

**UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT**

August Term 2016

(Argued: January 18, 2017 Decided: November 28, 2017)

No. 15-3831-pr

KENNETH WASHINGTON,

Petitioner-Appellant,

-v.-

THOMAS GRIFFIN, SUPERINTENDENT, SULLIVAN CORRECTIONAL FACILITY,

Respondent-Appellee.

Before: KATZMANN, Chief Judge, KEARSE and LIVINGSTON, *Circuit Judges.*

Petitioner-Appellant, convicted in New York State of multiple counts of first- and second-degree burglary and first- and second-degree assault, as well as first-degree criminal sexual act and first-degree sexual abuse, contends that his Confrontation Clause rights were violated when records of the Office of the Chief Medical Examiner of the City of New York regarding the DNA testing of his cheek swab were admitted at trial. He asserts that the United States District Court for the Eastern District of New York erred in denying his petition for a writ of habeas corpus on this basis, arguing that the state court's rejection of his Confrontation Clause claim was contrary to, or involved an unreasonable

application of, clearly established law. We agree with the district court that the Supreme Court cases on which Petitioner-Appellant relies neither clearly establish his entitlement to cross-examine the analysts who prepared the informal, unsworn documents in the case file introduced as evidence at his trial, nor provide a basis for concluding that the state court judgment was contrary to, or involved an unreasonable application of, clearly established law. Accordingly, the judgment of the district court is AFFIRMED.

Chief Judge KATZMANN concurs in a separate opinion.

PAUL SKIP LAISURE (Lynn W.L. Fahey, *on the brief*), Appellate Advocates, New York, New York, *for Petitioner-Appellant*.

WILLIAM H. BRANIGAN, Assistant Queens County District Attorney (John M. Castellano and Joseph N. Ferdendzi, Assistant Queens County District Attorneys, *on the brief*), for Richard A. Brown, Queens County District Attorney, Kew Gardens, New York, *for Respondent-Appellee*.

DEBRA ANN LIVINGSTON, *Circuit Judge*:

Petitioner-Appellant Kenneth Washington (“Washington”) appeals from a judgment of the United States District Court for the Eastern District of New York (Block, *J.*), entered on November 5, 2015, denying his petition for a writ of habeas corpus. Washington was convicted in New York of multiple counts of first- and second-degree burglary and first- and second-degree assault, as well as

first-degree criminal sexual act and first-degree sexual abuse. He claims that the introduction at his trial, during the testimony of an expert lab analyst, of a case file concerning the DNA testing of Washington's buccal cheek swab and containing notations made by the expert's coworkers, "analysts whom the State did not call to the stand," Pet'r's Br. 2, violated his Sixth Amendment right to confront witnesses against him, as clearly established by *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009), and *Bullcoming v. New Mexico*, 564 U.S. 647 (2011). The district court denied the petition, but granted Washington a certificate of appealability. *Washington v. Griffin*, 142 F. Supp. 3d 291, 297 (E.D.N.Y. 2015). We conclude that Washington has not shown, as he must, that the state court either: (1) "arrive[d] at a conclusion opposite to that reached by [the Supreme] Court on a question of law or . . . decide[d] a case differently than [the Supreme Court] on a set of materially indistinguishable facts"; or (2) "unreasonably applie[d] [the correct governing legal] principle to the facts" of this case. *Williams v. Taylor*, 529 U.S. 362, 413 (2000). Accordingly, we affirm the judgment of the district court.

BACKGROUND

I. Factual Background¹

Washington was charged with multiple felony counts—three counts each of first- and second-degree burglary, two counts each of first- and second-degree assault, first-degree criminal sexual act, and first-degree sexual abuse—in connection with three separate home invasions that took place over the course of eleven months between August 2006 and July 2007 in adjacent neighborhoods in Queens, New York. DNA evidence was recovered from each of the three crime scenes, as recounted below. Washington was charged when, as stipulated at trial, a DNA profile based on the DNA evidence recovered at each crime scene was found to match his profile, contained in the New York State DNA Index.

A. The Crimes

1. *The T-Shirt Evidence*

The first set of crimes occurred around 2:00 a.m. on August 17, 2006, when an off-duty New York City Police Department (“NYPD”) detective who lived alone, awoke to find an intruder in her bedroom rifling through her jewelry box. The detective described the intruder, who gained access to her home through a

¹ The factual background presented here is derived from exhibits, testimony, and a stipulation offered at trial.

kitchen window, as a slender black man with cornrows wearing a white t-shirt, denim shorts, and a black stocking cap with a knot at the top. The cap covered the intruder's face and he wore socks on his hands.

When the NYPD officer attempted to retrieve a firearm from the nightstand beside her bed, the intruder approached and they struggled for the weapon. Calling her a "bitch" and a "stupid fat bitch," the intruder viciously beat the detective on the head, first with his hands and eventually with the gun, so hard she bled into her eyes and could not see. Trial Tr. 494. The struggle and beating continued into the hallway and then the bathroom. Demanding money, the intruder pushed his victim into the bathtub and asserted that he had been watching her and knew that she was "some police type bitch." *Id.* at 495. When he left her alone in the bathroom (apparently so that he could search for cash), the detective attempted to get up but slipped on the rim of the bathtub, which was wet with her blood. The intruder returned to the bathroom and scolded her to stay put, stomping on the woman and dumping the contents of her handbag over her. When the intruder again left her alone, the detective used the cellphone that had fallen from her bag to call 911. By the time help arrived, the intruder had left the scene. Emergency responders took the victim

to the hospital, where she was admitted and treated for her wounds. When she eventually returned to her apartment, the detective discovered that the intruder had taken jewelry, her police shield, her gun, and an NYPD-issued MetroCard.

During an early morning search of the area near the victim's home in the hours after the crime, a police officer observed a white t-shirt and a white sock, both apparently covered in blood, and a stocking cap. Officers photographed, collected, and documented these items. Eventually, analysts at the New York City Office of the Chief Medical Examiner ("OCME"), an accredited lab affiliated with the New York City Department of Health and Mental Hygiene, tested these items for DNA evidence.² From scrapings taken from the neck of the t-shirt, the OCME analysts developed a DNA profile of a then-unknown male individual.³

2. *The Glove Evidence*

The second criminal incident occurred on December 5, 2006, about four months later, and was discovered when a working mother returned home,

² Washington refers to the laboratory personnel whose work is at issue here as "analysts." *E.g.*, Pet'r's Br. 2. The state refers to these individuals as "analysts" and "technicians." *Compare* Respondent's Br. 3 *with id.* 18. For purposes of this opinion we refer to these workers as "analysts."

³ Scrapings from both the blood-stained t-shirt and bloody sock generated a DNA profile that matched the NYPD detective. The OCME analysts were unable to generate a DNA profile from the stocking cap.

accompanied by family, to find her house in disarray. Her handbag had been emptied out, and someone had strewn her earrings around the living room. Several items—sneakers, multiple video gaming systems, and two watches—were gone. A window in the dining room had been forced open.

Two gloves that did not belong to any of the home's occupants were recovered at the scene. Police officers collected the gloves and sent them to OCME for DNA testing. OCME analysts determined that, while there was a mixture of DNA present on each glove, both had the same major donor. A male DNA profile was generated from glove scrapings.

3. The Iced-Tea Container Evidence

Finally, on the afternoon of July 15, 2007, the third victim, who was alone at home at the time of the crime, had just awakened and was watching television in bed when a male intruder appeared in her bedroom. The intruder, a black male with cornrows, wore her long white bathrobe, and had covered his face with a towel or t-shirt. The third victim, like the first, noticed that the intruder wore socks on his hands.

The intruder violently assaulted this third victim, placing his hand over her mouth and pushing her face into a pillow to muffle her screams, before

pulling her off the bed by her hair and pressing his penis between her buttocks. The victim, who was pregnant at the time, used her hands to shield her stomach during this assault. When she resisted the intruder, he punched the side of her head, causing her to see stars, and tied a t-shirt around her face. The intruder repeatedly called the victim a bitch and also demanded money. At one point during the attack, the intruder dragged the woman into the kitchen, where he removed a container of iced tea from the refrigerator and took several gulps from it—spitting some of the tea onto her leg. The assailant then dragged her back to the bedroom, where he began choking her.

The victim defecated on herself at this assault, enraging the intruder who called her a “nasty bitch,” dragged her by the hair into the bathroom, threw her in the shower, and told her to clean herself. *Id.* at 719. The intruder then dragged her back to the bedroom and continued his attack, warning her that if she didn’t stop whimpering he would kill her. When the victim again defecated upon being choked, the intruder hit her on the face, returned her to the bathroom, and left her on the toilet. Once he left the bathroom, the woman locked the door behind him. While he banged on the door, threatening to kill her, she opened the bathroom window, which was eight feet above the ground,

and jumped out, landing on her back. Scantily clad and covered in blood and feces, she crawled on her hands and knees across the concrete to the front of the house, and then ran across the street to a neighbor's home for help.

The neighbor called 911, noting, as she did so, an individual in a white robe scaling the fence behind the victim's home. An ambulance took the victim to the hospital where medical personnel treated her injuries and monitored her unborn child during the next few days. She never returned to the residence, but when friends eventually retrieved her things, and she was able to go through them, she discovered that her eyeglasses, jewelry, and some money had been taken. While processing the crime scene, a police officer collected an iced-tea container from the bedroom, which the victim identified at trial. The police sent the iced-tea container to OCME for testing. The OCME DNA lab developed a male DNA profile from amylase taken from the container.⁴

B. The DNA Evidence

1. The DNA Index Match

At trial, the parties stipulated that Washington was not an identical twin and that, had witnesses been called from the New York State Police Forensic

⁴ Amylase is an enzyme present in saliva.

Biology Laboratory, these witnesses would have offered evidence establishing that “the male DNA profile developed by [OCME]’s DNA laboratory from the evidence contained in FB06-14709, scrapings from the neck of white T-shirt, FB07-2443, scrapings from the glove, and FB07-1469, amylase from ice[d-]tea container, was uploaded into [the] New York State DNA Index in Albany.” Joint App’x 23. The profile from the crime-scene evidence was then compared to known individuals in that database. The database included Washington’s DNA profile. The parties stipulated that “the New York State DNA Index revealed that the male DNA profile developed from the evidence described above matched the defendant, Kenneth Washington’s, DNA profile contained in the New York State DNA Index.” *Id.* at 24. DNA Index personnel informed the NYPD of the match.

Washington was arrested. After Washington’s arrest, Detective Patrick Curran, who testified at trial, used a buccal swab to take a DNA sample from Washington pursuant to a court order.⁵ Detective Curran sent the buccal swab in a sealed envelope to the OCME DNA lab for testing.

⁵ A buccal swab is a Q-tip like instrument that is rubbed along the inside of the cheek for the collection of cells.

2. *Yanoff's Analysis of the DNA Evidence*

At Washington's trial, the state relied on the testimony of Natalyn Yanoff, a Level Three Criminalist with OCME, who testified as an expert in the field of DNA analysis, forensic biology, and the statistical significance of DNA profiles, to establish that the DNA profiles developed from the evidence recovered at each crime scene matched the DNA profile of Washington developed from the buccal swab. Yanoff testified that as a Level Three Criminalist, she not only "manage[s] [her] own cases in which [she] interpret[s] DNA results, write[s] reports, and testif[ies] in court if needed," she also supervises others in the use of various DNA techniques, coordinating the lab's work flow and reviewing test results. Joint App'x 26. She testified generally about DNA and about the process used by her lab to develop DNA profiles.⁶

⁶ There are several steps to developing a DNA profile, some or all of which may be performed by different analysts, and multiple times. When evidence is submitted for testing, analysts prepare a sample and then extract DNA from the cells in the sample. If there is enough DNA to proceed, analysts then make millions of copies of portions of the DNA, which is called amplification. Next, analysts, focusing on the very small percent of DNA that varies from person to person, examine the DNA to determine what alleles are present at specific locations, called loci. (Alleles are alternative forms of a gene found at a particular locus on the DNA strand.) The resulting DNA profile is a string of numbers representing the particular alleles found at each of the tested locations.

Yanoff testified that as to the first crime-scene evidence, she cut or scraped samples from the t-shirt, the sock, and the stocking cap, after receiving these items in sealed condition in the lab. She submitted cuttings of apparent blood stains on the t-shirt and also scraped the collar, “an area [in] which we expect,” she testified, “more cells will be found . . . since that area rubs against the neck.” *Id.* at 52. She testified about her analysis of the t-shirt scrapings, which were determined to contain a mixture of cells from the victim and from a then-unknown male. These processes produced sufficient material for the OCME lab to develop a profile of the unknown male, which was placed in a database containing all the DNA profiles generated in her lab.

Yanoff testified that the analysis of the iced-tea container in the third victim’s residence took place some nine months later, and that when the profile from this sample was uploaded into the database, “we found out that it match[ed] the DNA profile that we found in the previous case.” *Id.* at 65. The male DNA profile developed from the glove scrapings in the second home invasion similarly “matched the DNA profile that we saw on [the] ice[d] tea container and . . . on the T-shirt.”⁷ Joint App’x 75. Yanoff testified that she had

⁷ Yanoff affirmed that the evidentiary items from each crime scene “were never at the lab at the same time.” *Id.* at 78.

calculated how often this specific profile could be expected to appear in the human population, and that this combination of alleles would be expected to be found in approximately “one in greater than [a] trillion individuals.” *Id.* at 77.

Yanoff made clear that as to the gloves and iced-tea container recovered from the second and third crime scenes, she did not personally prepare the samples for testing. (Regarding the crime-scene evidence generally, Yanoff does not appear to have personally performed the tasks necessary to extract the DNA from the cells or to amplify those portions to be analyzed, nor did she necessarily make the initial assessment as to the alleles to be found at particular loci.) Yanoff explained that her lab works “the same way as . . . [an] assembly line,” with a group of analysts assigned to specific tests each week, but with an interpreting analyst and at least one supervisor, at the end, reviewing all the raw data associated with a given sample and “mak[ing] conclusions on the findings.” *Id.* at 39. Yanoff testified that she was “familiar with each and every page, specifically each and every report and analysis” generated in regards to the laboratory testing of both the crime-scene evidence and the buccal swab. *Id.* at 45; *see also id.* at 79. Yanoff indicated that she personally reviewed the raw data resulting from all the DNA sampling, reaching her own conclusions based on

that data and comparing the DNA profiles developed from each of the crime scenes and from the swab.

During Yanoff's testimony, the state offered four OCME case files (corresponding to each of the three crime scenes and to the buccal swab), each containing a report from Yanoff as to her conclusions, as well as lab materials related to the DNA testing associated with each file. Only the case file related to the buccal swab is relevant here.⁸ With regard to each case file, Yanoff testified that she examined each page in the file, considered the raw data, and reached her own conclusions based on the data in the file. She also testified as to the foundation for the file's admission as a business record. As relevant here, Washington argued that admission of the buccal swab case file violated his Confrontation Clause rights because Yanoff had not personally tested the swab, but relied on data generated by other analysts. The trial court nonetheless admitted this file along with the files regarding the profiles developed from each crime scene.

The OCME case file regarding the testing of Washington's buccal swab contains several documents. The first page is a "Certification as a Business

⁸ In his petition, Washington limits his challenge to the admission of the case file regarding the DNA testing of his buccal swab, and does not challenge the admission of the OCME case files concerning the DNA testing of the crime-scene evidence.

Record” indicating the records in the file “were prepared by [OCME] in the regular course of business within the Department of Forensic Biology.” *Id.* at 381. The next document is the four-page “Laboratory Report,” signed by Yanoff. This document identifies the suspect (Kenneth Washington) and summarizes Yanoff’s conclusion—that the DNA alleles from the buccal swab taken from Washington match the “DNA alleles of the male donor” from each of the three crime scene–derived profiles. *Id.* at 382.

Several documents follow, including, *inter alia*: evidence tracking forms bearing chain of custody notations of various sorts; a “Schedule of Analysis” indicating procedures the sample was to undergo; a “DNA/Serology Submission Tracking & Productivity Form” indicating that one item was examined, two samples were submitted for DNA extraction, two samples were submitted for quantitation, and two samples were amplified and analyzed at sixteen loci each, two documents each labeled “Control Review Worksheet” stating that several tests were passed, and an “Exemplar Evidence Packaging and Exam Worksheet” noting that the cheek swab was packaged in a white paper envelope approximately 9x6 inches in size that was sealed with tape and had various information written on it.

Yanoff affirmed that the case file reflected the testing of the buccal swab submitted to the lab by Detective Curran as a vouchered piece of evidence and received in a sealed envelope. She made clear that she was not personally involved in the DNA testing of the buccal swab, noting that items of evidence are examined in a different area from samples of known individuals, and that a “different group of people . . . perform[s the] testing of samples of known individuals.” *Id.* at 62–63. Yanoff described the procedures used for testing known samples, indicating that “two separate testing[s] at . . . different times would occur.” *Id.* at 82. She also testified that she personally had reviewed the raw data connected with the swab’s testing and that after reviewing this data, she had compared the DNA profile generated from the buccal swab to the evidence contained in each of the three crime-scene files. She affirmed that the DNA profiles from each of the three crime scenes and from the buccal swab were the same, and she concluded, to a reasonable degree of scientific certainty, that Washington was the source of the DNA on the t-shirt, the gloves, and the iced-tea container.

II. Procedural History

Washington was convicted on all counts on January 19, 2011, at the conclusion of his jury trial. He was thereafter sentenced principally to ninety years in prison. Washington appealed, and on July 3, 2013, the Appellate Division affirmed his conviction. With respect to Washington's Confrontation Clause claim, the Appellate Division stated:

The court properly admitted files prepared by the New York City Medical Examiner's Office containing DNA profiles derived from the testing of evidence recovered from the crime scenes, since the documents containing the DNA profiles, which were prepared prior to the defendant's arrest, "did not, standing alone, link him to the crime." The testimony of the People's expert witness established that she conducted the critical analysis at issue by comparing the DNA profiles derived from the crime scene evidence to the defendant's DNA profile and concluding that all of the profiles matched. Moreover, the DNA profile generated from the swab of the defendant's cheek, standing alone, shed no light on the issue of the defendant's guilt in the absence of the expert's testimony that it matched the profiles derived from the crime scene evidence.

People v. Washington, 968 N.Y.S.2d 184, 186–87 (2d Dep't 2013) (citations and brackets omitted) (quoting *People v. Dail*, 894 N.Y.S.2d 78, 80 (2d Dep't 2010)).

Washington sought leave to appeal the Appellate Division's decision, which the New York Court of Appeals denied on January 31, 2014.

In federal court, in his petition for a writ of habeas corpus, Washington argued before Judge Block that the admission at trial of the OCME file regarding the testing of his cheek swab and, in particular, the DNA profile that this testing produced "violated his Sixth Amendment right to confrontation because he was not afforded the opportunity to cross-examine the lab technicians who generated [the profile]." *Washington v. Griffin*, 142 F. Supp. 3d 291, 292 (E.D.N.Y. 2015). The district court held that in light of the lack of clarity in the Supreme Court's case law on the interaction between scientific report evidence and the Confrontation Clause, as well as the factual similarities between Washington's claim and the one rejected in *Williams v. Illinois*, 132 S. Ct. 2221 (2012), the Appellate Division's decision, which both cited *Williams* and, according to the district court, "mirrored [its] disposition," was not an unreasonable application of clearly established Supreme Court precedent. *Washington*, 142 F. Supp. 3d at 297. The district court nonetheless granted Washington a certificate of appealability. *Id.* Washington timely filed a notice of appeal from the district court's denial of his petition.

DISCUSSION

We review *de novo* a district court's disposition of a petition for a writ of habeas corpus. *Tavarez v. Larkin*, 814 F.3d 644, 648 (2d Cir. 2016). When the petitioner presses a claim that was "adjudicated on the merits in State court proceedings," as here, the Antiterrorism and Effective Death Penalty Act of 1996 ("AEDPA"), Pub. L. No. 104-132, 110 Stat. 1214 (codified as amended in scattered sections of 8, 18, 22, 28 and 42 U.S.C.), "obliges federal courts to give deference to state courts' decisions," *Chrysler v. Guiney*, 806 F.3d 104, 117 (2d Cir. 2015), issuing a writ of habeas corpus only when the state-court adjudication "resulted in a decision that was contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of the United States," 28 U.S.C. § 2254(d)(1).

A principle is "clearly established Federal law" for § 2254(d)(1) purposes "only when it is embodied in a [Supreme Court] holding," *Thaler v. Haynes*, 559 U.S. 43, 47 (2010), framed at the appropriate level of generality, *see Nevada v. Jackson*, 133 S. Ct. 1990, 1994 (2013) (per curiam) (noting that framing Supreme Court precedent at too high a level of generality risks "transform[ing] even the most imaginative extension of existing case law into 'clearly established Federal

law, as determined by the Supreme Court” (quoting 28 U.S.C. § 2254(d)(1)). A state court decision is “contrary to” such clearly established law when the state court “either has arrived at a conclusion that is the ‘opposite’ of the conclusion reached by the Supreme Court on a question of law or has ‘decided a case differently than the Supreme Court has on a set of materially indistinguishable facts.’” *Smith v. Wenderlich*, 826 F.3d 641, 649 (2d Cir. 2016) (brackets omitted) (quoting *Williams v. Taylor*, 529 U.S. 362, 412–13 (2000)). An unreasonable application occurs when “the state court correctly identifies the governing legal principle . . . but unreasonably applies it to the facts of the particular case,” *Bell v. Cone*, 535 U.S. 685, 694 (2002), so that “the state court’s ruling on the claim . . . was so lacking in justification that there was an error well understood and comprehended in existing law beyond any possibility for fairminded disagreement,” *Harrington v. Richter*, 562 U.S. 86, 103 (2011).

Washington renews his argument that the information contained in the OCME case file concerning the DNA testing of his buccal swab was testimonial. In Washington’s view, the admission of this file during Yanoff’s testimony absent his opportunity to cross-examine each of the “non-testifying OCME analysts who conducted DNA testing of [his] buccal swab” and made notations in the file

violated his Sixth Amendment right of confrontation. Pet'r's Br. 25. Further, the Appellate Division's decision rejecting this claim was contrary to, or involved an unreasonable application of, clearly established law set out by the United States Supreme Court in *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009), and *Bullcoming v. New Mexico*, 564 U.S. 647 (2011). We conclude that Washington has not met § 2254(d)(1)'s standard for the review of claims adjudicated on the merits in state court and, accordingly, that his habeas petition was properly denied.

I

The Sixth Amendment to the United States Constitution, applicable to the states through the Fourteenth Amendment, guarantees a criminal defendant “the right . . . to be confronted with the witnesses against him.” U.S. Const. amend. VI; see *Pointer v. Texas*, 380 U.S. 400, 403 (1965). In *Crawford v. Washington*, 541 U.S. 36 (2004), the Supreme Court rejected its earlier view that out-of-court statements falling within a firmly rooted hearsay exception satisfy Confrontation Clause concerns, see *Ohio v. Roberts*, 448 U.S. 56, 66 (1980), and “adopted a fundamentally new interpretation of the confrontation right,” *Williams v. Illinois*, 132 S. Ct. 2221, 2232 (2012) (plurality opinion). The Court held that the

Confrontation Clause prohibits admission at trial of out-of-court testimonial statements against a criminal defendant unless the declarant is unavailable and the defendant had a prior opportunity to cross-examine him. *Crawford*, 541 U.S. at 68. The *Crawford* Court, observing that there are various ways to define “testimonial,” declined to settle on a precise articulation of the term, *id.* at 51–52, 68, resulting in a “steady stream of new cases,” *Williams*, 132 S. Ct. at 2232. Most recently, the Supreme Court has noted that “under our precedents, a statement cannot fall within the Confrontation Clause unless its primary purpose was testimonial”—that is, in light of all the relevant circumstances, viewed objectively, the statement was made or procured with a primary purpose of “creat[ing] an out-of-court substitute for trial testimony.” *Ohio v. Clark*, 135 S. Ct. 2173, 2180 (2015) (quoting *Michigan v. Bryant*, 562 U.S. 344, 358 (2011)). And even then, the Court observed, the Clause does not “bar[] every statement that satisfies the ‘primary purpose’ test,” pointing specifically to out-of-court statements “that would have been admissible in a criminal case at the time of the founding.” *Id.*

To establish his Confrontation Clause claim, Washington relies primarily on the Supreme Court’s decisions in *Melendez-Diaz* and *Bullcoming*, which

addressed the meaning of “testimonial” in the context of laboratory testing of, respectively, purported narcotics and actual blood, for its blood alcohol content. At the start, however, both cases are sufficiently distinguishable from the circumstances here as to draw into question Washington’s contention that the Appellate Division, in rejecting his claim based on these cases, unreasonably applied clearly established Federal law or acted contrary to it. *See* § 2254(d)(1).

Melendez-Diaz was a narcotics case in which the prosecution introduced into evidence multiple bags of purported cocaine that had been in the possession of the defendant and his associates. The Supreme Court held that the sworn, notarized certificates of lab analysts, each reporting on the weight of the bags and affirming that the contents had been examined and determined, in fact, to be cocaine, were testimonial, and could not be admitted at trial absent the defendant’s opportunity to cross-examine the declarants. 557 U.S. at 308, 310–11. In reaching this conclusion, the Court observed that the analysts’ reports—titled “certificates of analysis”—were “quite plainly” affidavits, that is, “declarations of facts written down and sworn to by the declarants before an officer authorized to administer oaths,” and “functionally identical” to “live, in-court testimony.” *Id.* at 308, 310–11. Indeed, the “sole purpose of the

affidavits” under state law, the Court noted, “was to provide ‘prima facie evidence of the composition, quality, and the net weight’ of the analyzed substance[s],” and it could be “safely assume[d] that the analysts were aware of the affidavits’ evidentiary purpose, since that purpose . . . was reprinted on the affidavits themselves.” *Id.* at 311 (quoting Mass. Gen. Laws, ch. 111, § 13).

Bullcoming was to similar effect. The Court held there that admission at trial of a lab report containing a testimonial certification that Bullcoming’s blood-alcohol concentration was above the threshold for aggravated DWI was improper. The report in *Bullcoming*, although not notarized, otherwise closely resembled the “certificates of analysis” in *Melendez-Diaz*: law enforcement had provided evidence to a state laboratory for testing, an analyst had tested the evidence and prepared a certificate attesting to the results, and this certificate was “formalized,” as the *Bullcoming* Court put it, “in a signed document” for the purpose of proving the facts it alleged in the context of a criminal proceeding.⁹ *Bullcoming*, 564 U.S. at 664–65. The *Bullcoming* Court concluded that “the formalities attending the ‘report of blood alcohol analysis’ [were] more than adequate to qualify [the analyst’s] assertions as testimonial,” and the report’s

⁹ Indeed, the document, as the Supreme Court observed, “contain[ed] a legend referring to municipal and magistrate courts’ rules” providing for the admissibility of certified blood-alcohol analyses. *Bullcoming*, 564 U.S. at 665.

admission was error, absent the declarant's unavailability and a showing of the defendant's prior opportunity to cross. *Id.* at 665. The testimony of another analyst, who was familiar with the device used to test the blood and the lab's procedures but did not observe the test or have an "independent opinion," *id.* at 662, concerning the defendant's blood alcohol content, was insufficient to cure the problem. *Id.* at 662–63.

The circumstances here are not the same. Washington does not rely on a lab analyst's affidavit, as in *Melendez-Diaz*, or on the formal certificate of an analyst attesting to his results, as in *Bullcoming*, to make out his Confrontation Clause claim. He instead points to a medley of unsworn, uncertified notations by often unspecified lab personnel, working, as Yanoff testified, "the same way as [an] assembly line." Joint App'x 39. Such notations, standing alone, are potentially as suggestive of a purpose to record tasks, in order to accomplish the lab's work, as of any purpose to make an out-of-court statement for admission at trial. But as we stated in *United States v. James*, 712 F.3d 79 (2d Cir. 2013), *Melendez-Diaz* and *Bullcoming* together suggest that a laboratory analysis is testimonial *only* when "the circumstances under which the analysis was prepared, viewed objectively, establish that the primary purpose of a reasonable

analyst in the declarant's position would have been to create a record for use at a later criminal trial." *Id.* at 94.

II

The differences between *Melendez-Diaz* and *Bullcoming* and the present case in themselves cast doubt on Washington's contention that he has satisfied § 2254(d)(1)'s demanding standard. This conclusion becomes only clearer in light of the Supreme Court's more recent decision in *Williams v. Illinois*, 132 S. Ct. 2221 (2012), which presented facts closest to those here. "When reviewing state criminal convictions on collateral review, federal judges," the Supreme Court has said, "are required to afford state courts due respect by overturning their decisions only when there could be no reasonable dispute that they were wrong." *Woods v. Donald*, 135 S. Ct. 1372, 1376 (2015); *see also id.* (noting that "AEDPA's standard is intentionally 'difficult to meet'" (quoting *White v. Woodall*, 134 S. Ct. 1697, 1702 (2014))). Fairly read, *Melendez-Diaz*, *Bullcoming*, and *Williams* together foreclose any such claim as to the Appellate Division's decision in Washington's case.

Williams involved a state DNA expert's testimony at a rape trial that a DNA profile developed from the victim's vaginal swabs by an outside

commercial lab matched the defendant's profile produced at the lab where the expert worked. 132 S. Ct. at 2227 (plurality opinion). During her testimony, the expert "explained the notations on documents admitted as business records stating that . . . vaginal swabs taken from the victim were sent to and received back from Cellmark," the outside lab. *Id.* She also referred to Cellmark's DNA profile "as having been produced from semen found on the victim's vaginal swabs," even though she had not conducted or observed the lab's work in developing the profile. *Id.*; see also *id.* at 2230. The Court affirmed the conviction, determining that this testimony did not violate the Confrontation Clause despite the fact that no analyst from Cellmark testified about the lab's work. *Id.* at 2244. As we have previously acknowledged, however, in so concluding "[t]he Court came to no clear consensus as to what constituted a testimonial statement in this context." *James*, 712 F.3d at 91.

The *Williams* plurality opinion, written by Justice Alito, offered two alternative bases for concluding the expert's testimony did not implicate the Confrontation Clause. First, the plurality determined that to the extent the substance of the Cellmark report (which was not itself introduced into evidence) was admitted, it was not admitted for its truth but rather as a basis for the expert

witness's opinion that the DNA profile developed by Cellmark matched the accused's DNA profile. 132 S. Ct. at 2239–40. Second, the plurality alternatively concluded that even assuming the contents of the report were admitted for their truth, these contents were not testimonial because “the primary purpose of the Cellmark report, viewed objectively, was not to accuse [the] petitioner or to create evidence for use at trial.” *Id.* at 2243. The plurality deemed it significant, *inter alia*, that when the Illinois State Police lab sent its sample to Cellmark for analysis, “its primary purpose was to catch a dangerous rapist who was still at large, not to obtain evidence for use against [the] petitioner, who was neither in custody nor under suspicion at that time.” *Id.* More generally, the plurality noted that, as here, when “numerous technicians work on each DNA profile” — “[w]hen the work of a lab is divided up in such a way” — “it is likely that the sole purpose of each technician” is not to make statements for admission at trial, but “simply to perform his or her task in accordance with accepted procedures.” *Id.* at 2244.

As Justice Kagan pointed out in dissent, neither of the plurality's rationales commanded a majority. *Id.* at 2277 (Kagan, *J.*, dissenting). Justice Thomas rejected both of the plurality's proffered bases for the Court's holding but

nevertheless concurred in the judgment, agreeing that no Confrontation Clause violation had occurred. *See id.* at 2255, 2256 (Thomas, *J.*, concurring in the judgment). In Justice Thomas’s view, the Confrontation Clause reaches only formalized testimonial materials. *Id.* Judged by this standard, the Cellmark report at issue was insufficiently formalized to qualify as testimonial because it “lack[ed] the solemnity of an affidavit or deposition, for it [was] neither a sworn nor a certified declaration of fact.” *Id.* at 2260. Justice Thomas, noting that the report did not even “attest that its statements accurately reflect the DNA testing processes used or the results obtained,” deemed the Cellmark report distinguishable from the certifications in *Melendez-Diaz* and *Bullcoming* on this ground. *Id.*

Against this backdrop, we cannot say, as AEDPA requires, that the Appellate Division ruling that Washington challenges—namely, that the admission of the OCME case file about the DNA testing of his buccal swab did not offend the Confrontation Clause—represented such an “‘extreme malfunction[]’” in the state criminal justice system that “there could be no reasonable dispute that [the state court] was wrong.”¹⁰ *Donald*, 135 S. Ct. at 1376

¹⁰ Although Washington has failed to meet AEDPA’s exacting standard for the issuance of a writ of habeas corpus, we note that the Appellate Division erred insofar as

(quoting *Harrington*, 562 U.S. at 102 (quoting *Jackson v. Virginia*, 443 U.S. 307, 332 n.5 (1979) (Stevens, J., concurring in judgment))). Assuming *arguendo* that the case file here was admitted for its truth, the Supreme Court has never held that the Confrontation Clause requires an opportunity to cross examine each lab analyst involved in the process of generating a DNA profile and comparing it with another, nor has it held that uncertified, unsworn notations of the sort at issue here are testimonial. As the *Williams* plurality observed, *Melendez-Diaz* and *Bullcoming* “held that the particular forensic reports at issue qualified as testimonial statements, but the Court did not hold that all forensic reports fall into the same category.” 132 S. Ct. at 2243. Nor do the various *Williams* opinions settle the question. As Justice Breyer recognized in his concurrence, none of these opinions “fully deals with the underlying question as to how, after *Crawford*, Confrontation Clause ‘testimonial statement’ requirements apply to crime laboratory reports.” *Id.* at 2248 (Breyer, J., concurring in the judgment).

III

it held that DNA profiles, as a categorical matter, are non-testimonial because “standing alone, [they] shed no light on the issue of the defendant’s guilt.” As previously noted, *see supra* at 29–30, at least five Justices in *Williams* (Justice Thomas in his concurrence and those joining Justice Kagan’s dissent) agreed that the introduction of DNA profiles could, under proper circumstances, run afoul of the Confrontation Clause.

A state court cannot be faulted for declining to apply a specific legal rule “that has not been squarely established by [the Supreme] Court,” *Harrington*, 562 U.S. at 101 (quoting *Knowles v. Mirzayance*, 556 U.S. 111, 122 (2009)), nor even for incorrectly applying an established rule where reasonable jurists could disagree as to its application. *Id.* at 102. Washington makes two main arguments in an effort to avoid the conclusion that these AEDPA principles are determinative of this appeal. Both derive from the proposition that *Williams* “did not alter the rule of *Bullcoming* and *Melendez-Diaz*” with respect to the circumstances of his case. Pet’r’s Br. 25.

Recognizing that the majority decisions in both *Melendez-Diaz* and *Bullcoming* applied to “formalized out-of-court statements,” *id.* at 46, and that Justice Thomas joined the majority opinions in both cases on this basis, Washington first asserts that, unlike the Cellmark report in *Williams*, the OCME case file regarding the testing of his buccal swab is, in fact, analogous to the lab analysts’ affidavits in *Melendez-Diaz* and the testimonial certification in *Bullcoming*, even though the individual lab analysts here did not certify their results. This is because a “certifying agent of OCME signed a ‘Certification as a Business Record’ cover page to which the file was attached attesting to the fact

that the within records had been prepared in the regular course of OCME business.” Pet’r’s Br. 41. This certification, Washington contends, establishes that the out-of-court notations of the lab analysts here were, as in *Melendez-Diaz*, “formalized testimonial materials,” 557 U.S. at 310 (quoting *Crawford*, 541 U.S. at 51-52), rendering *Williams* inapplicable and the Appellate Division’s decision to the contrary not merely erroneous but wrong beyond reasonable dispute.

We disagree. Both in the affidavits at issue in *Melendez-Diaz* and in the testimonial certification in *Bullcoming*, lab analysts affirmed, in essence, that they had performed particular tests, adhered to precise protocols, and produced specified results. As the *Melendez-Diaz* Court put it, the analysts’ out-of-court “certificates” were “functionally identical to live, in-court testimony,” *id.* at 310–311, and the lab analysts “create[d] [them] for the sole purpose of providing evidence against a defendant,” *id.* at 323 (emphasis in original). Here, no lab analyst did any such thing: rather, a *custodian* attested in a business records certification that the OCME case file produced in court was a true copy of the original case file maintained by the OCME DNA lab, and that the file’s contents were prepared in the regular course of business.¹¹ Joint App’x 381. To be

¹¹ As already explained, Yanoff also testified to the foundation requirements for admitting the OCME file as a business record.

clear, such a certification does not defeat a meritorious Confrontation Clause claim. At the same time, however, this certification—a “traditionally admissible” means, as *Melendez-Diaz* recognized, by which “[a] clerk could by affidavit authenticate or provide a copy of an otherwise admissible record,” 557 U.S. at 322–23—does not transform the underlying notations of the lab analysts into formalized testimonial materials. Nor does it place beyond reasonable dispute whether the lab notations satisfy the primary purpose test: whether, as the Court put it in *Clark*, they were made with a primary purpose of “creat[ing] an out-of-court substitute for trial testimony,” 135 S. Ct. at 2180 (internal quotation marks omitted), or instead, as the plurality suggested in *Williams*, for the purpose of “perform[ing] . . . task[s] in accordance with accepted procedures,” 132 S. Ct. at 2244.

Washington next argues that even if *Williams*, with its discordant opinions, changed “the rule of *Bullcoming* and *Melendez-Diaz*,” it merely narrowed the definition of “testimonial” and the evidence in his case falls within that narrowed definition. Pet’r’s Br. 25. He contends that the “clearly established” rule of this precedent is “that formalized out-of-court statements made by forensic analysts that have the primary purpose of building a case against a targeted individual”

are testimonial, and so subject to the Confrontation Clause. *Id.* at 46. Any confusion emanating from the fractured *Williams* Court, Washington argues, relates only to “how far *beyond* the targeted suspect scenario the primary purpose test reaches.” *Id.* at 35. Moreover, Washington contends that his case falls within the “targeted suspect scenario” because his buccal swab was tested *after* the match between his DNA profile in the New York State DNA Index and the crime-scene evidence profiles led to his arrest.¹²

This argument, too, is unavailing. The Supreme Court has unequivocally stated that a principle is “clearly established” for the purposes of § 2254(d)(1) “only when it is embodied in a [Supreme Court] *holding*.” *Haynes*, 559 U.S. at 47 (emphasis added). We have already noted the difficulty in identifying a single holding of principle from the several opinions of the fractured *Williams* Court, using the analytic approach that the Supreme Court recommends. *See James*, 712 F.3d at 95 (citing *Marks v. United States*, 430 U.S. 188, 193 (1977)); *see also Williams*, 132 S. Ct. at 2277 (Kagan, J., dissenting) (noting that *Williams* leaves “significant confusion in [its] wake,” making apparent that *Melendez-Diaz* and *Bullcoming* “no longer mean all that they say” without clarifying “in what way or

¹² As already noted, Washington does not press a Confrontation Clause claim as to the OCME files related to the evidence found at each crime scene, all of which was tested prior to his identification as a suspect.

to what extent they are altered”). Indeed, the supposedly clear rule that Washington discerns in *Williams* runs counter to the opinion of a majority of Justices there: thus, both Justice Thomas in his concurrence and Justice Kagan in her dissent specifically reject the proposition that Confrontation Clause protections should be limited to circumstances in which a suspect has been identified, *see* 132 S. Ct. at 2262 (Thomas, *J.*, concurring in the judgment) (rejecting the “targeted individual” theory of Confrontation Clause protections as “lack[ing] any grounding in constitutional text, in history, or in logic”); *id.* at 2274 (Kagan, *J.*, dissenting) (rejecting the theory as insufficiently addressing reliability concerns), and Justice Thomas alone subscribes to the view that the Clause reaches only formalized materials. It is therefore difficult to see how Washington’s purported rule could be “clearly established Federal law” for purposes of § 2254(d)(1).

Moreover, even were we to assume that this is not a problem—that we may in theory take as clearly established a narrowed version of “testimonial” emanating from the plurality opinion, plus Justice Thomas’s concurrence—Washington fails to show that reasonable jurists would all agree as

to the narrowed rule to be drawn from the plurality opinion.¹³ *Harrington*, 562 U.S. at 102 (noting that if AEDPA’s standard “is difficult to meet, that is because it was meant to be”). The *Williams* plurality clearly stated that in “identifying the primary purpose of an out-of-court statement,” courts are to “look for the primary purpose that a reasonable person would have ascribed to the statement, taking into account *all* of the surrounding circumstances.” 132 S. Ct. at 2243 (emphasis added). As Washington notes, one circumstance supporting the plurality’s conclusion that the primary purpose of the Cellmark report was *not* “to create evidence for use at trial” was that the analysts in *Williams* were testing the sample there in an effort to identify a still-at-large rapist. *Id.* Significantly, however, the plurality opinion at no point affirms that in the “targeted suspect scenario,” the Confrontation Clause necessarily applies.

And Washington ignores other aspects of what the plurality opinion does, in fact, say. As to DNA testing in particular, the plurality also deemed it “significant” that when the work of a lab is divided up among a number of

¹³ In addition, even taking as clearly established Washington’s purported rule (that “formalized out-of-court statements by forensic analysts that have the primary purpose of building a case against a targeted individual are testimonial,” Pet’r’s Br. 25), Washington—as we noted above—does not show that the analysts’ notations *were* “formalized” for the purposes of Justice Thomas’s concurrence, much less does he put this issue beyond possibility of “fairminded disagreement,” *see Harrington*, 562 U.S. at 103.

analysts, the likelihood is that the only purpose of each analyst is “to perform his or her task in accordance with accepted procedures” — at least suggesting that in such circumstances, the primary purpose of out-of-court notations may not be testimonial, regardless whether a suspect has been identified. *Id.* at 2244. “[T]he use at trial of a DNA report prepared by a modern, accredited laboratory,” the plurality further observed, “bears little if any resemblance to the historical practices that the Confrontation Clause aimed to eliminate.” *Id.* (quoting *Bryant*, 131 S. Ct. at 1167 (Thomas, *J.*, concurring in the judgment)).

In such circumstances, we agree with the district court that “whether the plurality would hold that the primary purpose of those preparing Washington’s DNA profile implicated the Confrontation Clause is, at the very least, debatable.” *Washington*, 142 F. Supp. 3d at 296; *see also Harrington*, 562 U.S. at 98 (noting that for claims adjudicated on the merits in state court, “the habeas petitioner’s burden . . . must be met by showing there was no reasonable basis for the state court to deny relief”). We also concur in that court’s conclusion that “[c]onsidering the lack of clarity in the Supreme Court’s Confrontation Clause jurisprudence, and in light of the factual similarities between *Williams* and the present case,” the Appellate Division’s decision here cannot be deemed an

unreasonable application of clearly established Supreme Court precedent, *Washington*, 142 F. Supp. 3d at 297; *see* § 2254(d)(1).

* * *

To be clear, our conclusion today is narrow. We note that the New York Court of Appeals recently decided in *People v. John*, 27 N.Y.3d 294 (2016), that where the generation of a DNA profile *is* testimonial—as it concluded the profile there was—“at least one analyst with the requisite personal knowledge must testify.” *Id.* at 313. The *John* Court rejected an “all analysts” rule and concluded that nothing in the record before it suggested that the analysts involved in the “preliminary testing stages” of “extraction, quantitation or amplification” were necessary witnesses. *Id.* Instead, the “analyst who witnessed, performed or supervised the generation of defendant’s DNA profile, or who used his or her independent analysis on the raw data” should testify. *Id.* at 315. The State argues here that Yanoff satisfies this criterion because she testified that she consulted the raw data, reached her own conclusions, and personally reviewed and compared the profile from the buccal swab to the profiles generated from the crime-scene evidence.

We need not and do not decide whether this case meets the New York State standard. As the New York Court of Appeals noted in *John*, courts around the country are assessing the scope of Confrontation Clause rights in the context of DNA evidence in the wake of *Williams*. *Id.* at 314–15; *see, e.g., State v. Norton*, 117 A.3d 1055, 1058 (Md. 2015); *Commonwealth v. Yohe*, 79 A.3d 520 (Pa. 2013). Our task here is more circumscribed: to assess whether the Appellate Division’s merits determination was “contrary to, or involved an unreasonable application of, clearly established Federal law.” 28 U.S.C. § 2254(d)(1). Like the district court, we cannot conclude that Washington has sustained his burden of showing that the Appellate Division applied a rule “contradict[ing] the governing law set forth in [the Supreme Court’s cases],” or that it “confront[ed] a set of facts that are materially indistinguishable from a [Supreme Court] decision” and arrived at a different result. *Taylor*, 529 U.S. at 405–06. Nor is the Appellate Division’s decision “so lacking in justification” as to constitute an unreasonable application of clearly established federal law “beyond any possibility for fairminded disagreement.” *Harrington*, 562 U.S. at 103.

CONCLUSION

For the foregoing reasons, we AFFIRM the district court's denial of Washington's petition.

KATZMANN, *Chief Judge*, concurring:

Mindful of AEDPA's "intentionally difficult [standard] to meet," *Woods v. Donald*, 135 S. Ct. 1372, 1376 (2015) (internal quotation marks omitted), I concur in full with the Court's opinion. I write separately to raise a pragmatic suggestion for future prosecutions. Given the Supreme Court's fractured disposition in *Williams* and the New York Court of Appeals' recent holding in *People v. John*, 27 N.Y.3d 294 (2016), legal and practical issues related to the testimonial use of DNA test results in criminal trials are sure to remain. Although the *John* Court settled on the requirement that, in that case, "a single analyst, particularly the one who performed, witnessed or supervised the generation of the critical numerical DNA profile" would suffice for the purposes of the Confrontation Clause, *id.* at 314, serious concerns remain about whether crime labs have properly stored, extracted, and labeled DNA samples, particularly where a single lab contains and tests samples from the victim, the crime scene, and the accused, *see, e.g., Williams v. Illinois*, 567 U.S. 50, 118-19 (2012) (Kagan, *J.*, dissenting).

One approach to addressing these concerns is to spend years litigating every instance a DNA profile is offered at trial in order to determine whether or

not the Confrontation Clause is implicated. I suggest what I think is an easier and more efficient route. For cases scheduled for trial, the prosecution could order that a defendant's DNA sample be collected and tested again and supervised by an analyst who is prepared and qualified to testify. This approach mirrors the recommendation of the National Research Council Committee on DNA Forensic Science, which has stated that "[t]he ultimate safeguard against error due to sample mixup is to provide an opportunity for retesting," and that "[i]n most cases, it is possible to retain portions of the original evidence items and portions of the samples from different stages of the testing."¹ The National Institute of Justice has likewise found that "[a]ny probative biological sample that has been stored dry or frozen, regardless of age, may be considered for DNA analysis,"² and the Innocence Project in fact has utilized DNA testing of preserved evidence

¹ National Research Council, *The Evaluation of Forensic DNA Evidence* 81 (1996), available at <https://www.nap.edu/read/5141/chapter/1>.

² U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, *DNA Evidence: Basics of Identifying, Gathering and Transporting* (Aug. 9, 2012), <https://www.nij.gov/topics/forensics/evidence/dna/basics/pages/identifying-to-transporting.aspx>.

in every one of its over 350 DNA exonerations.³ Thus, where law enforcement officers have properly preserved forensic evidence, it would be feasible for the DNA to be retested under the supervision of an analyst who is qualified and prepared to testify at trial.

The supervising analyst need not conduct every step of the process herself. Instead, by supervising the process, she could personally attest to the extraction and correct labeling of the sample, that a proper chain of custody was maintained, and that the DNA profile match was in fact a comparison of the defendant's DNA to that of the DNA found on the crime scene evidence.⁴ Such testimony would assuage Confrontation Clause concerns, and, because the vast majority of criminal defendants plead guilty, only a small share of the DNA reports would need to be retested.

³ Innocence Project, *Preservation of Evidence*, www.innocenceproject.org/preservation-of-evidence (last visited Oct. 25, 2017).

⁴ Ideally, the analysts should not be informed that the testing is for the purpose of providing evidence at trial. Where this is not feasible, cross-examination of the supervising analyst would alleviate any concern that there was intentional mishandling of the sample. Of course, the prospect of cross-examination might incentivize more defendants to go to trial. I find this unlikely, however, because the defendant would not know at the time of plea negotiations whether the Government intended to retest the DNA sample (and would therefore call the additional analyst at trial).

The State might retort that such testing and testimony would be unduly expensive, requiring additional time and resources to conduct a DNA test anew and provide a testifying analyst at trial. Those costs, it seems to me, are far outweighed not only by the additional assurance provided by the defendant's opportunity to cross-examine, but also by the exorbitant costs in both time and resources implicated by a defendant's subsequent appeal challenging the denial of such an opportunity.

Consider the case history here. Washington appealed his conviction on Confrontation Clause grounds first to the Appellate Division of the New York Supreme Court, *see People v. Washington*, 968 N.Y.S.2d 184 (2d Dep't 2013), and then to the New York Court of Appeals, which declined to hear his case, *see People v. Washington*, 22 N.Y.3d 1091 (2014). He then filed a habeas petition in federal court, which was first denied by the district court, *see Washington v. Griffin*, 142 F. Supp. 3d 291 (E.D.N.Y. 2015), and has now, nearly two years later, been denied by this Court. This process has involved a half-decade of litigation, countless hours of attorney manpower, and the dedication of four different courts at both the state and federal level. Simply testing a second buccal swab

sample would have rendered such litigation wholly unnecessary.

To be sure, the analysts conducting the second test might make a mistake. But if DNA testing is so fickle that we cannot reasonably expect a second test to produce accurate results, this is an indictment of DNA evidence as a whole rather than the narrow solution of retesting. Moreover, retesting is likely to produce more reliable results than the first time around. The supervising analyst would be physically present during the most error-prone portions of the analysis, would review the findings of the individual analysts at the end, and could utilize any additional measures adopted by the original crime lab, such as running two tests to confirm the results. The probability that the second test would have a higher risk of error than the first accordingly seems marginal.

DNA evidence has greatly enhanced the State's ability to investigate crimes and identify suspects, while also exonerating many wrongly convicted of crimes they did not commit. As with any rapidly developing technology, however, its adoption has sometimes outstripped the law's capacity to oversee its judicious use. Such failure may not always result in a constitutional violation, but it does warrant careful consideration and pragmatic policy modifications

where feasible. I am hopeful that going forward, prosecutors will endeavor where possible to make an analyst available at trial who was involved *firsthand* in the handling and testing of DNA, even if that may sometimes require the testing of a second sample from a defendant scheduled to stand trial. It is far better for *all* involved — the prosecution, the court, and the accused — that the defendant has the opportunity to challenge DNA evidence at trial, rather than years later on appeal.