



MARY JANE BURTON CASE REVIEW

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EXECUTIVE SUMMARY

In January 2023, a podcast was released alleging that Mary Jane Burton engaged in misconduct during her work as a forensic examiner with the Virginia Department of Forensic Science (DFS) between 1973 and 1988. In response to these allegations, the General Assembly enacted budget language in 2024 to require the Crime Commission to determine the scope of Ms. Burton's work at DFS. Specifically, the Crime Commission must review DFS cases where Ms. Burton performed the testing or analysis and report on the total number of:

- Case files that contain at least one named suspect;
- Cases where scientific testimony was provided by Ms. Burton; and,
- Named suspects who were convicted of an offense, categorized by persons:
 - Currently incarcerated, on probation, or on parole;
 - Executed; or,
 - Deceased.

As of April 2025, Crime Commission staff has identified approximately 7,600 cases where Ms. Burton was the forensic examiner. The chart on page 38 in this report entitled “*Status of the Mary Jane Burton (MJB) Project*” illustrates the progress of the work on the budget language as of April 2025. Staff will continue to provide updates on its work until this review is complete.

In addition to determining the scope of Ms. Burton's work in accordance with the 2024 budget language, staff also met with numerous stakeholders and advocates, examined post-conviction remedies under Virginia law, and identified incidents of forensic examiner misconduct in other states in an effort to determine how Virginia could respond to the allegations against Ms. Burton. Based on this work, staff recommended that the Crime Commission endorse legislation to create a panel to conduct a detailed review of certain cases where Ms. Burton was the forensic examiner. The Crime Commission unanimously endorsed staff's recommendation to create a review panel.

The endorsed legislation (House Bill 2730; Senate Bill 1465) was enacted into law during the 2025 Regular Session of the General Assembly. As enacted, the legislation directs the Crime Commission to designate a panel to review approximately 300 cases where Ms. Burton was the forensic examiner, including certain cases that resulted in a conviction and all cases where she testified. The panel will be comprised of a Commonwealth's attorney; a public defender; a practicing criminal defense attorney; a retired circuit court judge; the Office of the Attorney General; the Executive Director of the Mid-Atlantic Innocence Project; and an independent serologist. The panel must make all reasonable efforts to (i) determine whether Ms. Burton engaged in a pattern of misconduct and (ii)

evaluate the accuracy of her testing, analysis, and testimony. Crime Commission staff will provide staff support, and the panel must report annually until the completion of its review.

BACKGROUND

Mary Jane Burton was a forensic examiner at the Virginia Department of Forensic Science (DFS) from 1973 to 1988.⁸⁵ The majority of her work was in serology, which involves the detection and identification of biological material (such as blood, semen, saliva, or urine) on physical evidence.⁸⁶ Unlike DNA testing,⁸⁷ “serology testing cannot identify an individual to the exclusion of all others.”⁸⁸ Many of Ms. Burton’s cases involved violent crimes, such as murder and sexual assault, but she also examined evidence for a variety of other types of offenses.

In January 2023, the podcast *Admissible: Shreds of Evidence* was released.⁸⁹ This podcast raised concerns regarding Ms. Burton’s work at DFS, based in part on documents provided to its producer by a former DFS employee.⁹⁰ The allegations focused on two key areas:

- Discrepancies, errors, and alterations of test results; and,
- Misleading testimony in court.

⁸⁵ See Virginia Department of Forensic Science. *About DFS: History*, last visited May 8, 2025. Ms. Burton did not work for DFS as it exists today. The agency was housed in a number of locations before becoming its own department. (“In 1970, a survey by the International Association of Chiefs of Police demonstrated a need for a statewide forensic laboratory system in Virginia. Two years later, an act of the General Assembly created the Division of Consolidated Laboratory Services (DCLS), which included a Bureau of Forensic Science. The new Bureau absorbed the Commonwealth’s existing drug and toxicology laboratories in addition to providing other forensic services. In 1990, the rapidly expanding Bureau was elevated to Division status. In 1996, the Division transferred from the Department of General Services (DGS) to the Department of Criminal Justice Services (DCJS). In 2005, the Division was elevated to Department status under the Governor’s Secretary of Public Safety. DFS continues to provide comprehensive forensic laboratory services to over 400 law enforcement agencies in the Commonwealth, while remaining independent of any of them.”) <https://dfs.virginia.gov/about-dfs/>.

⁸⁶ See, e.g., National Institute of Justice, *Laboratory orientation and testing of body fluids and tissues for forensic analysts*, last visited May 8, 2025, <https://nij.ojp.gov/nij-hosted-online-training-courses/laboratory-orientation-and-testing-body-fluids-and-tissues/testing-body-fluids-tissues/overview> (“Serology is the detection, identification, and typing of body tissues, either in native form or as stains or residues left at a crime scene. Most often, the tissue of interest is a body fluid such as blood or semen; however, other tissues such as hair or bone are encountered.”)

⁸⁷ Virginia Department of Forensic Science. *Forensic biology*, last visited May 8, 2025, available at <https://dfs.virginia.gov/laboratory-forensic-services/biology/> (“...DNA analysis can be conducted on [biological material], and conclusions can be drawn as to whether an individual can be eliminated or included as a possible contributor to the genetic material identified.”).

⁸⁸ Jackson, L.C. (2024, October 22). *Current DFS quality system and the duty to correct: An update on the Mary Jane Burton project*. Presentation at the October 22, 2024 Crime Commission Meeting (Richmond, VA), <https://vscc.virginia.gov/2024/October22Mtg/DFS%20Quality%20System%20and%20Duty%20to%20Correct%20-%20MJB%20Update.pdf>. See also, e.g., Garrett, B.L., & Neufeld, P.J. (2009). Invalid forensic science testimony and wrongful convictions. *Virginia Law Review*, 95(1), 1-97, at p. 35: “This conventional serology analysis cannot identify particular individuals; it can, however, exclude individuals or place individuals within a percentage of the population that possesses a given type and cannot be excluded as a source of the fluid.”

⁸⁹ Podcast Directory. *Admissible: Shreds of evidence*. NPR, last visited May 8, 2025, available at <https://www.npr.org/podcasts/1164809981/admissible-shreds-of-evidence>. See also *Admissible: Shreds of evidence*. Podcast Website, last visited May 8, 2025, available at <https://admissible.vpm.org/>.

⁹⁰ *Admissible: Shreds of evidence* (2023, February 14). Chapter 3: *Pandora’s Box*, available at <https://admissible.vpm.org/pandoras-box/>.

DFS RESPONSE TO ALLEGATIONS AGAINST Ms. BURTON

In July 2023, the podcast provided documents to DFS that were relied upon as part of the allegations against Ms. Burton. These documents were then referred to the DFS Scientific Advisory Committee (SAC) on August 18, 2023.⁹¹ The SAC chair created a Review Subcommittee to investigate the allegations, which met on October 10, 2023; January 9, 2024; and April 8, 2024.⁹²

The Review Subcommittee directed DFS to notify individuals whose cases were potentially impacted by Ms. Burton's work. DFS offered to provide testing of any existing scientific evidence remaining from those cases as part of the laboratory's duty to correct.⁹³ In June 2024, DFS sent notification letters to 174 law enforcement agencies and 125 localities.⁹⁴ Each letter included a list of affected cases for that agency/locality with copies of the certificates of analysis prepared by Ms. Burton. The letters also highlighted cases where an individual might be currently incarcerated.⁹⁵

As of April 2025, 86 individuals were identified who are currently incarcerated on a case where Ms. Burton was the forensic examiner.⁹⁶ DFS notified those individuals of the ongoing review of Ms. Burton's work and referred them to the Innocence Project at the UVA School of Law for pro bono legal assistance.⁹⁷

2024 BUDGET LANGUAGE

As a result of the allegations against Ms. Burton, budget language was enacted during the 2024 Regular Session of the General Assembly which directs the Crime Commission to review cases at DFS where she performed testing or analysis and report on the total number of:

- Case files that contain at least one named suspect;
- Cases where scientific testimony was provided by Ms. Burton; and,

⁹¹ Jackson, L.C. (2024, October 22). *Current DFS quality system and the duty to correct: An update on the Mary Jane Burton project*. Presentation at the October 22, 2024 Crime Commission Meeting (Richmond, VA), <https://vscc.virginia.gov/2024/October22Mtg/DFS%20Quality%20System%20and%20Duty%20to%20Correct%20-%20MJB%20Update.pdf>.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.* A copy of the notification letter to the Chiefs of Police, Sheriffs, and Commonwealth's Attorneys is available at <https://vscc.virginia.gov/2024/October22Mtg/Notification%20Letters.pdf>.

⁹⁵ *Id.*

⁹⁶ Arrington, C.B. (2025, April 23). *Status of the Mary Jane Burton Project: Update to the Forensic Science Board*. Presentation by Crime Commission staff at the April 23 Forensic Science Board Meeting (Richmond, VA). Note: at the time of the October 2024 Crime Commission meeting, only 66 individuals had been identified as being currently incarcerated on a case where Ms. Burton was the forensic examiner.

⁹⁷ See Jackson, L.C. (2024, October 22). *Current DFS quality system and the duty to correct: An update on the Mary Jane Burton project*. Presentation at the October 22, 2024 Crime Commission Meeting (Richmond, VA), <https://vscc.virginia.gov/2024/October22Mtg/DFS%20Quality%20System%20and%20Duty%20to%20Correct%20-%20MJB%20Update.pdf>. A copy of the notification letter to defendants is available at <https://vscc.virginia.gov/2024/October22Mtg/Notification%20Letters.pdf>. The additional individuals identified since the October 2024 Crime Commission meeting have also been notified by DFS and referred to the Innocence Project at the UVA School of Law for pro bono assistance.

- Named suspects who were convicted of an offense, categorized by persons:
 - Currently incarcerated, on probation, or on parole;
 - Executed; or,
 - Deceased.⁹⁸

As part of its work on the 2024 budget language and the allegations of misconduct against Ms. Burton, Crime Commission staff:

- Analyzed a spreadsheet provided by DFS to identify the total number of cases and named suspects where Ms. Burton was the forensic examiner;⁹⁹
- Began reviewing case files at DFS in May 2024 to identify named suspects, offense details, and victims (staff has reviewed over 2,700 case files as of April 2025);¹⁰⁰
- Identified the number of Ms. Burton's cases that overlap with the prior *Post-Conviction DNA Testing Program and Notification Project* (approximately 47% of cases overlap as of April 2025);¹⁰¹

⁹⁸ 2024 General Assembly Budget, Item 23(A), available at <https://budget.lis.virginia.gov/amendment/2024/1/SB30/Introduced/FA/23/3s/>.

⁹⁹ DFS provided Crime Commission staff with a spreadsheet including all certificates of analysis in their agency's *Historic Case File Project* where Ms. Burton was indicated as the forensic examiner performing the analysis (1973-1988). Specifically, the spreadsheet included 11,394 certificates of analysis completed by Ms. Burton across 10,283 assigned DFS Lab Numbers. It was soon discovered, however, that there were far more assigned DFS Lab Numbers than *unique* cases where Ms. Burton was the forensic examiner. Per DFS, it was customary practice during this time frame (1973-1988) for two DFS Lab Numbers to be assigned to the same unique case in instances where the Request for Laboratory Examination (RFLE) was submitted to a Lab other than the Central Lab by a law enforcement agency, but where forensic testing was performed at the Central Lab. As such, staff had to collapse the certificates of analysis and DFS Lab Numbers into unique cases to meet the directives of the budget language. This involved a lengthy, reiterative process of linking and collapsing dually assigned DFS Lab Numbers into an individual row per named suspect in each unique case (numerous cases had more than one named suspect). As a result of these efforts, Crime Commission staff has identified 7,579 *unique* cases where Ms. Burton was the forensic examiner, of which 3,467 included at least one named suspect and 188 where there was an indication of scientific testimony being provided by Ms. Burton, as of April 2025. This process also assisted DFS in preparing mailed notification letters to 174 law enforcement agencies and to the Commonwealth's Attorneys representing 125 localities where such cases originated. Each mailing included two lists accompanied by copies of the original certificates of analysis related to each case as follows: (i) list of cases/named suspects on certificates of analysis for their respective localities; and, (ii) list of cases where there was no named suspect on the certificates of analysis but rather only the named victim. Recipients of these notification letters were asked to verify whether any of their listed cases resulted in a conviction. Cases where the named suspect(s) were potentially incarcerated were highlighted for priority review.

¹⁰⁰ The spreadsheet provided to the Crime Commission by DFS did not include any personally identifiable information (PII), such as the dates of birth or social security numbers of named suspects, or vital offense details, such as offense date and offense type. Accordingly, the case review process entails multiple Crime Commission staff members reviewing and cross-validating PII and offense details in case files. As of April 2025, staff has reviewed and cross-validated approximately 2,700 cases. Case review was prioritized for cases involving individuals potentially incarcerated or under DOC supervision, as well as cases where there was indication that Ms. Burton provided court testimony. This process is crucial in obtaining the information needed to assist clerks of court in verifying whether these named suspects were convicted in their respective cases.

¹⁰¹ Preliminary analysis by staff determined that approximately half of the archived MJB cases were part of the earlier *Post-Conviction DNA Testing Program and Notification Project*. As of April 2025, 47% (1,623 of 3,467) of cases have thus far been linked to the earlier *Post-Conviction DNA Testing Program and Notification Project*. In general, the conviction status, post-conviction DNA testing status, and notification status have already been documented for the named suspects in these cases.

- Coordinated with the Virginia Department of Corrections (DOC) and the Virginia Parole Board to identify individuals incarcerated or under DOC supervision;¹⁰²
- Presented updates to the Scientific Advisory Committee and the Forensic Science Board;¹⁰³
- Reviewed post-conviction remedies in Virginia;
- Identified incidents of forensic examiner misconduct in other states; and,
- Consulted with numerous stakeholders and advocates.¹⁰⁴

STATUS OF 2024 BUDGET LANGUAGE

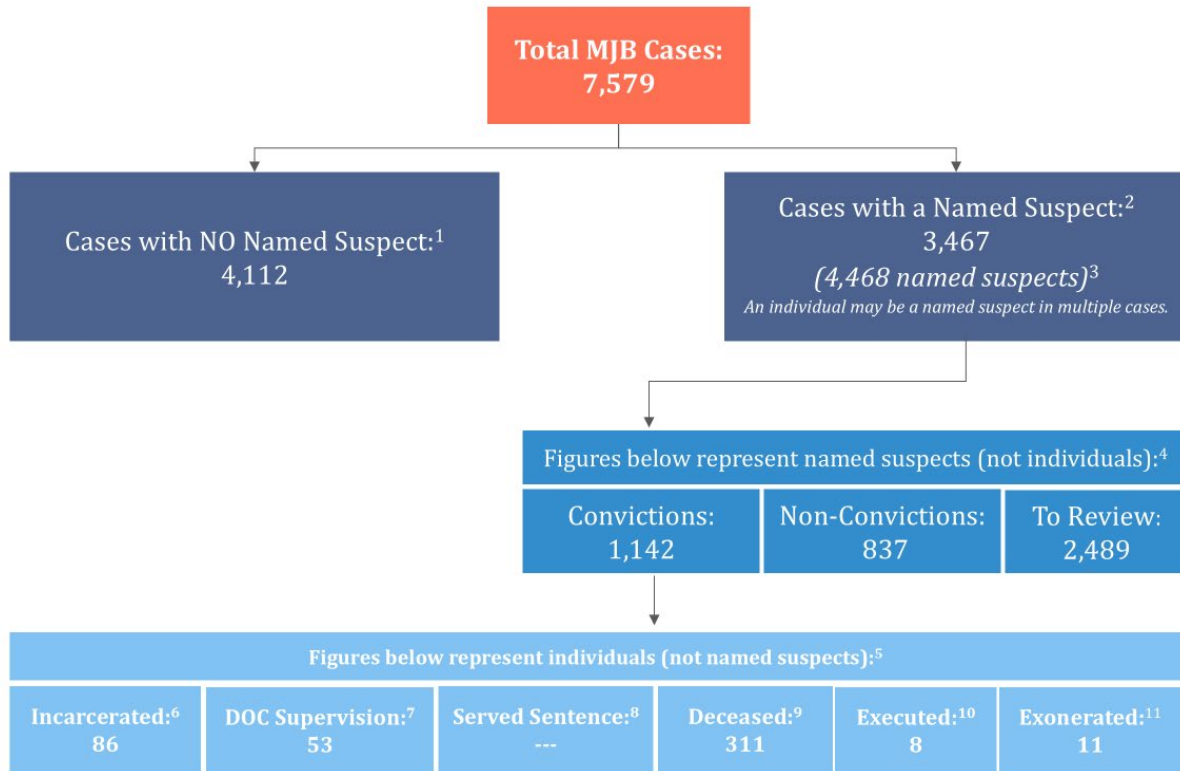
The following chart illustrates the status of the Crime Commission's work on the 2024 budget language as of April 2025.

¹⁰² Staff prioritized identifying individuals who were potentially incarcerated or under DOC supervision. Staff provided case information to both DOC and the Parole Board to help verify the incarceration status of each named suspect and to determine whether their current term of incarceration was specifically linked to the offense or offenses where Ms. Burton was the examiner. Any individuals determined to be incarcerated have been notified by DFS about their case, provided with a copy of their original certificate of analysis, and had their case referred to the UVA Innocence Project for pro bono legal assistance. As of April 2025, 86 individuals have thus far been identified as incarcerated, and 53 individuals have been identified as being under DOC supervision.

¹⁰³ Staff presented updates on the status of the case review to the Scientific Advisory Committee on April 8, 2024, October 8, 2024, and April 23, 2025, and to the Forensic Science Board on October 9, 2024, and April 23, 2025.

¹⁰⁴ Crime Commission staff consulted with the following stakeholders and advocates: Attorney General of Virginia; Benjamin and Desportes, P.C.; Cardozo Law, Perlmutter Center for Legal Justice; Innocence Project at the University of Virginia School of Law; Mid-Atlantic Innocence Project; Virginia Association of Chiefs of Police & Foundation; Virginia Association of Commonwealth's Attorneys; Virginia Commonwealth's Attorneys' Services Council; Virginia Department of Corrections; Virginia Department of Forensic Science; Virginia Department of Forensic Science – Scientific Advisory Committee; Virginia Indigent Defense Commission; Virginia Parole Board; Virginia Sheriffs' Association; and, Sheldon & Flood, P.L.C.

Status of Mary Jane Burton (MJB) Project



Source: Virginia Department of Forensic Science, Historic Case File Project, 1973-1988, MJB certificates of analysis only. Analysis by Virginia State Crime Commission staff. Separate and apart from the information in the chart, 181 cases have been identified where Ms. Burton provided scientific testimony. Status as of April 22, 2025.

¹ Nearly half (1,880 of 4,112) of the cases with no named suspect originated from the Office of the Chief Medical Examiner, which includes deaths that may not have been criminal in nature, such as a traffic fatalities and suicides. The remainder of these cases originated from law enforcement agencies where no named suspect was identified.

² To date, 47% (1,623 of 3,467) of these cases overlap with the earlier *Virginia Post-Conviction DNA Testing Program and Notification Project*.

³ This figure does not mean that there are 4,468 unique individuals, as a single person could be a named suspect in multiple cases. For example, "John Smith" might be a named suspect in five cases, so "John Smith" is counted as a named suspect five times.

⁴ These figures are based on 4,468 named suspects and not individuals, so a single person may be counted multiple times. For example, if "John Smith" was convicted on three cases and found not guilty on two cases, then "John Smith" is counted as three convictions and two non-convictions.

⁵ Unlike the "named suspects", these figures represent unique individuals who were convicted, along with their current status. For example, if "John Smith" was convicted on three cases and is incarcerated, then "John Smith" is counted as one unique individual in the incarcerated category. As named suspects who were convicted are identified, the individual who was convicted will be classified within these six categories based on their present status. The remainder of convicted named suspected are yet to be identified and classified across these six categories.

⁶ These 86 individuals (representing 96 named suspects in 92 cases) are either (i) serving a sentence in DOC on a case where Ms. Burton was the forensic examiner or (ii) have completed their term of incarceration for the Ms. Burton case, but are serving a sentence on an unrelated case.

⁷ These 53 individuals (representing 63 named suspects in 63 cases) are either (i) under DOC supervision (probation or parole) on a case where Ms. Burton was the forensic examiner or (ii) have completed DOC supervision for the Ms. Burton case, but are under DOC supervision for an unrelated offense.

⁸ This classification is still very preliminary. Thus far, two (2) individuals have been identified as being convicted on a case where Ms. Burton was the forensic examiner, but have served their sentence and are not incarcerated or on DOC supervision. This category is expected to grow significantly moving forward.

⁹ These 311 individuals (representing 320 named suspects in 302 cases) were convicted on a case where Ms. Burton was the forensic examiner, but have since passed away.

¹⁰ These 8 individuals (representing 10 named suspects in 10 cases) were convicted and executed on a case where Ms. Burton was the forensic examiner.

¹¹ These 11 individuals (representing 11 named suspects in 11 cases) were convicted and later exonerated on a case where Ms. Burton was the forensic examiner.

NEXT STEPS

While significant progress has been made on the directives set forth in the 2024 budget language, a great deal of work remains, including:

- Completing the review of the remaining DFS case files (~4,800) to collect information on named suspects, offense details, and victims;
- Coordinating with other stakeholders, such as clerks of court and Commonwealth's Attorneys, to determine the conviction status of all named suspects;
- Determining the status of any named suspect convicted on a case where Ms. Burton was the forensic examiner (incarcerated, DOC supervision, served sentence, deceased); and,
- Continuing to update the Crime Commission and other stakeholders on the progress of the work on the 2024 budget language.

POST-CONVICTION REMEDIES IN VIRGINIA

The Virginia Code sets forth two legal remedies for individuals seeking to petition Virginia courts for post-conviction relief. The first remedy is a writ of actual innocence, which can be based on previously unknown or unavailable biological¹⁰⁵ or non-biological¹⁰⁶ evidence. This remedy is available to an individual at any time following their conviction or adjudication of delinquency.¹⁰⁷ Both writs require that the petitioner provide an exact description of evidence which was not previously known or available,¹⁰⁸ and how the evidence will prove that no rational trier of fact would have found proof of guilt or delinquency beyond a reasonable doubt.¹⁰⁹ To support the writ, the individual can petition to obtain scientific analysis of newly discovered or previously untested scientific evidence.¹¹⁰ If the individual meets the burden of proof for the granting of a writ, the Court can either (i) vacate the conviction or finding of delinquency or (ii) find that sufficient evidence exists to enter a conviction or adjudication of delinquency to a lesser included offense and remand the case to circuit court for resentencing.¹¹¹

The second remedy is a writ of habeas corpus.¹¹² When filed to challenge a criminal conviction, a writ of habeas corpus typically alleges ineffective assistance of counsel, failure to disclose exculpatory evidence, new or recanting witness statements, failure of the court to provide sufficient

¹⁰⁵ VA. CODE ANN. § 19.2-327.2 et seq. (2024) (writs of actual innocence based on biological evidence are filed with the Virginia Supreme Court).

¹⁰⁶ VA. CODE ANN. § 19.2-327.10 et seq. (2024) (writs of actual innocence based on non-biological evidence are filed with the Virginia Court of Appeals).

¹⁰⁷ See VA. CODE ANN. §§ 19.2-327.3 & 19.2-327.11 (2024).

¹⁰⁸ If the evidence was previously known, the defendant would need to provide the reason why the evidence was not subject to scientific testing. VA. CODE ANN. §§ 19.2-327.3(A) & 19.2-327.11(A) (2024).

¹⁰⁹ VA. CODE ANN. §§ 19.2-327.3(A) & 19.2-327.11(A) (2024).

¹¹⁰ VA. CODE ANN. § 19.2-327.1 (2024).

¹¹¹ VA. CODE ANN. §§ 19.2-327.5 & 19.2-327.13 (2024).

¹¹² VA. CODE ANN. § 8.01-654 et seq. (2024).

time or expert resources, or juror impropriety or bias.¹¹³ If the defendant meets the probable cause standard of proof to demonstrate that they have been detained without legal authority, the court may grant the writ and order a new trial, sentencing, or appeal.¹¹⁴ However, this remedy has strict timelines, as the Virginia habeas corpus statute requires filing the writ either within two years of the final judgement in the trial court or within one year from the final disposition of the appeal, whichever date is later.¹¹⁵

FORENSIC EXAMINER MISCONDUCT IN OTHER STATES

While allegations have been raised about Ms. Burton's work at DFS, no determination has been made as to whether Ms. Burton engaged in a pattern of misconduct. However, as a result of these allegations, staff searched for instances of forensic misconduct in other states to determine how those states identified and responded to the misconduct. Staff discovered three relevant instances of forensic misconduct in other states, all of which required an individualized review of the forensic examiner's work to identify whether a pattern of misconduct existed.¹¹⁶

FRED ZAIN (WEST VIRGINIA)

Mr. Zain was the director of the serology department of the West Virginia Division of Public Safety from 1979 until 1989.¹¹⁷ Following the reversal of a conviction for sexual assault in *State v. Woodall*, 182 W. Va. 15 (July, 6, 1989), an internal investigation was conducted to review Mr. Zain's work.¹¹⁸ This internal investigation led the prosecuting attorney for Kanawha County, West Virginia, to petition

¹¹³ Virginia State Crime Commission (2016). *2016 annual report: Habeas corpus: Restrictions, deadlines and relief*, at p. 34, <https://vscc.virginia.gov/FINAL%20Habeas%20Corpus.pdf> (hereinafter "VSCC Habeas Corpus Report").

¹¹⁴ See VSCC Habeas Corpus Report at p.36. See also VA. CODE § 8.01-662 (2025).

¹¹⁵ VA. CODE § 8.01-654(A)(2) (2025).

¹¹⁶ The three cases of forensic scientist misconduct were the best comparisons to the ongoing study into the work of Ms. Burton. The three forensic scientists (Fred Zain, Joyce Gilchrist, and Yvonne "Missy" Woods) all worked for at least a decade as forensic scientists; they reviewed a wide range of cases during their careers, including sexual crimes and homicide; and, as a result of issues with their work being discovered, an individualized case review was conducted to determine the scope of the misconduct. Staff did find other examples of forensic scientist misconduct, but those examples did not provide guidance for how to handle Ms. Burton's cases because they were too dissimilar to Ms. Burton's cases and work. For example, a highly publicized case of forensic scientist misconduct was the case of Annie Dookhan and Sonja Farak in Massachusetts, which led to tens of thousands of cases being dismissed (and resulted in a 2020 Netflix documentary on the scandal). However, both Dookhan and Farak were chemists who worked exclusively on drug cases in drug labs, so their cases were significantly different in nature than the cases handled by Ms. Burton. See Mulvihill, M., & Schuppe, J. (2022, September 22). Epic Massachusetts crime lab scandal may involve even broader wrongdoing, judge says. *NBC News*, <https://www.nbcnews.com/news/us-news/massachusetts-crime-lab-drug-testing-scandal-rcna48940>; Trager, R. (2018, April 17). Fallout from rogue US forensic chemist continues. *Chemistry World*, <https://www.chemistryworld.com/news/fallout-from-rogue-us-forensic-chemist-continues/3008906.article>; Trager, R. (2017, April 25). 21,500 cases dismissed due to forensic chemist's misconduct. *Chemistry World*, <https://www.chemistryworld.com/news/21500-cases-dismissed-due-to-forensic-chemists-misconduct/3007173.article>.

¹¹⁷ *In re Investigation of the W. Va. State Police Crime Lab., Serology Div.*, 190 W. Va. 321, 330 n.4 (1993, November 10). See also Court invalidates a decade of blood test results in criminal cases. (1993, November 12). *New York Times*, <https://www.nytimes.com/1993/11/12/us/court-invalidates-a-decade-of-blood-test-results-in-criminal-cases.html>.

¹¹⁸ *In re Investigation* at 329.

the West Virginia Supreme Court for a review Mr. Zain's work.¹¹⁹ The review included 134 cases where Mr. Zain was the forensic examiner.¹²⁰

The review, which was completed in November 1993, concluded that the "overwhelming evidence of a pattern and practice of misconduct by Zain completely undermines the validity and reliability of any forensic work he performed or reported during his tenure in the serology department of the state police crime laboratory."¹²¹ Mr. Zain was found to have committed several acts of misconduct, including "reporting inconclusive results as conclusive;...failing to report conflicting results;...implying a match with a suspect when testing supported only a match with the victim; and...reporting scientifically impossible or improbable results."¹²² However, though the Court found that any testimony or evidence provided by Mr. Zain would be "deemed invalid, unreliable, and inadmissible," it did not mean that all of the cases he worked on should be dismissed.¹²³ Instead, affected defendants could proceed on a habeas corpus claim on the issue of whether the evidence provided at or prior to a guilty plea or trial, "independent of the forensic evidence presented by Zain, would have been sufficient to support the verdict or plea."¹²⁴ At least seven individuals whose cases Mr. Zain worked on had their convictions vacated following the Court's findings.¹²⁵

JOYCE GILCHRIST (OKLAHOMA)

Ms. Gilchrist worked as a forensic chemist for the Oklahoma City Police Department from 1980 until 2001.¹²⁶ In 1999, the District Court for the Western District of Oklahoma in Mitchell v. Ward, 150 F. Supp. 2d 1194 (W.D. Okla., Aug. 27, 1999), granted a defendant's petition for habeas relief regarding convictions for rape and sodomy based at least in part on misconduct by Ms. Gilchrist.¹²⁷ The District Court found that portions of Gilchrist's trial testimony were "without question, untrue" and "misleading,"¹²⁸ and that Gilchrist's testimony had been questioned in several other cases.¹²⁹

Following the Mitchell decision, an internal investigation was conducted to review Ms. Gilchrist's work.¹³⁰ The report from that investigation, filed in January 2001, found that "Gilchrist performed

¹¹⁹ *Id.* at 329-330.

¹²⁰ *Id.* at 331.

¹²¹ *Id.* at 337-338.

¹²² *Id.* at 336.

¹²³ *Id.* at 340.

¹²⁴ *Id.*

¹²⁵ See The National Registry of Exonerations, search results for "Fred Zain" and "Zain," last viewed May 8, 2025, <https://www.law.umich.edu/special/exoneration/Pages/detailist.aspx>.

¹²⁶ *Gilchrist v. Citty*, 173 Fed. Appx. 675, 677 (10th. Cir., Apr. 4, 2006). See also Brewer, G.L. (2015, August 13). Disgraced Oklahoma City police chemist Joyce Gilchrist dies, *The Oklahoman*, <https://www.oklahoman.com/story/news/2015/08/31/disgraced-oklahoma-city-police-chemist-joyce-gilchrist-dies/60726319007/>.

¹²⁷ Mitchell v. Ward at 1226, 1229.

¹²⁸ *Id.*

¹²⁹ *Id.* at 1229 n.52 (noting four separate cases where Gilchrist was found to have committed significant misconduct, including failing to disclose evidence to the defense and testifying to conclusions which were not scientifically supported).

¹³⁰ *Gilchrist* at 678.

inaccurate forensic analyses, interpreted evidence incorrectly, and offered misleading testimony in criminal cases.”¹³¹ This report led to additional findings of misconduct, which resulted in the termination of Ms. Gilchrist’s employment on September 25, 2001.¹³² At least 12 individuals whose cases Ms. Gilchrist worked on had their convictions vacated following the findings of misconduct.¹³³

YVONNE “MISSY” WOODS (COLORADO)

Ms. Woods worked as a forensic scientist for the Colorado Bureau of Investigation from 1994 until 2023.¹³⁴ An internal investigation into Ms. Woods’ work began in September 2023 after an intern uncovered an anomaly in her DNA case work.¹³⁵ Soon thereafter, Ms. Woods was placed on administrative leave, and she then retired on November 6, 2023, before the completion of the internal investigation.¹³⁶ The internal investigation report, published on June 5, 2024, found that Ms. Woods “omitted material facts in official criminal justice records,” “tampered with DNA testing by altering or omitting some test results from the case file,” and “engaged in the deletion and alteration of data.”¹³⁷ A comprehensive review of all of Ms. Woods’ cases was completed by December 2024, which found that Ms. Woods’ misconduct may have impacted 1,003 cases.¹³⁸ On January 22, 2025, Ms. Woods was charged with 102 criminal offenses in relation to her alleged misconduct, including 1 count of cybercrime, 1 count of perjury, 48 counts of attempt to influence a public servant, and 52 counts of forgery.¹³⁹

¹³¹ *Id.* at 679.

¹³² *Id.* at 679-681.

¹³³ See The National Registry of Exonerations, search results for “Joyce Gilchrist,” last viewed May 8, 2025, <https://www.law.umich.edu/special/exoneration/Pages/detailist.aspx>.

¹³⁴ Colorado Bureau of Investigation. (2024, March 3). *Colorado Bureau of Investigation releases findings from internal affairs probe into laboratory testing*, <https://cbi.colorado.gov/news-article/colorado-bureau-of-investigation-releases-findings-from-internal-affairs-probe-into>. See also Nguyen, T. (2024, March 10). Former Colorado forensic scientist accused of manipulating DNA test results, *USA Today*, <https://www.usatoday.com/story/news/nation/2024/03/10/colorado-forensic-scientist-manipulated-dna-results-investigation/72923480007/>.

¹³⁵ Hassenstab, K. (2024, February 26). Internal Affairs investigative report. *Colorado Bureau of Investigation Report of Investigation*, Case Number IIA-23-05, page 2 (hereinafter “CBI Woods Report”).

¹³⁶ Colorado Bureau of Investigation. (2024, June 5). *Colorado Bureau of Investigation releases internal affairs report into former forensic scientist Missy Woods*, <https://cbi.colorado.gov/news-article/colorado-bureau-of-investigation-releases-internal-affairs-report-into-former-forensic>.

¹³⁷ *Id.* See also CBI Woods Report at pages 91-94 (provides a table of “Known Error Types in Woods’ Case Work,” which includes issues of “deliberate data change,” “deleted data,” and “additional analysis should have been performed and was not”).

¹³⁸ Colorado Bureau of Investigation. *Yvonne “Missy” Woods investigation* (Timeline of Events, December 2024), last viewed May 8, 2025, <https://cbi.colorado.gov/sections/administration/media-relations/yvonne-missy-woods-investigation#:~:text=Timeline%20of%20Events&text=December%202024%20%2D%20Comprehensive%20review%20of%20Judicial%20District%20Attorney's%20Office>. See also Butzer, S. (2024, December 22). Review of all CBI cases involving Missy Woods complete; more than 1K cases impacted by mishandling of DNA. *ABC News, Denver Channel 7*, <https://www.denver7.com/news/local-news/review-of-all-cbi-cases-involving-missy-woods-complete-more-than-1k-cases-impacted-by-mishandling-of-dna>.

¹³⁹ Colorado District Attorney’s Office for Gilpin and Jefferson Counties. (2025, January 22). *Former CBI Lab analyst Missy Woods facing criminal charges*, <https://firstda.co/news-update/former-cbi-lab-analyst-missy-woods-facing-criminal-charges/>.

In February 2025, HB25-1275 was introduced in the Colorado legislature in response to Ms. Woods' alleged misconduct.¹⁴⁰ The legislation seeks to enact several new statutes which would require district attorneys, defendants, and defendant's counsel to be notified when a report of misconduct against a crime laboratory employee is filed with a crime laboratory director.¹⁴¹ Upon being notified of such misconduct, defendants would have the opportunity to file a petition to seek post-conviction relief.¹⁴² Under this petition, if a defendant can demonstrate by a preponderance of the evidence that the crime laboratory employee engaged in misconduct and the misconduct was material to the case, the court shall vacate the conviction and grant a new trial.¹⁴³ This bill passed the Colorado legislature and was signed into law by the Governor in June 2025.¹⁴⁴

CRIME COMMISSION LEGISLATION

At the October 2024 Crime Commission meeting, DFS presented on its response to the allegations against Ms. Burton,¹⁴⁵ while Crime Commission staff updated members on the status of the 2024 budget language¹⁴⁶ and potential next steps regarding the allegations against Ms. Burton.¹⁴⁷ Crime Commission staff recommended the creation of a panel to conduct a detailed review of certain cases where Ms. Burton was the forensic examiner in order to determine whether she engaged in a pattern of misconduct.¹⁴⁸

At the January 2025 Crime Commission meeting, members unanimously endorsed legislation to create a panel to review certain cases where Ms. Burton was the forensic examiner. As part of this endorsement, members voted to include the Office of the Attorney General on the review panel, provided that the Virginia State Bar verified that this would not pose a conflict of interest. The Virginia State Bar sent an email to the Crime Commission on January 17, 2025, advising that including the Office of the Attorney General as a member of the review panel would not constitute a legal ethics conflict under the Rules of Professional Conduct.

¹⁴⁰ Bill available at: <https://leg.colorado.gov/bills/hb25-1275>.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ Jackson, L.C. (2024, October 22). *Current DFS quality system and the duty to correct: An update on the Mary Jane Burton project*. Presentation at the October 22, 2024 Crime Commission Meeting (Richmond, VA), <https://vscc.virginia.gov/2024/October22Mtg/DFS%20Quality%20System%20and%20Duty%20to%20Correct%20-%20MJB%20Update.pdf>.

¹⁴⁶ Arrington, C.B. (2024, October 22). *Mary Jane Burton case review: Project status*. Presentation at the October 22, 2024 Crime Commission Meeting (Richmond, VA), https://vscc.virginia.gov/2024/October22Mtg/FINAL_MJB%20Case%20Review%20Presentation_10.21.24%20.pdf

¹⁴⁷ Lubetkin, J. (2024, October 22). *Mary Jane Burton case review: Next steps*. Presentation at the October 22, 2024 Crime Commission Meeting (Richmond, VA), <https://vscc.virginia.gov/2024/October22Mtg/2024%20MJB%20Legislation%20Presentation%20FINAL.pdf>.

¹⁴⁸ *Id.* at slide 6.

As a result of this study, House Bill 2730 and Senate Bill 1465 were introduced during the 2025 Regular Session of the General Assembly as part of the Crime Commission's legislative package.¹⁴⁹ These bills passed the General Assembly and were signed into law by the Governor.¹⁵⁰ As enacted into law, these identical bills:

- Direct the Crime Commission to designate a panel to review cases where Ms. Burton was the forensic examiner, including (i) cases resulting in convictions of persons who are currently incarcerated, or who were executed or exonerated, and (ii) cases where Ms. Burton testified, regardless of the final disposition of the case.
- Instruct the panel to make all reasonable efforts to (i) determine, if possible, whether Ms. Burton engaged in a pattern of misconduct in relation to her testing, analysis, or testimony in such cases and (ii) evaluate the accuracy of her testing, analysis, and testimony.
- Require the panel to prioritize the review of cases for persons who are currently incarcerated.
- Provide that the findings of the panel shall be admissible, but not binding, on a court's determination in any post-conviction proceeding.
- Set forth the panel membership as: a Commonwealth's attorney; a public defender; a practicing attorney who is qualified to serve as court-appointed counsel in felony cases pursuant to § 19.2-163.03 of the Code of Virginia; a judge of a circuit court who is retired under the Judicial Retirement System (§ 51.1-300 et seq. of the Code of Virginia); a representative from the Office of the Attorney General; the Executive Director of the Mid-Atlantic Innocence Project; and, an independent serologist.
- Exempt the work of the panel from the Virginia Freedom of Information Act (§ 2.2-3700 et seq. of the Code of Virginia).
- Require the Crime Commission to provide staff support to the panel.
- Allow the Crime Commission to receive and disseminate information to facilitate the work of the panel, and to share information that it receives with an attorney representing or considering representing an individual in a petition for a writ of habeas corpus or writ of actual innocence pursuant to Chapter 19.2 (§ 19.2-327.2 et seq.) of Title 19.2 of the Code of Virginia or any other federal or state post-conviction proceeding or pardon.
- Instruct the panel to report to the Crime Commission on its work by the first day of each Regular Session of the General Assembly until the completion of the review.

CONCLUSION

As a result of 2024 budget language and 2025 legislation, two reviews are being conducted into the allegations of misconduct against Ms. Burton. The review based on the 2024 budget language is

¹⁴⁹ House Bill 2730, 2025 Regular Session of the General Assembly (Del. Patrick A. Hope). <https://lis.virginia.gov/bill-details/20251/HB2730>. Senate Bill 1465, 2025 Regular Session of the General Assembly (Sen. Scott A. Surovell). <https://lis.virginia.gov/bill-details/20251/SB1465>.

¹⁵⁰ 2025 Va. Acts, Reg. Sess., ch. 421 and 430.

being conducted by Crime Commission staff in order to determine the scope of Ms. Burton's work at DFS. This review focuses on identifying the number of cases where Ms. Burton was the forensic examiner, including the number of cases where she testified, and identifying the number of cases that resulted in a conviction, as well as determining the current status of any individuals who were convicted.

The review based on the 2025 legislation will be conducted by a panel designated by the Crime Commission. That panel will conduct a more in-depth review of approximately 300 cases where Ms. Burton was the forensic examiner in an effort to evaluate the accuracy of her work and testimony and to determine, if possible, whether she engaged in a pattern of misconduct. The Crime Commission will provide staff support to this panel until the completion of the panel's work.

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Virginia Association of Commonwealth's Attorneys

Virginia Commonwealth's Attorneys' Services Council

Virginia Court Clerks Association

Virginia Department of Corrections

Virginia Department of Forensic Science

Virginia Indigent Defense Commission

Virginia Parole Board

Virginia Sheriffs' Association

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