't going to answer any more questions until somebody told her how her children were doing." *Id.* at 874. And Dr. Miller said that while petitioner exerted a great deal of control, he did not observe her to be at all lighthearted. *Id*. at 545.

When she testified, petitioner tried to explain her self-control to the jury over Hugi's objections that what she had to say on the topic of control was not relevant. *Id.* at 1641. Petitioner was allowed to testify, explaining that, "control is just you don't show emotion. You don't let people know when you're hurting because usually, they find a weak spot and they try to hurt you worse. *Id.* at 1642. When discussing accusations against her of inappropriate smiling and laughing she explained that, "Laughing is sometimes - - laughing and crying are two

emotions that are so closely related…..They are two emotions that are so closely related that I've never been allowed to cry, so I laugh.*' Id.* at 1649.

Despite her efforts to explain herself to the jury, Fred Hugi as state prosecutor, had the upper hand and was not above acting in bad faith in his quest to smear petitioner as a cold-hearted killer due to her demeanor. He asked petitioner the following on cross examination: "Are you aware that your psychologist has diagnosed you as a deviant sociopath?" *Id.* at 2342. Presumably, this was his way to present this diagnosis to the jury—only it was not her diagnosis. According to petitioner's then psychologist, Dr. Pollyann Jamison, she made no such diagnosis. Petitioner sought therapy after her indictment before trial because, according to Jamison, "she was extremely distraught over what was happening; the loss of her children, dreams she was having, suicidal feelings off and on." *Pet. Ex. 30* [58] at 26. Jamison testified during post-conviction that petitioner "was sent to me for personal therapy as anyone going through a real stressful time would likely do. She was not sent to me for any kind of forensic evaluation or for use in the trial." Id. at 27.

Jamison learned about Hugi's statement that petitioner was a deviant sociopath from media reports and people in court. She wrote Hugi a letter stating the following:

> I understand that from the newspaper and from people in the courtroom that you asked Diane: "Are you aware that your psychologist has diagnosed you as a deviant sociopath?. This has not, as far as I know, been cleared up in front of the jury—is that true?
>
> I want you to know that I did not diagnose Diane with that diagnosis. In fact, "deviant sociopath is not even an psychiatric diagnosis at all in the DSM-III. Plus Diane's score on the Pd scale (Scale #4) is within **normal limits.** (*emphasis added).* Nobody would use just that to put such a diagnosis on a client.

[58] *Polly Ann Jamison PCR Testimony.*

> I need to register a protest regarding this issue—I am very unhappy with the jury being left with the impression that I gave that diagnosis to Diane. Why didn't you let me testify to explain my notes and tests to you? *Pet. Ex. 31*[59].

Despite Jamison's letter, Fred Hugi did nothing to correct this false impression to the jury and inexplicably, petitioner's defense attorney did not object or call Dr. Jamison to correct the misimpression. The jury was left believing it was an accurate—and scary sounding—diagnosis.

In a recent 2025 interview, during a forensic psychological evaluation undertaken by Dr. Megan McNeal, petitioner, now 70-years-old, remembers the time-period as a "maelstrom" describing herself as having been "very naïve." *Pet. Ex. 32*[60]. She explains that "having to be 'up' for them and being maligned by the media and feeling like I need to fix it, answering police calls at any time to answer questions, trying to work because I felt like I needed to." *Id.* at 8. She went on, "Right after it happened, I felt like I had to be 'on' and happy. I was telling kids, "it's going to be OK. But I didn't feel OK. I was enraged, confused, so sad. I would cry and scream in my car driving from one hospital to another to see Daniel." *Pet. Ex. 32.*

She also explained that "Growing up at home, we weren't allowed to have conflict. That's what I grew up with. They don't like chaos. Same with me. I don't like chaos. If there's a problem, you sit down and discuss it. *Id.* at 7. She remembers her interactions prior to and during her trial and explains that "she felt as though she had to appear "always happy" and she added, "I remember walking with my parents and seeing the media and thinking, 'Oh God, I can't do this' and my mom was saying, "Be strong. Be smiling all the time. Don't let them see you sweat." *Id.*

Dr. McNeal noted petitioner's prior performance on the Wechsler Adult Intelligence Scale – which fell in the "very superior range" with a full-scale IQ score of 137. This places

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[59] Polly Jamison Letter to Fred Hugi dated June 13, 1984.
[60] Declaration and Report of Dr. Megan McNeal.

petitioner in the 99th percentile in the population and categorizes her as "moderately gifted.' *Id.* at 18. McNeal concluded that:

> "Ms. Downs has been vilified, to this day, by media and others for not showing the emotions expected of a mother in such a situation. Many highly intellectual people demonstrate difficulty showing emotion, but this does not mean they do not feel emotion. Especially when the feelings are overwhelming, many people resort to avoidance or intellectualization to keep from experiencing distress.'
>
> If she is, in fact, innocent of the charges, as she has claimed for other forty years, then her behavior after the shooting could be explained by other reasons, including being in a state of shock from the trauma and dissociating from the emotion of it. Her lack of emotional expression, and tendency to rely on analysis and logic when making her case, has been a consistent part of her presentation over the course of her life. It is very likely that her emotionally detached, somewhat neurodiverse, and overly analytical presentation worked to convict her as much or more than the evidence in her trial. *Id.* at 33.

Hugi's closing argument reveals the truth of Dr. McNeal's conclusions. Hugi summed up his case up by pointing to petitioner's demeanor as evidence of her guilt.

> There was something wrong there, and that behavior and that demeanor that was observed by those doctors is consistent with a person who would be able to do what Mrs. Downs did, to shoot her own children, that disassociation, that ability to put a distance and a wall between yourself and any emotional feelings for your children. *Pet. Ex. 4* at 2851.

VI. INVESTIGATION AFTER PETITIONER'S CONVICTION: AFFIDAVITS ABOUT JAMES CLAIR HAYNES' CONFESSIONS

The police investigation focused on petitioner and allowed many leads to go unfollowed. Therefore, it is unknown whether Haynes might have been apprehended, had the police followed every lead and/or discovered the reports to the defense team to follow up.

It was not until after petitioner was convicted, litigating her post-conviction and then federal habeas cases, that her investigative teams located several witnesses who informed them of Haynes' many confessions. These are people who all had different relationships Haynes but who were willing to come forward and sign affidavits. There were others who were too scared,

but who told their stories. Affidavits from federal investigator William Teesdale, describing these additional witnesses, are also attached. All the witnesses believed that Haynes shot petitioner and her children, and that petitioner was wrongfully convicted. Wendy Willis requested an evidentiary hearing for them to give testimony during the federal habeas proceeding, but the Court denied her request as discussed above. *Pet. Ex.13* at 31-32.

There is nonetheless a precedent for testing evidence to see if it is connected to Haynes in this case. In 1998, Wendy Willis discovered that James Clair Haynes' fingerprints were on file from a previous Multnomah County conviction. She received an Order to have the fingerprints tested to see whether they could be matched with several latent prints found on the trunk of petitioner's car. His fingerprints did not match. This is not a surprising outcome since there was no particular reason why he would have touched the trunk of petitioner's car, but it is precedent that the courts considered him a serious enough possibility to Order testing. *Pet. Ex.33*[61].

Below is a brief description of some of the witnesses who have come forward and whose affidavits are submitted together. *Pet. Ex. 34*.

On October 27, 1993, Phyllis Elaine Haynes, the wife of Jim Haynes, submitted an affidavit attesting that in the summer of 1985 James Haynes confessed to her that he was the person who shot the Downs family on the Old Mohawk Road, on the night of May 1985. He repeated his confession six months later, and according to Ms. Haynes, he repeated his confession to many of his friends and acquaintances during that time. Phyllis Haynes also completed a supplemental affidavit in 1997. *Pet. Ex. 34*[62] at 1-9.

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[61] *Ex Parte* Order for Fingerprint Comparisons dated June 10, 1998.
[62] Affidavits of Phyllis Elaine Haynes et al.

Also on October 27, 1993, Dan Newby submitted an affidavit. He was an acquaintance of Mr. Haynes who remembered being in a car with him and another man named Byron Gray. Newby remembers that Gray was very intimidated by Haynes comments that he had undertaken the Downs shooting. Newby was aware of other people who Haynes had admitted to committing this crime to. *Id.* at 9-11.

On October 28 1993, Teresa Nyjordet, an acquaintance of James Haynes, submitted an affidavit explaining that he told her he had shot the Downs family. Ms. Nyjordet believed him. Haynes informed her that he had been hired to do the job. She believed that he was a violent man who eased his conscience by confessing to her what he had done. Haynes also threatened to kill Ms. Nyjordet's children and blaming her for his brother being busted for possession of drugs. Ms. Nyjordet signed a supplemental affidavit in 1997. *Id*. at 12-17.

On October 28, 1993, Janet Rexroad said that she heard about the Downs shooting from Haynes in 1990. He admitted to her that he did the shooting, and it was a hit. She did not remember the date, but he also later threatened to kill Teresa Nyjordet's children to Rexroad. *Id.* She wrote a supplemental affidavit in 1997. *Pet. Ex. 34* at 18-23.

On November 10, 1993, Clayton Nysten, an acquaintance of James Haynes submitted an affidavit about the Downs shooting. Nysten went to Haynes home the day after the Downs shooting. He saw the composite photo that looked like Haynes and knew that he owned an old yellow car like the one described in the article. Nysten also recalled that Haynes got rid of the car the week the crime occurred. After the crime, Haynes changed his appearance by starting to wear sunglasses, he grew a beard and sideburns and did not let people photograph him. From Nysten's perspective he seemed to have lost his aggressiveness and become more of a shell of a person.

Two days after the shooting, Haynes confessed that it was he who shot Diane Downs and her children. He told Nysten that she saw something she should not have seen and that he was paid to do the job. Nysten believed him. Over time Haynes told more and more people that he was the one who committed the crime. Due to his behavior after the crime Nysten believed Haynes was the shooter. Nysten filed a supplemental affidavit in 1998. *Id.* at 24-33.

On March, 4, 1998, Cecilia Nysten, Clayton Nysten's wife also submitted an affidavit stating that she was present with her husband when Haynes confessed to the shooting soon after it happened. Her husband and Haynes discussed disposing of the gun used in the crime. Ms. Nysten was scared to come forward earlier due to both her husband and Haynes violent natures. *Id.* at 34-36.

On October 27, 1993, Francis Annette Wirta the mother of Phyllis Haynes, attested that James Haynes also confessed to her that he committed the Downs' shooting. He told her he was paid money to carry out the crime, and she remembers him having additional money in the summer of 1983. Soon afterwards she asked her daughter whether Haynes confessed to her, which her daughter replied in the affirmative. Due to her fears of his violence toward her daughter and grandchildren, they did not come forward. However, when Haynes violence escalated toward her daughter and grandchildren she could no longer ignore his confessions. She spoke with Clayton Ntysten who she knew was Haynes best friend. He expressed relief to have someone to talk to about this. Nysten informed her that on the night of the shooting, Haynes came to his house with a blood-spattered t-shirt wrapped around something heavy both of which he buried. Pet. Ex. 34 at 37-42.

On November 9, 1993, Terri Lee Wirta, the daughter of Francis Wirta and sister of James Haynes' wife, also submitted an affidavit. In 1992, Haynes confessed to her that he had

committed the Downs' crime. She believed him to be a very violent person and believed he was not only capable of committing this crime but did indeed do so. *Id.* at 43-46.

In 1993, petitioner's father Wesley Frederickson submitted an affidavit describing his personal investigations into locating the perpetrator in the shooting during the 1990s. After Fran Wirta sent a letter to petitioner in prison, Mr. Frederickson contacted her and interviewed her. It was Wirta informed him that the person who shot petitioner and her children was her son in law James Haynes. Wirta remembered two distinct times that he confessed to the crime in 1987. She also gave petitioner names of eleven other people who had heard his confession, some of whom submitted affidavits above. She informed Mr. Frederickson that Haynes had threatened to kill her parents and other members of her family, and that was the reason she and others did not come forward to police. Mr. Frederickson's affidavit includes other names of people, including those described above, who either came forward or were possibly willing to come forward to attest to what Haynes confessed to them that he shot petitioner and her children. *Pet. Ex. 34* at 47-60.

Finally attached are investigation reports and affidavits from federal investigator William Teesdale. One affirms that he spoke with Dan Newby again in 1997, and he confirmed the veracity of his earlier affidavit. The second documents his conversations with Sandy Capps, a former girlfriend of Haynes, and an affidavit he prepared for her which she ultimately refused to sign because she was too scared of Haynes. Third is an affidavit documenting his conversations with Roxy Ann Haynes, Haynes' former wife. She agreed to sign an affidavit which is attached but ultimately was too scared of Haynes violence to sign it. *Id*. at 60-69.

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VII. PROBABILITY IN LIGHT OF ALL THE EVIDENCE, THAT HAD THIS EXCULPATORY DNA EVIDENCE BEEN AVAILABLE AT TIME OF THE UNDERLYING PROSECUTION PETITIONER WOULD NOT HAVE BEEN CONVICTED

The Diane Downs case would have been a different case if there had been concrete DNA evidence that James Haynes was present at the scene of the shooting. In fact, it would not have been the Diane Downs case at all. Petitioner's version of events would have had support, and the police investigation would have pursued an entirely different set of leads to determine if it were James Haynes and/or any of his associates who shot petitioner and her children.

The subjective forensic analysis undertaken to conclude that petitioner's bullets matched the casings and that Cheryl was shot outside of the car, would not have occurred. This is not to suggest that Pex and Murdock acted in bad faith, but that they fell into the confirmation bias trap—and interpreted the evidence looking for confirmation of their existing beliefs and theory that petitioner was culpable. Furthermore, the testing and processes used in the ATFE analysis was not scientifically credible. Likewise, the BPA analysis was similarly tainted, and it was based on a false premise.

Christie's memory, which two preeminent experts, James McGaugh and Daniel Reisburg, conclude was most likely suggested to her, would not have been suggested to her. If the State had not been trying to prove that petitioner likely killed her children, the children would not have been placed in foster care, nor would Christie have been subjected to repeated interviews and reenactments to help her "recover" her memory. In fact, no pressure would have been placed on Christie to remember what happened.

Petitioner's demeanor would likely have received a more generous interpretation if she was not the prime suspect. She would not have been vilified at trial or in the media. Her entire

life story with every bad decision or poor conduct would not have been put on trial. Petitioner would not have felt attacked or that the entire world was against her, and she would not have responded by being outspoken, aggressive, and at times inappropriate and self-destructive.

The media's focus would have not been on this case, because it is not a compelling national media story if a man shoots children in a car.

Because the DNA evidence would have changed the entire trajectory of the case, there is more than reasonable probability that had it been available at the time of the trial, petitioner would not have been convicted.

VIII. CONCLUSION

Petitioner therefore requests that the court issue an Order to test the beer cans, bubble gum and rock panel and scrapings. If the DNA on the beer can and bubble gum is a match for James Haynes, or any of his associates[63], who confessed to the crime multiple times to several people, over a period of years, then it will prove that petitioner was telling the truth and is innocent of this crime. If the rock panel DNA reveals blood beyond Cheryl's, then it will further support petitioner's assertions that the children were shot in the car by a male stranger, not outside the car by her, as the State insisted.

Dated: November 3, 2025

/s/ Venetia Mayhew
Venetia Mayhew OSB # 176082
/s/ Mieke De Vrind
Mieke De Vrind OSB # 193494
Attorneys for Petitioner

[63] Or indeed any man who may have fitted petitioner's description of the shooter or could be shown to be culpable.