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Cover Page Footnote

J.D. Candidate, May 2014, The Catholic University of America, Columbus School of Law; B.A., 2011, Gettysburg College. The author wishes to thank John Sharifi for his exceptional and invaluable insight, guidance, dedication, tenacity, and inspiration throughout this process. She would also like to thank her colleagues on the Catholic University Law Review for their work on this Comment, and her legal writing professors, who taught her to question what she thinks she may know and to always lead with her conclusion.

CAN'T TOUCH THIS? MAKING A PLACE FOR TOUCH DNA IN POST-CONVICTION DNA TESTING STATUTES

Victoria Kawecki⁺

DNA testing is to justice what the telescope is for the stars: not a lesson in biochemistry, not a display of the wonders of magnifying optical glass, but a way to see things as they really are. It is a revelation machine”¹

On February 11, 1987, in Fort Collins, Colorado, a passing cyclist discovered the body of a brutally murdered woman exposed in an open field.² Earlier that morning, fifteen-year-old Timothy Masters had seen the same body.³ Convinced himself that the body was a mannequin, Masters did not report the sighting to police.⁴ This misstep, coupled with the proximity of the Masters's home to the crime scene⁵ and the discovery of questionable “character” evidence,⁶ led investigators to interrogate Masters for ten hours

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1. BARRY SCHECK, PETER NEUFIELD & JIM DWYER, ACTUAL INNOCENCE: WHEN JUSTICE GOES WRONG AND HOW TO MAKE IT RIGHT xviii (2003) [hereinafter SCHECK ET AL.].

2. *Masters v. People*, 58 P.3d 979, 983 (Colo. 2002). The partially nude body of thirty-seven-year-old Peggy Hettrick was found “murdered and sexually mutilated” in a field in Fort Collins, Colorado. *Drawn to Murder* (CBS News television broadcast Dec. 24, 2011), available at http://www.cbsnews.com/8301-18559_162-6025618/drawn-to-murder/. According to medical reports, Hettrick was fatally stabbed in the back with a five-inch serrated knife. *Masters*, 58 P.3d at 983.

3. According to Masters's father, Masters normally walked straight through the field each morning on his way to school; however, on the day of the murder, Masters visibly hesitated, veered off course, and stopped—actions his father later interpreted as obvious indications that Masters had seen the body. *Drawn to Murder*, *supra* note 2.

4. TIMOTHY MASTERS WITH STEVE LEHTO, DRAWN TO INJUSTICE 3 (2012) (explaining that the body resembled a Resusci Anne Simulator doll which is normally used for CPR practice). The cyclist that eventually reported the discovery to the police also mistook the victim's remains for a mannequin. *Drawn to Murder*, *supra* note 2. Investigators noted that the victim's body was clean of blood, which added credibility to Masters's assumption. *Id.*

5. *Masters*, 58 P.3d at 983 (explaining that “[t]he body was left within several hundred feet of [Masters's] home, and could be seen from [his] bedroom window”).

6. The Colorado Supreme Court admitted into evidence numerous graphic drawings, writings with sexual overtones, and a suitcase filled with pornographic photographs of female genitalia, all seized from Masters. *Id.* at 983–84. Although the Colorado Supreme Court held that some of the drawings and writings could only lead to an inference of bad character, which is

shortly after the murder, and to arrest him ten years later.⁷ Masters was charged and later convicted of a murder he did not commit.⁸ After spending almost a decade in prison, Masters was released in 2008.⁹ Masters's release and exoneration were partially based on the cutting-edge deoxyribonucleic acid (DNA) analysis of microscopic skin cells left behind by the perpetrator on the victim's clothing,¹⁰ a method colloquially known as "touch DNA" testing.¹¹ Fortunately for Masters, Colorado's post-conviction DNA testing statute, which permits testing of biological evidence if the petitioner proves by a preponderance of the evidence that "[f]avorable results of the DNA testing will demonstrate the petitioner's actual innocence," is broad enough to allow DNA analysis of skin cells.¹² Masters, in this regard, was lucky to have been prosecuted in Colorado.

Although states acknowledge the importance of providing avenues for demonstrating actual innocence, inmates are often severely hampered by restrictive post-conviction DNA testing statutes in many states often limiting access to the type of DNA testing that led to Masters's exoneration.¹³ The ability to obtain any kind of post-conviction DNA testing hinges on the structure of the statute. The availability of specific types of DNA testing depends on the statute's definition of testable material ("biological material requirement"), and its emphasis on the expected impact of the testing

prohibited by Colorado Rule of Evidence 404, the court found that their admission was "harmless error" in light of the entire record. *Id.* at 1002–04 (applying COLO. R. EVID. 404(b)).

7. *Drawn to Murder*, *supra* note 2. After Masters's father—his only alibi witness—died, the state again pursued Masters's arrest by reevaluating previously collected evidence. *MASTERS WITH LEHTO*, *supra* note 4, at 148–49.

8. *Masters*, 58 P.3d at 983 (noting Masters's conviction by jury verdict).

9. Trevor Hughes, *Tim Masters Formally Exonerated for 1987 Murder of Peggy Hettrick of Fort Collins*, *THE COLORADOAN* (Fort Collins, Colo.) (June 28, 2011), available at <http://www.coloradoan.com/article/20110628/UPDATES01/110628016/Tim-Masters-formally-exonerated-1987-murder-Peggy-Hettrick-Fort-Collins>.

10. Miles Moffett, *DA Set to Drop Masters Case*, *DENVER POST* (Jan. 25, 2008), http://www.denverpost.com/ci_8071788. The Masters defense team traveled to Amsterdam, where the victim's clothing underwent touch DNA testing. *Drawn to Murder*, *supra* note 2.

11. *Touch DNA*, BODE TECHNOLOGY, <http://www.bodetech.com/forensic-solutions/dna-technologies/touch-dna/> (last visited Apr. 15, 2013) (explaining that touch DNA can link perpetrators to a particular crime if the perpetrator leaves enough skin cells behind on an item at the crime scene).

12. COLO. REV. STAT. § 18-1-413(1)(a)–(b) (2012). Similar to the District of Columbia's Innocence Protection Act (IPA), the Colorado statute uses equivocal language, such as the term "demonstrate." See *infra* notes 121, 173 and accompanying text (analogizing the IPA's materiality language to a "some evidence" standard).

13. See, e.g., *State v. Solman*, 29 A.3d 183, 188–90 (Conn. App. Ct. 2011) (denying an application for touch DNA testing despite the petitioner's argument that the purpose of the statute is to provide access to potentially exculpatory DNA evidence), *cert. denied*, 33 A.3d 739 (Conn. 2011); *Hood v. United States*, 28 A.3d 553, 560, 566 (D.C. 2011) (denying an application for touch DNA testing despite the IPA's alleged purpose to allow access to "powerful techniques of DNA analysis").

(“materiality requirement”).¹⁴ Some statutes broadly define biological material, allowing for touch DNA testing if the petitioner can show—with varying levels of certainty—that the test results will support his or her claim of innocence.¹⁵ Other statutes regulate the types of evidence that can be tested to such an extent that touch DNA is not plainly eligible for post-conviction consideration.¹⁶ Finally, the District of Columbia’s Innocence Protection Act (IPA) definitively repudiates touch DNA testing.¹⁷ The IPA altogether precludes post-conviction touch DNA testing, setting a potentially dangerous precedent for other jurisdictions with similar statutes.¹⁸ Had Masters sought post-conviction relief in the District of Columbia, he would probably still be incarcerated.

The IPA is an extreme example of the problematic and restrictive language that plagues many post-conviction DNA testing statutes.¹⁹ Typical of this type of statute, the IPA presents two obstacles that a touch-DNA petitioner must overcome. First, the statute requires that the testing will help to demonstrate the petitioner’s actual innocence.²⁰ Second, the IPA limits testing to

14. See *infra* Part I.D (explaining the significance of the biological material and materiality requirements in post-conviction DNA testing statutes in the District of Columbia, Maryland, and Texas).

15. See, e.g., MD. CODE ANN., CRIM. PROC. § 8-201(a)(5)(iii) (LexisNexis 2008 & Supp. 2012); MD. CODE ANN., CRIM. PROC. § 8-201(d)(1)(i) (LexisNexis 2008 & Supp. 2012); OHIO REV. CODE ANN. §§ 2953.71(B), 2953.74(B)(1) (LexisNexis 2010 & Supp. 2012) (allowing for post-conviction DNA testing if the petitioner has met certain requirements, including a showing that the results are “outcome determinative”).

16. See, e.g., CONN. GEN. STAT. § 54-102kk(a) (2009), *construed in Solman*, 29 A.3d at 188 (holding that there must “be a factual basis to conclude that biological evidence is present on the evidence prior to testing,” which must be more than a good-faith assertion); TEX. CODE CRIM. PROC. ANN. art. 64.01(a)–(b) (West 2006 & Supp. 2012), *construed in Swearingen v. State*, 303 S.W.3d 728, 732 (Tex. Crim. App. 2010) (holding that the statute requires “that all evidence to be tested must first be proven to contain biological material”).

17. *Hood*, 28 A.3d at 566 (discussing D.C. CODE § 22-4133(2001 & Supp. 2012)). The IPA includes a collection of post-conviction statutes. D.C. CODE §§ 22-4131 to 22-4135 (2001 & Supp. 2012). This Comment uses the collective “IPA,” even when discussing the specific post-conviction DNA testing provision.

18. *Hood*, 28 A.3d at 557–60. Nevertheless, the IPA is considered a model post-conviction remedy statute *Unavailability of Adequate Post-Conviction Remedies*, MID-ATLANTIC INNOCENCE PROJECT, <http://www.exonerate.org/about-2/causes-of-wrongful-convictions/unavailability-of-adequate-post-conviction-remedies/> (last visited Apr. 15, 2013). Judicial interpretation of the IPA’s restrictive provisions could influence those states where appellate courts have not yet considered touch DNA evidence. See, e.g., *infra* note 144 (noting that Maryland and the District of Columbia appear to be the only jurisdictions in which the highest appellate courts have considered touch DNA evidence under their post-conviction DNA testing statutes).

19. See *infra* Part I.D. (discussing different types of biological material and materiality requirements that are commonly found in post-conviction DNA testing statutes).

20. D.C. CODE § 22-4133(d) (requiring a “reasonable probability” that DNA testing will “help establish that the applicant was actually innocent”).

“biological material,”²¹ which it strictly defines to include only seven materials: the contents of a “sexual assault forensic kit, semen, vaginal fluid, blood, saliva, *visible* skin tissue,” and, in some instances, hair.²²

In 2011, the D.C. Court of Appeals squarely faced the question of whether a request for touch DNA testing could be granted under the IPA in *Hood v. United States*.²³ In *Hood* the petitioner was charged with murder after he was found inside the home of the dying victim.²⁴ Although the petitioner argued at trial that he was in the victim’s home to defend her from a third-party attacker, the jury found him guilty.²⁵ Following the enactment of the IPA, the petitioner moved for touch DNA testing, claiming that the testing would identify the actual assailant.²⁶ The court foreclosed the opportunity to test the DNA contained in skin cells, interpreting the statute’s “visible skin tissue” qualification to exclude samples that could not be seen by the unaided eye.²⁷ The court also concluded that the testing requested would not meet the statute’s materiality requirement.²⁸

The court’s interpretation of the IPA highlights the counterintuitive nature of the statute’s language: although enacted to provide relief to the wrongfully convicted,²⁹ the statute prohibits the testing of probative evidence.³⁰ The D.C. Council has recognized this juridical gap and, after the *Hood* decision, has considered redefining “biological material” in the IPA to allow for touch DNA testing.³¹ The Council’s amendment process has

21. *Id.* § 22-4133(a) (allowing petitioners to “apply to the court for DNA testing of biological material” that meets the requirements of the statute).

22. *Id.* § 22-4131(2) (emphasis added). This definition applies to the IPA in its entirety, not only to the post-conviction DNA testing provision. *See, e.g.*, D.C. CODE § 22-4131 (explaining that the section’s definitions apply to the entire chapter).

23. 28 A.3d 553, 555 (D.C. 2011); *see also* Reply Brief for Appellant at 3, *Hood*, 28 A.3d 553 (No. 08-CO-1581) (framing the issue on appeal as a case of misapplication and misinterpretation of the IPA).

24. *Hood*, 28 A.3d at 556–57.

25. *Id.* at 557.

26. *See id.* at 557–58 (noting that the appellant sought to establish that he was not the assailant by requesting DNA testing of evidence found at the crime scene).

27. *Id.* at 559–60.

28. *Id.* at 564–66 (finding that the IPA requires a petitioner to make a showing of more than a mere possibility that the results would prove his or her innocence).

29. COUNCIL OF THE DIST. OF COLUMBIA COMM. ON THE JUDICIARY, 14th Council Period B. 14-153 (2001) [hereinafter D.C. COMM. REP.]. The appellant in *Hood* contended that the purpose of the IPA “is to enable wrongfully convicted persons to use the powerful techniques of DNA analysis to prove their innocence.” *Hood*, 28 A.3d at 560.

30. *Hood*, 28 A.3d at 563 (noting that the IPA is exceptional because, although it establishes a right to post-conviction DNA testing, a petitioner’s request to test trace amounts of skin cells that could potentially exonerate a petitioner can still be denied).

31. In July 2012, D.C. Councilmember Mary Cheh proposed the “Innocence Protection Amendment Act of 2012,” which seeks to define “biological material” more broadly to ensure the availability of DNA testing for “potentially exonerating evidence.” B. 19-880, 19th Council Period (D.C. 2012).

revealed the difficulty in wording a post-conviction statute to fairly balance competing interests without prohibiting touch DNA evidence testing.³²

This Comment presents an alternative to the limiting threshold that the IPA and other similarly restrictive statutes place on an inmate seeking access to potentially exonerative touch DNA testing. Part I provides a brief history of the use of DNA technology in criminal investigations and in the courtroom. This Comment then briefly discusses the rapid evolution of DNA testing technology, specifically focusing on touch DNA. Part I concludes by explaining the common requirements for relief in state post-conviction DNA testing statutes. Part II categorizes these statutes by whether the language permits touch DNA testing. Finally, Part III suggests that unreasonably restrictive statutes, such as the IPA, should be restructured to combine a discerning materiality requirement with a technologically neutral biological material requirement. A standard that balances the importance of rectifying wrongful convictions with the value of preserving state resources allows actually innocent individuals to further capitalize on the “revelation machine”³³ that is DNA technology.

I. THE NEW “GOLD STANDARD”:³⁴ DNA AND THE CRIMINAL JUSTICE SYSTEM

Considered common parlance in today’s courtroom, DNA refers to the genetic material found in each cell that encodes biological identity.³⁵ The human genome consists of 3.2 billion nucleotides strung together to form the familiar double helix.³⁶ Disentangling the double helix revealed that roughly 99.5 to 99.7% of genetic material is identical among all humans.³⁷ The

32. See *Public Hearing: B. 19-880, Innocence Protection Amendment Act of 2012 & Re-entry Facilitation Amendment of 2012 Before the Comm. on the Judiciary*, 19th Council Period (D.C. Sept. 25, 2012), http://dc.granicus.com/MediaPlayer.php?view-id=12&clip_id=1396 [hereinafter *IPA Amendment Hearing*] (video recording of public hearing accessed through Council Hearings Archive).

33. SCHECK ET AL., *supra* note 1, at xviii (comparing DNA testing to telescopes for its ability to reveal previously unknown evidence in criminal cases).

34. Mark Hansen, *The Uncertain Science of Evidence*, 91 A.B.A. J. 48, 50 (2005) (quoting Paul C. Giannelli, Professor of Law at Case Western Reserve University) (characterizing DNA analysis as the “gold standard” among forensic sciences).

35. See Erin Murphy, *Relative Doubt: Familial Searches of DNA Databases*, 109 MICH. L. REV. 291, 294 (2010); see also DAVID H. KAYE, *THE DOUBLE HELIX AND THE LAW OF EVIDENCE* 5 (2010) (noting the long history of using genetics in the courtroom); RON C. MICHAELIS, ROBERT G. FLANDERS, JR. & PAULA H. WULFF, *A LITIGATOR’S GUIDE TO DNA: FROM THE LABORATORY TO THE COURTROOM* 215 (2008) [hereinafter MICHAELIS ET AL.] (describing briefly the history of DNA analysis in the courtroom).

36. See Murphy, *supra* note 35, at 294 (noting that the human genome consists of nucleotides stored in paired chromosomes). DNA is composed of two strands of nucleotides that are bound together to form a double-helix structure. MICHAELIS ET AL., *supra* note 35, at 7–8.

37. KAYE, *supra* note 35, at 42–43; Murphy, *supra* note 35, at 294–95.

remaining miniscule percentage denotes an individual's unique genetic information.³⁸

In 1984, British geneticist Sir Alec Jeffreys discovered this variation in the DNA nucleotide sequence, using restriction fragment length polymorphism (RFLP) technology³⁹ to isolate portions of the DNA strands.⁴⁰ Through this methodology—called “DNA fingerprinting”—Jeffreys was able to identify individuals by their DNA.⁴¹

A. Rapidly Evolving Technology

One of RFLP technology's drawbacks is that it requires a large amount of DNA to produce an accurate result.⁴² To combat this problem, scientists developed polymerase chain reaction (PCR) analysis, a method that can replicate small quantities of DNA exponentially to create a usable sample.⁴³ A

38. KAYE, *supra* note 35, at 42–43; Murphy, *supra* note 35, at 294–95. There are “standard locations in the [human] genome where the sequence” of nucleotides varies enough to distinguish individuals. NORAH RUDIN & KEITH INMAN, *AN INTRODUCTION TO FORENSIC DNA ANALYSIS* 38 (2d ed. 2002).

39. See Kamrin T. MacKnight, Comment, *The Polymerase Chain Reaction (PCR): The Second Generation of DNA Analysis Methods Takes the Stand*, 9 SANTA CLARA COMPUTER & HIGH TECH. L.J. 287, 294, 296–97 (1993) (explaining, in detail, the process of isolating genetically distinct material using RFLP technology); see also KAYE, *supra* note 35, at 43–47 (same).

40. Polymorphism refers to the variation in genetic information at a locus, a molecular location in the genome. RUDIN & INMAN, *supra* note 38, at 38.

41. MacKnight, *supra* note 39, at 294. This process identified patterns in the DNA strands that were specific to the individual from whom the genetic material was drawn. *Id.* at 296–97; see also Ricardo Fontg, Comment, *DNA Fingerprinting: A Guide to Admissibility and Use*, 57 MO. L. REV. 501, 506 (1992) (explaining that DNA fingerprinting can identify individuals with “virtual certainty”).

42. This cumbersome aspect of RFLP testing was problematic in cases in which the amount of DNA left by the perpetrator was negligible, or, in older cases, where the DNA sample had degraded over time. See *United States v. Morrow*, 374 F. Supp. 2d 51, 65 (D.D.C. 2005). DNA testing was therefore unavailable in cases even in which the assailant left behind DNA evidence. SCHECK ET AL., *supra* note 1, at 46. For example, in the post-conviction proceedings for Marion Coakley, who was convicted of rape, Coakley's lawyers attempted to use the newly developed DNA fingerprinting technology when the semen left at the crime scene did not produce a large enough sample for DNA testing. *Coakley v. State*, 571 N.Y.S.2d 867, 868–70 (N.Y. Ct. Cl. 1991); see also SCHECK ET AL., *supra* note 1, at 45–46.

43. *United States v. Lowe*, 954 F. Supp. 401, 408–09 (D. Mass. 1996) (noting that PCR technology “is important for forensics because it permits DNA profiling of samples containing much smaller quantities of DNA—such as saliva on a cigarette butt—that cannot be tested via the RFLP method”). However, PCR is more properly used as an exclusion method rather than as a positive identification mechanism because of the difference in probability statistics between RFLP and PCR testing. *Id.* at 409–10; *Morrow*, 374 F. Supp. 2d at 58–59. For a detailed discussion of the differences between PCR and RFLP testing, see generally *Lowe*, 954 F. Supp. at 409–10; and KAYE, *supra* note 35, at 178–87. Similarly, courts recognized the fact that PCR testing is more susceptible to contamination than its RFLP counterpart, requiring greater care in testing and analysis. KAYE, *supra* note 35, at 178–79. *But cf. id.* at 179 (finding “[n]o major

further technological advancement called short tandem repeats (STR) analysis blends the speed and quantity-production of PCR analysis with the exactness of RFLP testing to create an improved technique.⁴⁴ STR analysis, aided by PCR amplification, has become the predominant method by which DNA samples are analyzed.⁴⁵

B. Practical Application: DNA Evidence in the Courtroom

Investigators and attorneys began using DNA fingerprinting almost immediately following its inception to aid in identifying—and excluding—potential perpetrators.⁴⁶ Judicial reaction to this new evidentiary tool was initially positive, and very few questions concerning validity and admissibility arose as DNA evidence was used in the courtroom.⁴⁷ But, as DNA evidence became more common, judicial reception of DNA identification and inculcation chilled.⁴⁸ Poor quality evidence⁴⁹ combined with

judicial opinions expressing significant misgivings emerged to slow the transfer of the technology”).

44. See KAYE, *supra* note 35, at 187–91 (providing a detailed discussion of STR testing). STR analysis begins with the amplification techniques of PCR, creating a large enough sample size for further analysis. See *Morrow*, 374 F. Supp. 2d at 57 (explaining, in detail, the PCR process). These copies are used to create a tandem repeat—“multiple copies of an identical DNA sequence arranged in direct succession in a particular region of a chromosome”—which is measured to reveal the alleles present at that part of the chromosome and then used to build the individual DNA profile. *Id.*

45. Catherine Arcabascio, *Chimeras: Double the DNA-Double the Fun for Crime Scene Investigators, Prosecutors, and Defense Attorneys?*, 40 AKRON L. REV. 435, 449 (2007) (noting that PCR-STR testing is the most widely used testing method in both the field of molecular biology and the criminal justice system).

46. KAYE, *supra* note 35, at 54–56 (discussing the value of DNA fingerprinting’s ability to produce results “completely specific to [the] individual” in criminal investigations); see also JUSTIN BROOKS, *WRONGFUL CONVICTIONS: CASES AND MATERIALS* 339–42 & n.1 (2010) (discussing the role DNA evidence played in the *Pitchfork* case, which was the first application of DNA fingerprinting to a criminal case) (reprinting and annotating *R v. Pitchfork*, (2009) EWCA (Crim) 963, (1)–(2), (11), (13) (Eng.), available at 2009 WL 1321737 (reaffirming the defendant’s 1988 conviction)).

47. See KAYE, *supra* note 35, at 60; see also, e.g., *People v. Wesley*, 533 N.Y.S.2d 643, 644 (Albany Cnty. Ct. 1988) (citing the admissibility of DNA evidence as a question of first impression but ultimately considering DNA evidence to be “the single greatest advance in the ‘search for truth,’ and the goal of convicting the guilty and acquitting the innocent, since the advent of cross-examination”), *aff’d*, 589 N.Y.S.2d 197 (N.Y. App. Div. 1992), *aff’d*, 83 N.Y.S.2d 417 (N.Y. 1994).

48. See, e.g., *People v. Castro*, 545 N.Y.S.2d 985, 995–96, 998–99 (N.Y. Sup. Ct. 1989). The court added a third prong to the admissibility test established in *Frye v. United States*. *Id.* at 995–96 (citing *Frye v. United States*, 293 F. 1013, 1014 (D.C. 1923)). The new prong required a pretrial hearing to determine if the laboratory that performed the analysis employed the proper techniques. *Id.* The court concluded that the DNA evidence was not admissible to prove the presence of the victim’s blood on the defendant’s watch because the laboratory failed to use generally accepted testing techniques. *Id.* at 998–99.

49. See, e.g., *State v. Schwartz*, 447 N.W.2d 422, 426–28 (Minn. 1989) (excluding DNA evidence proffered by the government after expressing concerns over false positives, incorrect

more stringent standards for the admissibility of scientific evidence⁵⁰ resulted in an unwillingness to admit DNA evidence and caused courts to subject DNA testing “to considerably more intense scrutiny than any of the other forensic sciences.”⁵¹ However, with increased judicial oversight and more reliable and accurate technology, modern DNA testing has been “rigorously validated” in the legal community,⁵² and U.S. Supreme Court Chief Justice John Roberts has asserted that “there is no technology comparable” to PCR-STR testing.⁵³

C. Touch DNA

Improvements in the efficiency and accuracy of methods for building DNA profiles opened the door for new sources of testable DNA evidence, including touch DNA.⁵⁴ Touch DNA refers to the genetic information recovered from epithelial (skin) cells left behind when a person makes contact with an object.⁵⁵ During the commission of a crime, an assailant can leave touch DNA samples

matches, the overall unreliability of DNA testing, and the laboratory’s failure to use scientifically accepted techniques); MICHAELIS ET AL., *supra* note 35, at 50 (explaining that RFLP tests produced poor quality data for its earliest court appearances, thus “illustrat[ing] the need for quality control and quality assurance programs”). Some courts are still wary of DNA evidence’s reliability due to the potential for human error. *See, e.g.*, *United States v. Bentham*, 414 F. Supp. 2d 472, 473 (S.D.N.Y. 2006) (highlighting the consequences of human error in DNA testing).

50. The Federal Rules of Evidence, although considered to establish more liberal standards than their predecessors, actually provide a more rigorous test for the admissibility of DNA evidence. *See, e.g.*, *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589–92 (1993) (interpreting FED. R. EVID. 702) (determining that the new Rules of Evidence superseded the *Frye* test and replaced the “general acceptance” of the scientific community requirement with a more burdensome standard requiring the trial judge to assess the scientific validity and reliability of the testing procedures that produced the evidence). The *Daubert* requirements also necessitate more pretrial hearings on the admissibility of expert witness testimony. MICHAELIS ET AL., *supra* note 35, at 220. Although judges currently have more discretion regarding the admissibility of DNA evidence, the *Daubert* standards mandate closer scrutiny of the validity and reliability of the evidence. *See Daubert*, 509 U.S. at 589 (requiring the trial judge to “ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable”).

51. MICHAELIS ET AL., *supra* note 35, at 215.

52. *Id.*; *see also* *Dist. Attorney’s Office for the Third Judicial Dist. v. Osborne*, 557 U.S. 52, 62 (2009) (noting that “[m]odern DNA testing can provide powerful new evidence unlike anything known before”); *Harvey v. Horan*, 285 F.3d 298, 306 (4th Cir. 2002) (Luttig, J., concurring) (“I believe that judicial recognition of this new science, and of the profound questions that it occasions, should, given law’s foundational concern for the determination of guilt and innocence, be unbegrudging.”).

53. *Osborne*, 557 U.S. at 62 (noting that modern DNA technology can identify individuals “with near certainty”).

54. BODE TECHNOLOGY, *supra* note 11.

55. *Touch DNA*, DNA FORENSICS, <http://www.dnaforensics.com/touchdna.aspx> (last visited Apr. 15, 2013); *see* Angela L. Williamson, *Touch DNA: Forensic Collection and Application to Investigations*, J. ASS’N CRIME SCENE RECONSTRUCTION (Jan. 26, 2012, 6:38 AM), <http://www.acsr.org/wpcontent/uploads/2012/01/Williamson.pdf> (explaining that people “shed tens of thousands of skin cells each day,” and listing potential sources of touch DNA as “weapons, vehicles, and clothing” as well as “bullet casings, documents, and latent fingerprints”). For information on how cells are collected for testing, *see* BODE TECHNOLOGY, *supra* note 11.

behind when he or she has used a large amount of force, which deposits cells on a victim's clothing or other items implicated in the crime.⁵⁶ Touch DNA testing uses the same STR and PCR technology used to test more traditional sources of DNA—blood, semen, saliva, and other bodily fluids—to test recovered epithelial cells.⁵⁷ The difference between “traditional” DNA testing—the testing of bodily fluids—and touch DNA testing is the material from which the DNA is collected, not the method by which the DNA sample is analyzed.⁵⁸

Although touch DNA testing uses the same PCR-STR technology that is used to test other widely accepted sources of DNA, it has failed to garner the same approval as its bodily fluid progenitors.⁵⁹ Touch DNA has received

56. See, e.g., *Ex Parte Hammond*, 93 So. 3d 172, 175–77 (Ala. Crim. App. 2012) (ruling on whether to allow DNA testing of pants, a wallet, fingerprints on a refrigerator, a towel, shirt, shoelaces, and car interior in a murder trial). Richard Eikelenbloom, the Dutch touch-DNA specialist responsible for the exculpatory testing in the Masters case, reenacted the crime to determine where on the victim's clothes there could have been enough force for skin-cell transfer. *Drawn to Murder*, *supra* note 2; see also Maureen Callahan, *CSI: For Hire*, N.Y. POST (Dec. 14, 2008, 3:52 AM), http://www.nypost.com/p/news/opinion/opedcolumnists/item_cFtIsWfOk57J93gB3DJt7O/1.

57. Touch DNA is analyzed by first increasing the sample size through PCR amplification and subsequently analyzing the sample with STR technology. BODE TECHNOLOGY, *supra* note 11. Another method of analysis, “Low Copy Number” (LCN) analysis, builds a DNA profile from as few as five to twenty cells, thereby requiring more cycles of amplification than traditional PCR analysis. *Id.* By contrast, touch DNA testing refers to a larger sampling of DNA that is replicated via traditional PCR analysis, which “[is] therefore admissible in court.” *Id.*; see also Max Houck & Lucy Houck, *What is Touch DNA?*, SCIENTIFIC AMERICAN (Aug. 8, 2008), <http://www.scientificamerican.com/article.cfm?id=experts-touch-dna-jonbenet-ramsey>. This distinction is important in evaluating condemnations of the technology, as critics sometimes confuse the two. See, e.g., Paula Hoffman Wulff, *Low Copy Number DNA: Reality vs. Jury Expectations*, 41 PROSECUTOR 34 (May/June, 2007) (equating LCN DNA and touch DNA when many of her critics are targeted at LCN's much smaller sample size and need for additional replication).

58. BODE TECHNOLOGY, *supra* note 11. Although some courts still question the reliability of touch DNA evidence, the STR technology—the same technology used to test blood and other “traditional” sources of DNA—used to analyze skin cells has been widely accepted. See *Harvey v. Horan*, 285 F.3d 298, 305 (4th Cir. 2002) (Luttig, J., concurring) (recognizing that STR testing, although requiring “literally cellular-size samples only,” is capable of distinguishing “between any two individuals on the planet”); see also *supra* note 45 and accompanying text (noting that STR-PCR testing is the most common method of DNA analysis used in the criminal justice system).

59. For example, in *State v. Nevius*, the court rejected the defendant's petition for touch DNA testing because there was no evidence that such testing was “generally accepted within the relevant scientific community.” See *State v. Nevius*, No. 04-10-0985, 2012 WL 2361516, at *19–20 (N.J. Super. Ct. App. Div. May 7, 2012). The court referred to touch DNA as “a new DNA amplification method,” which shaped the court's analysis of its reliability and admissibility. *Id.* at *19; cf. *supra* note 58 and accompanying text. Additionally, although the judge in *Nevius* dismissed the petition, it was without prejudice, and the court indicated it would reconsider the petition with an expert report addressing the speculative aspects of the request. *Nevius*, 2012 WL 2361516, at *20. Similarly, a study of the use of DNA to solve property crimes in Denver, Colorado, indicated that, although touch DNA is a helpful tool, it does not surpass the reliability

tenuous popular,⁶⁰ investigative,⁶¹ and judicial⁶² attention, and courts have expressed concerns about using touch DNA evidence in both pretrial and post-conviction proceedings.⁶³ Like the *Hood* court, many other courts have denied requests to use touch DNA evidence.⁶⁴ At best, judicial reception of

and usefulness of traditional blood and semen samples. Simon Ashikhmin et al., *Using DNA to Solve High-Volume Property Crimes in Denver: Saving Money, Lowering Crime Rates and Making Denver Safer*, 42 PROSECUTOR 34, 39–40 (July/Aug/Sept. 2008).

60. Touch DNA analysis gained notoriety in the Jon Benet Ramsey case, in which the Ramseys were exonerated—outside of legal proceedings—of any involvement in their daughter’s murder. Houck & Houck, *supra* note 57. Additionally, touch DNA has received national recognition as a possible tool in solving cold cases around the country. Kevin Johnson, ‘Touch’ DNA Offers Hope in Cold Investigations, USA TODAY, Sept. 23, 2008, at 2A.

61. Law enforcement in some communities routinely use touch DNA analysis in their investigations. See, e.g., Ashikhmin, et al., *supra* note 59, at 40 (citing the use of touch DNA to solve property crimes in Denver, Colorado, but noting that touch DNA is less effective than blood or saliva); Anita Hassan, *Investigators Using ‘Touch DNA’ to Solve Property Crimes*, HOUSTON CHRONICLE (Mar. 12, 2012, 12:41 AM), <http://www.chron.com/news/houston-texas/article/DNA-is-solving-property-crimes-3397341.php> (discussing efforts of a Texas community to use touch DNA more frequently for vehicle burglaries and thefts because skin cells may be left behind even when a perpetrator was wearing gloves); Virginia Hennessey, *Monterey Police Rely More on ‘Touch DNA’ to Find Suspects*, MONTEREY HERALD (Aug. 13, 2012, 8:20 PM), http://www.montereyherald.com/local/ci_21294142/Monterey-police-rely-more-touch-dna-find-suspects (highlighting the use of touch DNA to issue no-name arrest warrants, based entirely on DNA profiles, to arrest suspects who have left touch DNA evidence on various surfaces).

62. *Raynor v. State*, 29 A.3d 617, 626 (Md. Ct. Spec. App. 2011) (finding no privacy right in touch DNA left behind by the defendant while sitting in a chair in the police barracks, which the police later used to tie him to the crime in question), *cert. granted*, 52 A.3d 978 (Md. 2012); *State v. Reynolds*, 926 N.E.2d 315, 317–18 (Ohio Ct. App. 2009) (granting the defendant’s request for post-conviction DNA testing, which included touch DNA analysis); *State v. Guerrero*, No. M2008-02839-CCA-R3-CD, 2011 WL 2306078, at *4–5 (Tenn. Crim. App. June 8, 2011) (affirming the defendant’s conviction, which was based on the investigators finding his DNA on the grip of a rifle used in the murder); *State v. Dick*, 280 P.3d 445, 448–49 (Utah Ct. App. 2012) (affirming the defendant’s conviction, which was based, in part, on touch DNA that matched the defendant and was found on a bandana).

63. *Montez v. State*, 86 So. 3d 1243, 1244–45 (Fla. Dist. Ct. App. 2012) (remanding the case for an evidentiary hearing on the admissibility of touch DNA to determine the authenticity and reliability of the evidence); see also *State v. Carver*, 725 S.E.2d 902, 908–09 (N.C. Ct. App. 2012) (Hunter, J., dissenting) (expressing concerns about the sufficiency of touch DNA evidence in the absence of any other evidence, the lack of precedent for its use, and the questionable accuracy of the technology due to the potential for contamination in the form of secondary skin cell transfer, or “if person A touches person B, and person B touches a pen, person A’s DNA can be found on the pen”), *aff’d*, 2013 N.C. Lexis 52 (N.C. Jan. 25, 2013); *Swearingen v. State*, 303 S.W.3d 728, 732–33 (Tex. Crim. App. 2010) (rejecting the defendant’s petition for post-conviction touch DNA testing, in part because of the lack of expert testimony establishing the likelihood that skin cells were deposited on the evidence).

64. *State v. Solman*, 29 A.3d 183, 190 (Conn. App. Ct. 2011) (rejecting the defendant’s petition for post-conviction touch DNA testing), *appeal denied*, 33 A.3d 739 (2011); *Hood v. United States*, 28 A.3d 553, 566 (D.C. 2011) (same); *Swearingen*, 303 S.W.3d at 733 (same).

touch DNA evidence has been mixed, and its use is often restricted by statutes construed similarly to the IPA.⁶⁵

D. Exonerating the Wrongfully Convicted: Guaranteeing Access to Post-Conviction DNA Testing Through Statute

Although DNA exoneration has occurred pre-trial,⁶⁶ DNA exculpation has had a more profound impact post-conviction.⁶⁷ Consequently, states began to acknowledge that the right to exculpatory evidence pre-trial—based on the landmark ruling in *Brady v. Maryland*⁶⁸—should also apply to post-conviction proceedings.⁶⁹ The recognition of the impact of post-conviction DNA analysis led to widespread efforts to establish the right to post-conviction DNA testing, which is now codified in forty-nine states.⁷⁰

Despite the growing importance of post-conviction DNA testing, post-conviction testing statutes impose several procedural requirements that can severely restrict an applicant's access to testing.⁷¹ These restrictive provisions reflect the tension between the state's interest in allocating limited

65. See *infra* Part II (explaining the restrictions that post-conviction DNA statutes placed on the use of touch DNA).

66. See, e.g., *R. v. Pitchfork*, [2009] EWCA (Crim) 963, [1]–[2], [11], [13] (Eng.), available at 2009 WL 1321737 (reaffirming the defendant's 1988 sentencing). The defendant's conviction was based on DNA evidence that also exculpated a prior suspect. BROOKS, *supra* note 46, at 342 n.1.

67. As of June 2013, DNA evidence is responsible for more than 300 post-conviction exonerations. *Know the Cases: Innocence Project Case Profiles*, THE INNOCENCE PROJECT, <http://www.innocenceproject.org/know/> (last visited June 1, 2013).

68. 373 U.S. 83, 87 (1963) (holding that the prosecution violated due process by withholding from the defendant exculpatory evidence).

69. *Sewell v. State*, 592 N.E.2d 705, 708 (Ind. Ct. App. 2005) (holding that, because the goals of discovery are “the facilitation of the administration of justice and the promotion of the orderly ascertainment of the truth,” the requirement to disclose exculpatory information applies to post-conviction requests for forensic testing); *State v. Thomas*, 586 A.2d 250, 253 (N.J. Super. Ct. App. Div. 1991) (anticipating that, because of the growing utility of DNA testing, the failure to grant the defendant's motion for post-conviction testing could violate *Brady*); *Dabbs v. Vergari*, 149 Misc. 2d 844, 847 (N.Y. Sup. Ct. 1990) (recognizing a right to post-conviction DNA testing by applying the *Brady* principles to post-conviction proceedings); *Commonwealth v. Brison*, 618 A.2d 420, 425–26 (Pa. Super. Ct. 1992) (remanding the defendant's case for DNA testing based on persuasive authority from other states interpreting *Brady*). The Supreme Court did not extend *Brady* to recognize a constitutional right to post-conviction DNA testing, but instead determined that it was more appropriate for state legislatures to resolve the issue. *Dist. Attorney's Office for the Third Judicial Dist. v. Osborne*, 557 U.S. 52, 68–69 (2009).

70. Oklahoma remains the only state without a post-conviction DNA testing statute. *Access to Post-Conviction DNA Testing*, THE INNOCENCE PROJECT, http://www.innocenceproject.org/Content/Access_To_PostConviction_DNA_Testing.php (last visited Apr. 16, 2013).

71. See generally Kathy Swedlow, *Don't Believe Everything You Read: A Review of Modern “Post-Conviction” DNA Testing Statutes*, 38 CAL. W. L. REV. 355 (2002) (detailing several restrictions on post-conviction DNA testing, including filing timelines, materiality requirements, financing, and testing procedures).

resources and the inmate's right to post-conviction relief.⁷² The U.S. Supreme Court acknowledged this tension in *District Attorney's Office for the Third District v. Osborne*, recognizing the value of DNA evidence in exonerating the wrongfully convicted while simultaneously accepting a state's need to condition access to post-conviction remedies for practical purposes.⁷³

To balance these interests, post-conviction DNA testing statutes contain various threshold burdens that a petitioner must satisfy. For example, citing the Court's rationale in *Osborne*, the Connecticut Supreme Court explained that, "[t]o reconcile these competing interests, legislatures have imposed various threshold showings, including materiality requirements."⁷⁴ Materiality requirements, contained in almost every state's post-conviction statute, mandate that the requested testing must produce either a reasonable probability of a different outcome, or evidence that in some way supports the petitioner's claim of innocence.⁷⁵ Additionally, post-conviction DNA testing statutes often contain threshold provisions in the form of biological material requirements, which dictate the specific types of material a petitioner may—or may not—submit for testing.⁷⁶ The ease with which a petitioner can gain access to DNA testing under a state's statute depends on the strength of and relationship between these requirements.⁷⁷

1. *The Innocence Protection Act: D.C. Code Sections 22-4131 to 22-4135*

In 2001, the IPA was adopted following a public hearing to consider the fashioning of a "set of procedural rules for relief from wrongful conviction" that reflected the growing trend of legislation enacted to allow for DNA testing

72. *Osborne*, 557 U.S. at 62–63.

73. *Id.* In his concurring opinion, Justice Samuel Alito explained that restricting post-conviction access to DNA testing served the interests of promoting finality of judgment and conserving public resources. *Id.* at 76–77, 83–84 (Alito, J., concurring).

74. *State v. Dupigny*, 988 A.2d 851, 860 (Conn. 2010) (citing *Osborne*, 557 U.S. at 63) (applying the *Osborne* Court's rationale of balancing interests to the interpretation of Connecticut's post-conviction DNA testing statute).

75. See Swedlow, *supra* note 71, at 367–68 (explaining that all state post-conviction DNA testing statutes contain some sort of materiality requirement, although the required burden of proof differs); *Strickler v. Greene*, 527 U.S. 263, 280–81 (1999) (recognizing that "materiality" under *Brady* requires "a reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different"). Some statutes require a lesser showing than *Brady* materiality. See, e.g., D.C. CODE § 22-4133(d) (2001 & Supp. 2012) (requiring "evidence that would help establish that the applicant [is] actually innocent"); MD. CODE ANN., CRIM. PROC., § 8-201(d)(1) (LexisNexis 2008 & Supp. 2012) (requiring that the requested testing has the potential to produce evidence relevant to the petitioner's innocence).

76. See, e.g., D.C. CODE § 22-4133(d) (requiring the petitioner to test "biological material," defined in D.C. CODE § 22-4131(2) (2001 & Supp. 2012)); *Hood v. United States*, 28 A.3d 553, 559–63 (D.C. 2011) (interpreting the IPA's definition of "biological material").

77. See *infra* Part II (explaining the impact of materiality and biological material requirements on a petitioner's access to touch DNA in several states).

post-conviction.⁷⁸ The D.C. Council justified enacting the IPA, in part, on the ground that nineteen other states had similarly codified of a right to post-conviction access to DNA testing.⁷⁹

The IPA's burden scheme, requiring both materiality and testable—per the IPA's definition—biological material, demonstrates the typical structure of a post-conviction DNA testing statute.⁸⁰ To apply for testing under the IPA, a petitioner must: (1) ensure that biological material is still available for testing and explain why it was not tested previously; (2) submit an affidavit asserting his actual innocence; and (3) satisfy a materiality requirement.⁸¹ Since its enactment, District of Columbia courts have interpreted and qualified the IPA's procedural restrictions.

a. Interpreting the IPA: Hood v. United States

The seminal decision interpreting the IPA's post-conviction DNA testing provisions is *Hood v. United States*.⁸² The *Hood* case arose from a robbery and murder committed in Northwest Washington, D.C., on the night of May 18, 1989.⁸³ Police found Charles Hood in the home of Helen Chappelle following a violent struggle that ultimately caused her death.⁸⁴ Hood was arrested and charged with first-degree murder, among other charges.⁸⁵ Although Hood argued at trial that an unknown third party was responsible for Chappelle's death, he was ultimately convicted in March of 1991.⁸⁶

78. D.C. COMM. REP., *supra* note 29.

79. *Id.*

80. *See infra* Part I.D.1.a.i–ii (discussing the IPA's materiality and biological material requirements).

81. D.C. CODE § 22-4133; *see also* *United States v. Cuffey*, No. F-3044-97, 2003 WL 23202076, at *2 (D.C. Sup. Ct. Dec. 23, 2003) (discussing the requirements that petitioners must meet under the IPA to obtain post-conviction DNA testing).

82. 28 A.2d 553 (D.C. 2011). The *Hood* decision provides the most comprehensive discussion and interpretation of the requirements an applicant must satisfy under section 22-4133 of the IPA.

83. *Id.* at 555–57.

84. *See id.* at 555–56. Witnesses saw Hood run past Chappelle into her house, and then saw her follow him inside. *Id.* The witnesses also heard sounds of a struggle and Chappelle yelling and screaming as if in pain, followed by silence. *Id.* The police found Chappelle semi-conscious, resulting from a severe beating to her head and face. *Id.* at 556. Chappelle died eleven days later from her injuries. *Id.*

85. *Id.* at 556. A jury convicted Hood of one count of first-degree burglary with intent to steal, one count of first-degree burglary with intent to assault, one count of mayhem while armed, one count of armed robbery of a senior citizen, one count of first-degree murder while armed under the theory of felony murder during the commission of mayhem, and one count of first-degree murder while armed under the theory of felony murder during the commission of armed robbery. *United States' Opposition to Defendant's Supplemental Application for Post-Conviction DNA Testing and Motion for New Trial* at 1–2, *Hood*, 28 A.3d 553 (Crim. No. F-5686-89) [hereinafter *United States' Opposition*].

86. *Hood*, 28 A.3d at 557.

After the court denied his direct appeal, Hood filed several pro se motions for post-conviction relief.⁸⁷ Hood's fifth motion, filed in 2002, implicated the newly enacted IPA, resulting in the court's appointment of counsel to assist Hood in applying for DNA testing.⁸⁸ Hood's petition included a request for touch DNA analysis of several items collected at the crime scene.⁸⁹ The trial court denied Hood's motion, finding that he failed to satisfy both the biological material and materiality requirements of section 22-4133.⁹⁰ On appeal of the trial court's order, the D.C. Court of Appeals defined the limits of the IPA's restrictions in the context of a post-conviction request for touch DNA testing.⁹¹

i. Defining "Biological Material"

The IPA defines "biological material" as "a sexual assault forensic examination kit, semen, vaginal fluid, blood, saliva, visible skin tissue, or hair."⁹² The presence of one of these seven biological materials is necessary to obtain DNA testing under the IPA.⁹³ Before enacting the IPA, the D.C. Council heard testimony from Executive Assistant Chief Terrance Gainer of the Metropolitan Police Department (MPD), who explained that the department did not have the proper facilities to fully support the evidence preservation provision of the IPA.⁹⁴ The Council accommodated the MPD's

87. United States' Opposition, *supra* note 85, at 2. Hood filed his pro se motions under section 23-110 of the D.C. Code, which allows an inmate to attempt to reduce his or her sentence, alleging that the evidence supporting his conviction was insufficient. D.C. CODE § 23-110 (2001 & Supp. 2012); United States' Opposition, *supra* note 85, at 2-3.

88. Brief for Appellee at 14, *Hood*, 28 A.3d 553 (No. 08-CO-1581), 2010 WL 8020321 (explaining that Hood requested DNA testing of several pieces of evidence, including the victim's rings, a knife and scissors found near the victim, a wrench found in a drawer, and both Hood's and the victim's clothing). The court ordered testing of Hood's clothing and the knife for blood evidence, but that testing was inconclusive. Supplemental Application for Post-Conviction DNA Testing and Motion for New Trial at 3-4, *Hood*, 28 A.3d 553 (Crim. No. F-5686-89) [hereinafter Supplemental Application].

89. Because testing for blood evidence was inconclusive, Hood requested touch DNA testing on the victim's rings, the wrench, the handle of the knife, and a purse with a broken strap found near the victim. Supplemental Application, *supra* note 88, at 11.

90. The trial court denied Hood's motion for touch DNA testing on the grounds that epithelial cells do not meet the IPA's definition of "biological material" and that the presence of a third party's skin cells on the items in question would neither include nor exclude Hood as the true perpetrator. Order at 6-8, *Hood*, 28 A.3d 553 (Crim. No. F-5686-89).

91. Brief for Appellee at 3-4, *Hood*, 28 A.3d 553 (No. 08-CO-1581), 2010 WL 8020321.

92. D.C. CODE § 22-4131(2) (2001 & Supp. 2012) (defining "biological material").

93. D.C. CODE § 22-4133(a) (2001 & Supp. 2012) (outlining when a party may request testing of biological material); *see also* D.C. CODE § 22-4131(5) (defining "DNA testing").

94. D.C. COMM. REP., *supra* note 29 (referring to the provision of Bill 14-153, which would eventually become D.C. Code § 22-4134, which requires law enforcement to preserve evidence collected from a crime scene for as long as the convicted perpetrator is incarcerated).

“very valid concern”⁹⁵ by expressly defining “biological material” so that the MPD need only preserve “small samples of blood, or hair, and not entire automobiles and couches.”⁹⁶

Although the IPA’s definition of biological material specifically requires “visible skin tissue,” the IPA’s legislative history provides no definition of the term “visible.”⁹⁷ In construing the term’s meaning, the *Hood* court relied on the plain meaning of the statutory language and legislative intent.⁹⁸ Drawing on the Council’s concerns about evidence preservation, the court ultimately defined “visible” as “perceptible by [normal] vision,” excluding the microscopic skin cells tested in touch DNA analysis.⁹⁹

The court premised its decision on the structure of the IPA as a whole.¹⁰⁰ Both section 22-4133 (post-conviction DNA testing) and section 22-4134 (evidence preservation) of the IPA use the same definition of biological material.¹⁰¹ The court explained, “[w]e cannot construe ‘visible’ narrowly when the question is whether skin tissue evidence must be preserved for DNA testing, yet broadly when the question is whether it is subject to that testing.”¹⁰² Acknowledging the strain of a broad definition of “biological material” on police resources for evidence preservation, the court retained a narrow definition for all provisions of the IPA, including the post-conviction DNA testing provision.¹⁰³ Short of legislative intervention, the court provided no scenario allowing for DNA testing of evidence outside of the exhaustive list of biological materials provided in section 22-4131.¹⁰⁴

95. *Id.* As introduced, the original Bill 14-153 did not expressly define “biological material.” *Hood*, 28 A.3d at 561. The preservation concerns of the MPD prompted the current biological material requirement in the statute. *Id.*

96. D.C. COMM. REP., *supra* note 29. The Council also noted that the IPA’s preservation requirement contains an exception that allows for the disposal of physical evidence after five years if the incarcerated individual is notified and given 180 days to apply for DNA testing of the evidence. *Id.*

97. *Hood*, 28 A.3d at 559 (emphasis added) (addressing the interpretation and definition of the term “visible”).

98. *Id.* at 559–61 (construing the term “visible” according to its ordinary meaning, per its dictionary definition).

99. *Id.* at 560.

100. *See id.* at 562 (noting the relationship between the DNA testing provisions and the evidence preservation provision of the IPA).

101. *Id.* at 562 n.28. The definitions in section 22-4131 apply to all sections of the IPA. D.C. CODE § 22-4131 (2001 & Supp. 2012).

102. *Hood*, 28 A.3d at 562 n.28.

103. *Id.* at 562.

104. Although the *Hood* court focused specifically on touch DNA testing, the court’s deference to the statute’s plain language suggests that, short of a direct constitutional challenge, only the legislature can alter the statute’s definition of “biological material.” *See id.* at 562–63.

ii. The Relationship Between Materiality and Actual Innocence

In revising Bill 14-153, the D.C. Council relied heavily on testimony from the U.S. Attorney's Office, which emphasized the need to condition access to post-conviction DNA testing in order to conserve limited public resources and to respect the finality of convictions.¹⁰⁵ Finding the testimony persuasive,¹⁰⁶ the Council included in the IPA the requirement that the petitioner show that "there is a reasonable probability that testing will produce non-cumulative evidence that would help establish that the applicant was actually innocent" of the crime of which he was convicted in order to gain access to DNA testing.¹⁰⁷

The court interpreted this language as a materiality requirement, obligating the petitioner to establish "more than a mere possibility that the test results would help [the applicant] prove his actual innocence."¹⁰⁸ The petitioner need only show that the result of the testing would "assist him to establish his actual innocence," assuming that DNA could be recovered.¹⁰⁹ The court made clear that a favorable result is only one step in the petitioner's showing of actual innocence.¹¹⁰ The court's interpretation of the statutory language respects the scope of the Council's purpose, reflecting both the recognition of the need to correct wrongful convictions and the need for practical limitations on access to testing.¹¹¹

105. D.C. COMM. REP., *supra* note 29 (providing the statements of Terrance Gainer, Executive Assistant Chief of Police, Metropolitan Police Department, and Kenneth L. Wainstein, U.S. Attorney for the District of Columbia).

106. *Id.* (noting the reaction of Councilmember Sharon Ambrose and other members who adopted the recommendations).

107. D.C. CODE § 22-4133(d) (2001 & Supp. 2012); *United States v. Cuffey*, No. F-3044-97, 2003 WL 23202076, at *3 (D.C. Sup. Ct. Dec. 23, 2003) (denying the petitioner's request because conclusive DNA testing had already been performed, thus precluding the petitioner from showing that testing would produce new evidence that would help establish his innocence).

108. *Hood*, 28 A.2d at 564.

109. *See Hood*, 28 A.3d at 564-65. The court noted that a petitioner is not always entitled to an assumption that DNA testing will provide usable DNA evidence if there is a reason to doubt its presence. *Id.* at 564 & n.43.

110. *See id.* at 564 n.42 (finding that the purpose of testing under section 22-4133 "is to develop new evidence that would support a motion to vacate a conviction or grant a new trial on the ground of actual innocence"). The standard is a lesser showing than the outcome-changing materiality under *Brady*, as the court indicated that the evidence should "support" a motion to vacate a conviction or for a new trial under D.C. Code § 22-4135(g)(2) (2001), which requires "proof of actual innocence by at least a preponderance of the evidence." *Hood*, 28 A.3d at 564 n.42; *see also infra* note 173 and accompanying text (likening the IPA's materiality requirement to a "some evidence" standard).

111. D.C. COMM. REP., *supra* note 29 (hearing testimony both advocating for broad access to a post-conviction DNA testing and advocating for limits on access to testing to preserve limited public resources and to ensure the finality of convictions).

b. The Innocence Protection Amendment Act of 2012

Less than a year after *Hood* was decided, D.C. Councilmember Mary Cheh introduced a bill to amend the IPA's "biological material" definition in section 22-4131, for the purpose of "ensur[ing that] potentially exonerating evidence can be tested for DNA."¹¹² The amendment seeks to eliminate the "visible" qualification of skin tissue as biological material and to add several other materials to the definition, including a catchall provision allowing for the testing of "other identifiable biological material."¹¹³ The amendment does not address the materiality requirement in Section 22-4133 or the potential limits imposed by the *Hood* court's interpretation.¹¹⁴ The legislation also fails to address the concerns raised by the court and Council members on the revision's potential impact on the IPA's evidence preservation provision.¹¹⁵

The Council's Committee on the Judiciary considered the proposed amendment during a public hearing on September 15, 2012, with testimony from the defense bar and representatives from the U.S. Attorney's Office.¹¹⁶ Although the witnesses agreed that the IPA's definition of "biological material" is unduly limiting and out of touch with current DNA technology,¹¹⁷ the two camps disagreed on the role of the IPA's materiality requirement in broadening access to potentially exonerative DNA evidence.¹¹⁸ The

112. B. 19-880, 19th Council Period (D.C. 2012) (explaining the purpose of the Innocence Protection Amendment Act of 2012).

113. *Id.* (defining biological material as "the contents of a sexual assault examination kit; and any item that contains blood, semen, hair, saliva, skin tissue, fingernail scrapings, bone, bodily fluids or other identifiable biological material that was collected as part of the criminal investigation or may reasonably be used to incriminate or exculpate any person for the offense"). The amended definition also clarifies that the focus of the definition is the material containing DNA, not the evidence from which the DNA was collected. *See id.*

114. *See infra* notes 162–65 and accompanying text.

115. *See supra* notes 106–07 and accompanying text (noting the relationship between sections 22-4133 and 22-4134).

116. *Innocence Protection Amendment Act of 2012*, DC COUNCIL, <http://dcclims1.dccouncil.us/lims/searchbylegislation.aspx> (search "B19-880") (last visited June 1, 2013).

117. The defense-oriented witnesses supported a broad definition of biological material. *See, e.g., The Innocence Protection Amendment Act of 2012: Public Hearing on B. 19-880*, Comm. on the Judiciary, 19th Council Period, B. 19-880 (D.C. Sept. 25, 2012) (statement of Chief Legislative Counsel for the Public Defender Service of the District of Columbia Laura E. Hankins) [hereinafter *Public Hearing*] (supporting the definition's revision); *id.* (statement of Sydney Hoffmann); *id.* (statement of Special Counsel to the U.S. Attorney for the District of Columbia Shawn Armbrust). The prosecution-focused witnesses also supported the revision. *See, e.g., id.* (statement of Renata Kendrick Cooper) (supporting the definition's revision); *id.* (statement of Dr. Jason Kowalski).

118. *Compare Public Hearing, supra* note 117 (statement of Sydney Hoffmann) (arguing that a petitioner should not be required to demonstrate a reasonable probability of actual innocence before the DNA is tested), *and id.* (statement of Shawn Armbrust, Executive Director of the Mid-Atlantic Innocence Project) (same), *with id.* (statement of Renata Kendrick Cooper) (arguing

Mid-Atlantic Innocence Project suggested that the materiality requirement should be replaced by a relevancy requirement.¹¹⁹ Conversely, the U.S. Attorney's Office argued that a broad definition of biological material warrants a showing of materiality.¹²⁰ Ultimately, Chairperson Phil Mendelson asked for additional briefing on the practices of other jurisdictions to aid in the amendment process.¹²¹ As of the publication of this Comment, the statute has not yet been amended.¹²²

2. Maryland Code Section 8-201

In drafting Maryland's post-conviction DNA testing statute, the Maryland General Assembly cited the release of seventy-six wrongfully convicted individuals as reason for the legislation.¹²³ Consequently, the statute has been described as "a mechanism for exoneration of the actually innocent."¹²⁴ Mindful of the focus on actual innocence, the Maryland Court of Appeals in *Gregg v. State* construed section 8-201 of the Maryland Code as crafted to promote the ease of access to post-conviction DNA testing.¹²⁵ The statute's threshold procedural requirements reflect this purpose.

Maryland requires a defendant both to fulfill a biological material requirement and to prove materiality.¹²⁶ Section 8-201 defines "biological evidence" as evidence that "includes, but is not limited to, any blood, hair, saliva, semen, epithelial cells, buccal cells, or other bodily substances from which genetic marker groupings may be obtained."¹²⁷ Section 8-201 does not

that the Council must limit the definition of "biological material" with "some notion of materiality"), and *id.* (statement of Dr. Jason Kowalski) (same).

119. *Id.* (statement of Shawn Armbrust) (misinterpreting the *Hood* decision as requiring the same showing of actual innocence for DNA testing as that required by the *Brady* standard: that the DNA test results would undermine confidence in the trial's outcome).

120. *Id.* (statement of Renata Kendrick Cooper) (explaining that a materiality requirement is essential and would "reduce the burden on law enforcement to preserve biological material for future DNA testing while still promoting the goals and fairness sought by the IPA").

121. *IPA Amendment Hearing, supra* note 32, at 00:51:47 (question to testifying witness by Chairperson Mendelson).

122. *See Innocence Protection Amendment Act of 2012, supra* note 116 (indicating that the Council has not taken action on Bill 19-880 since the September 25 hearing).

123. MD. GEN. ASSEMB. DEP'T OF LEG. SERVS. FISCAL NOTES, REV'D, S.B. 694, 2001 Sess. (2001) (explaining that DNA testing exonerated seventy-six individuals nationwide, and in sixteen cases, "led to the identification of the real perpetrator").

124. *Thompson v. State*, 909 A.2d 1035, 1043 (Md. 2006). When considering the post-conviction legislation, the Maryland General Assembly rejected a provision that would only allow post-conviction DNA testing if it had been previously unavailable to the defendant. *Id.*

125. *Gregg v. State*, 976 A.2d 999, 1009 (Md. 2009) (interpreting the amendment to "improve[] the existing remedy by making it easier for qualifying petitioners to establish entitlement to such testing").

126. *See* MD. CODE ANN., CRIM. PROC. § 8-201(b) & (c)(1) (LexisNexis 2008 & Supp. 2012).

127. MD. CODE ANN., CRIM. PROC. § 8-201(a)(2).

exhaustively define biological material; rather, the statute's "other bodily substances" provision functions as a catch-all, suggesting that any material containing DNA can be tested.¹²⁸

With respect to materiality, section 8-201 instructs the court to order DNA testing where "a reasonable probability exists that the DNA testing has the scientific potential to produce exculpatory or mitigating evidence relevant to a claim of wrongful conviction or sentencing."¹²⁹ In 2003, the Maryland legislature significantly revised the statute in order to "relax[] the standard" for entitlement to testing.¹³⁰ As it stands, the petitioner need only make a prima facie case that the test results have the potential for relevance to a claim of wrongful conviction, or even to sentencing.¹³¹

3. Texas Code of Criminal Procedure Articles 64.01 and 64.03

Texas's post-conviction DNA testing statute provides an example of a state law that was based on the outdated procedures by which convicted individuals could obtain DNA testing.¹³² Article 64.03 was enacted to provide access to testing that did not "unnecessarily inhibit[] the use of [DNA] evidence."¹³³ Although the Texas legislature does not require the petitioner to prove actual innocence, it did construct the statute to address judicial economy and the practical use of state resources.¹³⁴

128. *Id.* Other states define testable material in a similarly broad manner. For example, Ohio's statutory definition of biological material is a comparable catch-all provision, defining biological material is "any product of the human body containing DNA." OHIO REV. CODE ANN. § 2953.71(B) (LexisNexis 2010 & Supp. 2012). Connecticut, on the other hand, provides no definition of biological material. CONN. GEN. STAT. § 54-102kk (2009); *see also* CONN. GEN. STAT. § 54-102jj(a)(1) (defining "DNA testing"—applicable to both post-conviction testing and evidence preservation—as "forensic deoxyribonucleic acid testing").

129. MD. CODE ANN., CRIM. PROC. § 8-201(c)(1).

130. *See Gregg*, 976 A.2d at 1004–06 (discussing the legislative history of section 8-201). The Maryland Court of Appeals noted that the amended statute's purpose is "to provide a means for incarcerated persons to produce exculpatory or mitigating evidence relevant to a claim of wrongful conviction or sentencing." *Are v. State*, 929 A.2d 501, 510 (Md. 2007).

131. *See Gregg*, 976 A.2d at 1011 (approving the petitioner's request for DNA testing despite overwhelming evidence against him).

132. *See* S. RESEARCH CTR., TEX. BILL ANALYSIS, S.B. 3, 77th Reg. Sess. (Jan. 25, 2001) (Westlaw) [hereinafter S. Research Ctr.] (acknowledging as problematic that scientific developments in biological evidence have surpassed many DNA testing statutes); *see also* *State v. Emerick*, 868 N.E.2d 742, 745 (Ohio Ct. App. 2007) (explaining that the development of Y-STR testing, in part, prompted changes to the Ohio code to allow "otherwise qualified inmates . . . to take advantage of advances in technology that were not available at the time of their trials").

133. S. RESEARCH CTR., *supra* note 132.

134. TEX. H.R., TEX. BILL ANALYSIS, H.B. 1011, 78th Reg. Sess. (2003) (noting the number of requests the statute's enactment elicited, expressing concern about the use of resources on "frivolous claims" and suggesting limiting court-appointed attorneys to only those cases where there are reasonable grounds to file a motion for post-conviction testing); TEX. CODE CRIM. PROC. ANN. art. 64.03(a)(2)(A) (West 2006 & Supp. 2012).

Article 64.01 defines “biological material” as “an item . . . that contains blood, semen, hair, saliva, skin tissue or cells, fingernail scrapings, bone, bodily fluids, or other identifiable biological evidence that may be suitable for forensic DNA testing,” which includes “the contents of a sexual assault evidence collection kit.”¹³⁵ On its face, this language resembles that of the Maryland statute.¹³⁶ However, in *Swearingen v. State*, the Texas Court of Criminal Appeals imposed an additional limit, holding that the petitioner must provide “concrete evidence” that biological material is present on the items he or she wishes to test.¹³⁷ Although this type of threshold increases the burden on the petitioner, it does not categorically exclude certain materials from testing.¹³⁸

With respect to materiality, a petitioner under the Texas statute must show, by a preponderance of the evidence, that he or she “would not have been convicted if exculpatory results had been obtained through DNA testing.”¹³⁹ This higher threshold reflects the legislature’s intent “to provide an avenue by which a defendant may seek to establish his innocence *by excluding himself as*

135. TEX. CODE CRIM. PROC. ANN. art. 64.01(a)(1) & (2) (West 2006 & Supp. 2012).

136. Compare MD. CODE ANN., CRIM. PROC. § 8-201(a)(2) (LexisNexis 2008 & Supp. 2012), with TEX. CODE CRIM. PROC. ANN. art. 64.01(a)(1) & (2).

137. *Swearingen v. State*, 303 S.W.3d 728, 732–33 (Tex. Crim. App. 2010) (citing *Routier v. State*, 273 S.W.3d 241, 256 (Texas Crim. App. 2008)) (noting that, under the court’s standard, “a mere assertion or a general claim that existence of biological material is probable will fail to satisfy the appellant’s burden”). Connecticut similarly focuses on the presence of biological material on evidence rather than the biological material itself. See *State v. Solman*, 29 A.3d 183, 188 (Conn. App. Ct. 2011) (citing CONN. GEN. STAT. § 54-102kk (2009)) (requiring a factual basis in the petitioner’s assertion that the evidence he or she seeks to test contains biological material, which the statute does not define).

138. See *Swearingen*, 303 S.W.3d at 732–33 (entertaining the possibility that touch DNA could be permissible under the post-conviction DNA testing statute if the petitioner can show that biological material is present on the evidence in question).

139. TEX. CODE CRIM. PROC. ANN. art. 64.03(a)(2)(A). The preponderance of the evidence standard applied to Texas’s post-conviction DNA testing statute requires a petitioner to show that there is more than a fifty percent chance that he or she would not have been convicted if the testing had provided exculpatory results. *In re Morton*, 326 S.W.3d 634, 641 (Tex. Ct. App. 2010). Connecticut’s post-conviction DNA testing statute also requires a showing that the testing would have altered the trial’s outcome. *State v. Dupigney*, 988 A.2d 851, 860–61 (Conn. 2010). The court must order testing where the petitioner can demonstrate that “[a] reasonable probability exists that the petitioner would not have been prosecuted or convicted if exculpatory results had been obtained through DNA testing.” CONN. GEN. STAT. § 54-102kk(b)(1) (2009); *State v. Martinez*, No. CR94230560, 2007 WL 3011054, at *10 (Conn. Super. Ct. Oct. 3, 2007) (describing section 54-102kk(b)(1) as the “mandatory” provision for DNA testing when a petitioner satisfies certain conditions). The court may still consider a request at its discretion if there is a “reasonable probability . . . DNA results . . . would have altered the verdict” or sentencing. *Martinez*, 2007 WL 3011054, at *10 (describing section 54-102kk(c)(1) as a “discretionary” provision). In either situation, the petitioner must show a reasonable probability that the testing could have altered the outcome of the original trial. *State v. Smith*, No. CR95-68537, 2009 WL 3738829, at *1–2 (Conn. Super. Ct. Sept. 30, 2009).

the perpetrator of the offense.”¹⁴⁰ The Court of Appeals of Texas determined that a petitioner can satisfy the statutory burden by showing that the testing would exclude him as a culpable party and corroborate a defense of misidentification.¹⁴¹

II. FAILURE TO BALANCE IMPORTANT INTERESTS: INEFFECTIVE STATUTORY CONSTRAINTS ON TOUCH DNA

The *Hood* decision conclusively determined that the IPA—in its current form—does not support touch DNA testing.¹⁴² The District of Columbia may be the first and only jurisdiction to restrict touch DNA analysis so narrowly under its post-conviction DNA testing statute.¹⁴³ Relatively few jurisdictions have addressed whether a request for touch DNA testing can satisfy the statutory requirements for post-conviction DNA testing.¹⁴⁴ Still, the *Hood* court noted that District of Columbia “appears to be the only jurisdiction in the

140. *Lyon v. State*, 274 S.W.3d 767, 769 (Tex. Ct. App. 2008) (emphasis added); *Blacklock v. State*, 235 S.W.3d 231, 232–33 (Tex. Crim. App. 2007) (discussing the DNA testing statute’s legislative history). Ohio’s post-conviction DNA testing statute contains a similar exclusionary restriction, limiting testing to instances where “the offender shows that DNA exclusion . . . would have been outcome determinative” at his or her original trial. OHIO REV. CODE ANN. § 2953.74(B)(1) (LexisNexis 2010 & Supp. 2012). The statute could also permit DNA testing if it would demonstrate innocence by clear and convincing evidence. *State v. Ayers*, 923 N.E.2d 654, 658 (Ohio Ct. App. 2009) (noting that the statutory phrase “strong probability” effectively reduces the burden to a clear and convincing evidence standard).

141. *In re Morton*, 326 S.W.3d at 644–45. In this case, the appellant sought testing of a blood-stained bandana in order to establish that it contained the DNA of the victim and an unknown third party, but not that of the appellant. *Id.* at 641. Taking all of the evidence into account, including inconsistencies in circumstantial evidence and the defense theory of exclusion, the court held that if the DNA testing corroborated the defense theory, “there [was] greater than a 50% likelihood that the jury would have harbored a reasonable doubt as to appellant’s being the murderer,” thus satisfying the standard. *Id.* at 645.

142. *See Hood v. United States*, 28 A.3d 553, 560–62 (D.C. 2011) (holding that legislative intent required the court to construe “visible” as perceptible to the naked eye, thus ruling out touch DNA testing, which uses microscopic cells).

143. Even jurisdictions that have denied requests for touch DNA testing have not foreclosed the possibility of testing. *See, e.g., State v. Solman*, 29 A.3d 183, 189 & n.6 (Conn. App. Ct. 2011) (holding that a petitioner must demonstrate a reasonable basis that there is biological material on the evidence he or she wants to test and noting that this standard is similar to the Texas standard); *Swearingen*, 303 S.W.3d 728, 732–33 (entertaining the possibility that touch DNA testing may have been allowed if the petitioner had provided more concrete evidence at trial that there was biological material on the evidence he sought to test).

144. It seems as though the District of Columbia Court of Appeals and the Maryland Court of Appeals are the only highest courts of appeal to consider touch DNA testing under their respective state post-conviction DNA testing statutes requirements. *Compare Hood*, 28 A.3d at 559–60 (decided by the D.C. Court of Appeals), *and Gregg v. State*, 976 A.2d 999, 1002–03 (Md. 2009) (decided by the Court of Appeals of Maryland), *with Solman*, 29 A.3d 183 (decided by the Appellate Court of Connecticut); *Evans v. State*, 2011 Ark. App. 485 (Ark. Ct. App. 2011) (decided by the Court of Appeals of Arkansas), *Swearingen*, 303 S.W.3d 728, 731–35 (decided by the Court of Criminal Appeals of Texas), *and State v. Reynolds*, 926 N.E.2d 315 (Ohio Ct. App. 2009) (decided by the Court of Appeals of Ohio).

United States with a statutory right to post-conviction DNA testing that would deny testing on trace amounts of skin tissue that might provide exoneration,” amounting to a call for legislative action dependent on the practices of other jurisdictions.¹⁴⁵

However, this reliance on other jurisdictions is misplaced. In the states that have considered touch DNA testing, the disposition of touch DNA testing requests has depended on which requirement—materiality or biological material—is the most burdensome to the petitioner.¹⁴⁶ The operative requirement in adjudicating a touch DNA testing request, in turn, is often determined by the way the state balances the rights of the petitioner with the interests of the state in the drafting its post-conviction DNA testing statute.¹⁴⁷ Differing statutory construction among states has resulted in varied treatment of touch DNA, including statutes that either disregard practical resource concerns or acutely restrict the petitioner’s right to potentially exonerative evidence.

A. Promoting the Interests of the State and Finality of Conviction: Statutes that Effectively Preclude Touch DNA Testing

In *Osborne*, the Supreme Court recognized that states must be able to balance the petitioner’s right to post-conviction relief with the state’s right to preserve its existing statutory framework.¹⁴⁸ Although claiming to address the rights of the petitioner, states that have denied requests for touch DNA have generally crafted their statutes with a greater emphasis on resources.¹⁴⁹ Consequently, these statutes, in addition to a stringent materiality requirement, impose a prohibitive biological material requirement.

1. Judicial Prescription of Testable Material: A Restriction on Touch DNA Testing

A petitioner seeking touch DNA testing in a jurisdiction that gives greater weight to state resource concerns must first convince the court that the evidence in question conforms to the jurisdiction’s definition of testable

145. *Hood*, 28 A.3d at 563. During the public hearing for the Innocence Protection Amendment Act of 2012, Chairperson Mendelson requested briefing on the practices of other jurisdictions. *IPA Amendment Hearing*, *supra* note 32, at 00:51:47.

146. See *infra* Part II.A.1 (explaining that touch DNA is generally precluded in jurisdictions with strict biological material requirements); *infra* Part II.B.2 (explaining that touch-DNA testing is allowed in states where materiality is the petitioner’s only burden).

147. See *Hood*, 28 A.3d at 562–63. The court recognized the legitimate liberty interest in post-conviction DNA testing under the IPA, but ultimately concluded that the Supreme Court’s guidance in *Osborne* allows states “considerable ‘flexibility’” in structuring the application process for such testing. *Id.*

148. *Dist. Attorney’s Office for the Third Judicial Dist. v. Osborne*, 557 U.S. 52, 62–63 (2009).

149. See *supra* Part I.D.1–3.

evidence.¹⁵⁰ This limitation on the scope of what is eligible for post-conviction DNA testing controls the resources a state must expend in preserving evidence.¹⁵¹ As the *Hood* court explained, a broad definition of “biological material” could necessitate preservation of “entire automobiles and couches” in the event that these items contain skin cells.¹⁵²

The *Hood* decision ensured that touch DNA is not testable as a matter of law under the IPA’s definition of biological material, regardless of the viability of the evidence or its potential to exonerate the petitioner.¹⁵³ The court recognized the potential for its ruling to contravene the IPA’s purpose, but concluded that this question could not be resolved judicially.¹⁵⁴

The *Hood* opinion highlighted that the problem with obtaining post-conviction DNA testing lies not in the fallibility of touch DNA technology, but rather in the IPA’s structural deficiencies.¹⁵⁵ The rationale for the narrow interpretation of the “visible” qualification—the difficulty in preserving microscopic biological material—in no way implicates the IPA’s DNA testing provisions.¹⁵⁶ However, as the court noted, each provision of the IPA uses the same definition of “biological material,” including the definition of “DNA testing” and the section requiring preservation of evidence.¹⁵⁷ Concluding that the same term could not be construed differently depending on its function—which implicitly recognizes the conceptual difference between testing and preservation—the court narrowly defined the IPA’s biological material requirement and prioritized resource conservation over the protection of the right to post-conviction DNA testing.¹⁵⁸

Similarly, the Texas Court of Criminal Appeals rejected a request for touch DNA based on the appellant’s failure to satisfy the post-conviction DNA

150. *State v. Solman*, 29 A.3d 183, 188 (Conn. App. Ct. 2011) (requiring a petitioner to make a threshold statement that biological material is present for testing and to provide a factual basis for that assertion).

151. *See, e.g., id.* at 189 (explaining that a broad definition of biological material “would require that virtually every piece of evidence in the state’s possession be subjected to DNA testing”).

152. *Hood*, 28 A.3d at 561 (citing D.C. COMM. REPORT, *supra* note 29) (internal quotation marks omitted).

153. *Id.* at 562–63 & n.37 (noting that STR testing could be used successfully to analyze touch DNA samples). The court recognized a small window of opportunity for a constitutional challenge to the definition of “biological material,” were the petitioner to demonstrate sufficient materiality. *Id.* at 562–63. *Hood* raised, in the alternative, a constitutional argument: a narrow interpretation of “visible” violated his due process right to demonstrate his innocence. *Id.* However the court avoided deciding that issue. *Id.*

154. *Id.* at 560, 563.

155. *Id.* at 564–66.

156. The D.C. Council added the skin-tissue qualification specifically to lessen the evidence preservation burden on the city. *See supra* notes 94–96 and accompanying text.

157. *See* D.C. CODE § 22-4131 (2001 & Supp. 2012) (providing definitions that apply to the entire IPA).

158. *See Hood*, 28 A.3d at 560–62 & n.28.

testing statute's biological material requirement.¹⁵⁹ In *Swearingen v. State*, the court denied the petitioner's request for touch DNA analysis, holding that the petitioner's assertion that biological material could be recovered from items of evidence that the perpetrator touched alone was insufficient to meet the statute's threshold requirement that "concrete evidence" of the presence of biological material be shown.¹⁶⁰ The court acknowledged, in passing, that a plain reading of the requirement seems categorically to preclude the use of touch DNA testing, as it is almost impossible to determine whether biological material is present without first performing the touch DNA analysis.¹⁶¹

Rather than obligating the petitioner to simply apply to test material containing DNA, these statutes require the petitioner to demonstrate that the evidence he or she seeks to test falls within a statutorily defined category of testable material, a burden that has proved difficult, if not impossible, to overcome for touch DNA testing.¹⁶² The District of Columbia and Texas both impose biological material requirements judicially, rather than scientifically, to define testable biological material.¹⁶³ This is an unnecessary limit on valuable technology.¹⁶⁴

2. *More Stringent Materiality: Necessary Conditioning of Touch DNA Testing*

Although statutes with stringent materiality requirements impose greater limits on touch DNA testing, the petitioner may still satisfy the requirement under the proper circumstances.¹⁶⁵ For example, the D.C. Court of Appeals

159. *Swearingen v. State*, 303 S.W.3d 728, 730, 733 (Tex. Crim. App. 2010).

160. *Id.* at 732–33 (interpreting TEX. CODE CRIM. PROC. ANN. art. 64.01(a) (West 2006 & Supp. 2012)).

161. *See id.* at 732. The court noted that the petitioner had not provided any expert testimony at trial to establish that skin cells would necessarily have been deposited in the course of that particular crime. *Id.* at 732–33.

162. *See Hood*, 28 A.3d at 562–63; *Swearingen*, 303 S.W.3d at 731–32 (setting forth the criteria a petitioner must meet to qualify for post-conviction DNA testing).

163. *Compare supra* notes 92–99 and accompanying text (detailing the D.C. Court Appeals's interpretation of the IPA's biological material requirement), *and supra* notes 135–38 and accompanying text (noting the additional burden the Texas Court of Criminal Appeals added to the Texas statutes biological material requirement), *with infra* notes 176–80 and accompanying text (explaining that the definition of testable material in Maryland and Ohio is constrained only by what materials can undergo DNA testing).

164. *See infra* notes 193–98 and accompanying text (explaining that, because of the materiality requirement, additional limits on "biological material" are unnecessary and unreasonable).

165. Materiality requirements are the traditional safeguard for state resources. *Dist. Attorney's Office for the Third Judicial Dist. v. Osborne*, 557 U.S. 52, 63 (2009) (explaining that "[a] requirement of demonstrating materiality is common" among state efforts to place conditions on access to evidence). States with express concerns about resource conservation and preservation tend to impose a higher materiality threshold than those jurisdictions focused on the right to post-conviction testing. *Compare MD. CODE ANN., CRIM. PROC. § 8-201(d)(i)* (LexisNexis 2008 & Supp. 2012) (allowing testing if there is a "reasonable probability" that

found that Hood failed to demonstrate materiality under the IPA based on his theory that touch DNA testing would point to the true perpetrator.¹⁶⁶ The court reasoned that the presence of a third party's skin cells was not dispositive because it would merely show that the third party touched "ordinary personal and household objects . . . at some point in time."¹⁶⁷ Confining its analysis to the facts of Hood's case—a request to use touch DNA evidence to identify the true perpetrator—the court did not provide any insight regarding whether a request for touch DNA testing could ever satisfy the IPA's materiality requirement.¹⁶⁸

The court left unanswered the next logical question: whether touch DNA testing sought to *exclude* the petitioner would demonstrate sufficient materiality under the IPA. By comparison, a petitioner can meet the Texas post-conviction DNA testing statute's high materiality threshold based on a theory of exclusion.¹⁶⁹ Although the Texas Court of Appeals denied a request for touch DNA testing in *Swearingen* based on the state of the biological evidence,¹⁷⁰ it is reasonable to believe that a petitioner could meet the statute's materiality requirement with a request for touch DNA testing to *exclude* himself as the perpetrator.¹⁷¹

By analogy, this exclusion argument could be applied to the IPA. Although worded differently, both the District of Columbia and Texas materiality requirements focus on the applicant's guilt, requiring evidence of actual innocence or, similarly, that the applicant would not have been convicted.¹⁷²

testing may "produce exculpatory or mitigating evidence" relevant to conviction or sentencing), with TEX. CODE CRIM. PROC. ANN. art. 64.03(a)(2)(A) (West 2006 & Supp. 2012) (allowing testing only if the applicant "establishes by a preponderance of the evidence" that he or she "would not have been convicted if exculpatory results had been obtained through DNA testing").

166. *Hood*, 28 A.3d at 564–66.

167. *Id.* at 565.

168. The court determined that the presence of a third party's skin cells on the items Hood sought to have tested could "not have explained" the "other highly incriminating evidence against" him. *Id.* at 565 n.46.

169. See TEX. CODE CRIM. PROC. ANN. art. 64.03(a)(2)(A). A petitioner can satisfy this requirement by demonstrating that DNA testing would reveal the absence of his or her DNA on the evidence in question. *In re Morton*, 326 S.W.3d 634, 641–42 (Tex. Ct. App. 2010) (recognizing that an exclusion argument will satisfy the statute's materiality requirement).

170. *Swearingen v. State*, 303 S.W.3d 728, 732 (Tex. Crim. App. 2010) (denying the request for touch DNA testing because the petitioner failed to provide "concrete evidence" that the items in question contained biological material). The court did not engage in any discussion of the statute's materiality requirement. *Id.* at 731–33.

171. The appellant sought the testing to inculcate another individual, which would not fit the proposed exclusion scenario. *Id.* at 731.

172. The Texas statute requires evidence that "the person would not have been convicted if exculpatory results had been obtained through DNA testing." TEX. CODE CRIM. PROC. ANN. art. 64.03(a)(2)(A). Comparatively, the IPA mandates "a reasonable probability that testing will produce non-cumulative evidence that would help establish that the applicant was actually innocent of the crime for which the applicant was convicted or adjudicated as delinquent." D.C. CODE § 22-4133(d) (2001 & Supp. 2012).

Moreover, the IPA, as interpreted in *Hood*, appears to impose a lower burden, resembling a “some evidence” standard.¹⁷³ By extension, if an exclusion argument could satisfy Texas’s harsh materiality requirement, it should be sufficient to provide “some evidence” of the petitioner’s innocence under the IPA.

B. Protecting Post-Conviction Rights: Statutes That Allow for Touch DNA Testing

Of those jurisdictions that have considered a petition for touch DNA testing in a full appellate opinion, courts have allowed touch DNA testing where the post-conviction DNA testing statute emphasizes remedying wrongful conviction.¹⁷⁴ Consequently, these statutes impose minimal restrictions, in the form of broad biological material and materiality requirements, on the petitioner seeking access to DNA testing.¹⁷⁵

1. Inclusive Definition of Biological Material: Proper Language to Permit Touch DNA Testing

Statutes that appear to weigh the rights of the petitioner more heavily than the state’s interest in preserving resources provide a greater opportunity to take advantage of new technology by requiring only that the petitioner seek to test material containing DNA.¹⁷⁶ Because epithelial cells necessarily contain

173. According to the *Hood* court, the IPA’s materiality requirement “evidently” obligates the petitioner to establish “more than a mere possibility that the test results would help [the applicant] prove his actual innocence.” *Hood v. United States*, 28 A.3d 553, 564 (D.C. 2011). However, the court considered this to be a showing “comparable”—not identical—to the traditional burden of “undermining confidence in the trial’s outcome.” *Id.* This is a relatively broad reading that suggests something closer to a “some evidence” standard than one that requires a change in the outcome of the trial. By analogy, in the District of Columbia, a defendant is entitled to a jury instruction on his or her theory of the case if there is “any evidence fairly tending to bear upon the issue,” however tenuous it may be. *Rhodes v. United States*, 354 A.2d 863, 864 (D.C. 1976) (citing *Belton v. United States*, 382 F.2d 150, 155 (D.C. Cir. 1967)). For example, to warrant an instruction on inducement in the D.C. Superior Court, the defendant must provide “some evidence [of inducement by] the government agent.” *Instruction 9.310: Entrapment*, CRIMINAL JURY INSTRUCTIONS FOR THE DISTRICT OF COLUMBIA 9–11 (Barbara E. Bergman ed., 2012); see also *Hernandez v. United States*, 853 A.2d 202, 205 (D.C. 2004) (finding that an instruction for self defense is warranted where the defendant provides “some evidence”). A defendant need not establish his or her defense by a preponderance of the evidence in order to demonstrate entitlement to a jury instruction. See *Instruction 9.310: Consent Defense to Sexual Abuse*, CRIMINAL JURY INSTRUCTIONS, *supra*, at 9–16 (explaining the lowering of the preponderance of the evidence standard).

174. See *supra* notes 120–25 and accompanying text (explaining the pro-inmate focus of the Maryland and Ohio post-conviction DNA testing statutes); *infra* note 185 (noting that the Ohio post-conviction DNA testing statute values inmates’ rights over judicial economy).

175. See *supra* notes 127–31 and accompanying text.

176. See *supra* notes 127–28 and accompanying text. For example, Maryland limits DNA testing only by requiring that a DNA sample can be obtained from the evidence in question. Section 8-201 allows for testing on any “bodily substances from which genetic marker groupings

DNA,¹⁷⁷ this type of biological material requirement does not restrict touch DNA testing in any way.¹⁷⁸ Worded broadly to allow the statute to evolve with DNA technology, these biological material “requirements” recognize that a judicially prescribed “testable sample” is no longer a logical possibility.¹⁷⁹ Whether the evidence contains testable DNA is more properly in the purview of the “testing authority,” rather than a threshold determination for the court.¹⁸⁰

2. Broad Materiality: Insufficient Limits on Touch DNA Testing

As a consequence of a liberal biological material requirement, the discussion of whether touch DNA testing is permitted under this type of statute focuses on whether the petitioner can satisfy the materiality requirement. For example, in *Gregg*, the Maryland Court of Appeals granted the appellant’s petition for touch DNA testing.¹⁸¹ The court held that the request met section 8-201’s “reasonable probability” standard “to produce exculpatory or mitigating evidence.”¹⁸² Based on the argument that touch DNA analysis would connect a third party to the crime,¹⁸³ the court concluded that the petitioner’s request met the statute’s materiality threshold.¹⁸⁴ Unconstrained by the efficiency concerns underlying the IPA’s materiality requirement, Maryland’s broad

may be obtained,” and specifically enumerates epithelial cells. MD. CODE ANN., CRIM. PROC. § 8-201(a)(2) (LexisNexis 2008 & Supp. 2012).

177. BODE TECHNOLOGY, *supra* note 11. The *Hood* court also accepted that skin cells contain DNA. *See Hood v. United States*, 28 A.3d 553, 560 (D.C. 2011).

178. The opinions analyzing touch DNA petitions in jurisdictions with broad definitions of biological material make no mention of whether touch DNA satisfies that requirement. *See e.g.*, *Gregg v. State*, 976 A.2d 999, 1011 (Md. 2009) (requiring a petitioner to present only a prima facie case that DNA testing has a reasonable probability to produce evidence of exculpation or mitigation of an offense); *State v. Reynolds*, 926 N.E.2d 315, 317–18 (Ohio Ct. App. 2009) (deferring to the “testing authority” to determine the feasibility of touch DNA testing).

179. This was an important consideration raised in the context of revising the IPA. *See IPA Amendment Hearing, supra* note 32 (statement of Shawn Armbrust) (explaining that a broad definition of biological material ensures that the statute will have the flexibility to incorporate new technology without revision).

180. *Reynolds*, 926 N.E.2d at 319 (holding that the trial court abused its discretion by drawing its own conclusions about whether the evidence in question would produce a testable DNA sample). Because of “[t]he sensitivity and specificity of modern DNA analysis,” it is improper for the court to define a “testable sample” based only on the briefings of lawyers. *Public Hearing, supra* note 123 (statement of Dr. Jason Kolowski); *see also Reynolds*, 926 N.E.2d at 319.

181. *Gregg*, 976 A.2d at 1001–02 (requesting DNA analysis of epithelial cells recovered from the trigger of a gun).

182. *Id.* at 1011 (reiterating the statutory requirements for post-conviction DNA analysis).

183. The petitioner alleged that a third party, who fired the murder weapon, was present at the crime scene in the “getaway” van. *Id.* at 1001, 1011. The petitioner was in the car and admitted to touching the barrel of the gun, which precluded an exclusion argument. *Id.* at 1002.

184. *Id.* at 1011 (holding that because “DNA testing of epithelial cells has the scientific potential to produce relevant exculpatory or mitigating evidence, the petition, on its face, satisfie[d] that standard”).

materiality requirement echoes the Ohio Court of Appeals' assurance that there is "no viable argument that matters of judicial economy should supersede the law's never-ending quest to ensure that no innocent person be convicted."¹⁸⁵

Although more likely to remedy wrongful convictions, statutes with liberal materiality requirements invite criticism of practicality and sufficiency, especially in their treatment of touch DNA testing. Much of the concern surrounding the use of touch DNA evidence rests on the sufficiency of skin-cell analysis to identify the perpetrator of the crime. For example, in *State v. Carver*, the North Carolina Court of Appeals expressed doubt that touch DNA was enough to convict the defendant, citing secondary skin-cell transfer¹⁸⁶ as a source of possible inaccuracy in touch DNA evidence.¹⁸⁷ Similarly, the *Hood* court explained that the presence of a third party's skin cells would prove only a third party's one-time presence at the crime scene, not that the cells were deposited by the perpetrator during the crime.¹⁸⁸ Both courts noted the shortcomings of touch DNA technology in identifying the actual perpetrator, a function that a broad materiality requirement supports.¹⁸⁹

III. "WE ARE ARGUING OVER WORDS HERE"¹⁹⁰: STATUTORY LANGUAGE TO ENSURE POST-CONVICTION ACCESS TO TOUCH DNA TESTING

The variable construction of post-conviction DNA statutes has resulted in inconsistent standards for the permissibility of touch DNA testing. In some jurisdictions, allowing for touch DNA analysis based on a broad materiality requirement invites criticism of technological imperfections and the failure to address the problem of limited resources.¹⁹¹ In others, severely restricting testable material seems to preclude touch DNA testing altogether, disregarding the petitioner's post-conviction rights.¹⁹² The proper standard is a blending of both jurisdictional approaches to impose a solid materiality requirement and a flexible definition of biological material in order to most effectively take advantage of touch DNA technology.

185. *State v. Ayers*, 923 N.E.2d 654, 659 (Ohio Ct. App. 2009) (commending the Ohio General Assembly for "lowering the standard required to show that DNA testing can be outcome determinative").

186. *See supra* note 63 (explaining the concept of secondary skin-cell transfer, a problem unique to touch-DNA inculcation).

187. *State v. Carver*, 725 S.E.2d 902, 909 (N.C. Ct. App. 2012) (Hunter, J., dissenting), *aff'd*, 736 S.E.2d 172 (N.C. 2013). The Supreme Court of North Carolina affirmed the decision of the Court of Appeals in a memorandum opinion, declining to comment on the sufficiency or shortcomings of touch DNA evidence. *Carver*, 736 S.E.2d 172.

188. *Hood v. United States*, 28 A.3d 553, 565 (D.C. 2011).

189. *See supra* notes 181–84 and accompanying text (providing the facts of *Gregg*, in which the actual perpetrator was inculpated by touch DNA evidence).

190. *IPA Amendment Hearing*, *supra* note 32, at 01:03:41 (Chairman Mendelson commenting on the importance of choosing the proper language for the amended IPA).

191. *See supra* notes 186–89 and accompanying text.

192. *See supra* Part II.A.

A. *Elimination of the Judicially Prescribed Testable Sample*

A traditional standard of materiality as it applies to touch DNA testing places a reasonable limit on what a petitioner can test.¹⁹³ But this standard also requires a correspondingly broad biological material requirement to ensure the proper balance between post-conviction rights and the interests of the state.¹⁹⁴ Because both requirements aim to conserve state resources,¹⁹⁵ an onerous, statutorily imposed biological material threshold is unnecessary.¹⁹⁶ A more difficult materiality requirement necessarily limits what evidence the petitioner can test.¹⁹⁷ Therefore, a strict materiality requirement can soundly coexist with a biological material requirement that simply requires the petitioner to request DNA testing of “any product of the human body containing DNA.”¹⁹⁸

193. See *infra* notes 214–16 and accompanying text (listing the positive results of a relatively strict materiality requirement, including conservation of resources and avoiding deficiencies of positive identification through touch DNA analysis).

194. The Supreme Court has recognized the need for this balance. See *Dist. Attorney’s Office for the Third Judicial Dist. v. Osborne*, 557 U.S. 52, 63 (2009) (emphasizing that post-conviction DNA testing “laws recognize the value of DNA evidence but also the need for certain conditions on access to the State’s evidence”). But, many post-conviction DNA testing statutes fail to establish the proper balance between the rights of the petitioner and the interests of the state. See *supra* Part II.B.2 (discussing the problems of broad materiality requirements); see also *supra* Part II.A.1 (explaining the challenges of strict biological material requirements).

195. See *State v. Dupigney*, 988 A.2d 851, 860 (Conn. 2010) (citing conservation of resources as the rationale for the strict materiality requirement in Connecticut’s post-conviction DNA testing statute); *State v. Solman*, 29 A.3d 183, 189 (Conn. App. Ct. 2011) (citing conservation of resources as the rationale for the heightened biological material requirement in Connecticut’s post-conviction DNA testing statute).

196. See *supra* notes 162–64 and accompanying text (explaining the impropriety of a judicial determination of what constitutes a testable DNA sample).

197. By limiting post-conviction DNA testing to situations where the absence of the petitioner’s DNA would implicate guilt or innocence, the legislature assuaged concerns that petitioners would seek to test “virtually every piece of evidence in the state’s possession.” *Solman*, 29 A.3d at 189. In the context of touch DNA, the petitioner would likely be limited to testing those pieces of evidence where the perpetrator would most likely deposit skin cells, such as the victim’s clothing or the murder weapon. See *MASTERS WITH LEHTO*, *supra* note 4, at 363–64 (explaining that the touch DNA analyst uses the crime scene and the facts of the crime to determine “where force would have been applied by the perpetrator” in order to choose evidence from which skin cells could be extracted).

198. See OHIO REV. CODE ANN. § 2953.71(B) (LexisNexis 2010 & Supp. 2012) (defining “biological material”). Testifying at the public hearing for the Innocence Protection Amendment Act of 2012, a representative from the District of Columbia U.S. Attorney’s Office explained that an expanded definition of biological material necessitates a more restrictive materiality requirement in order to properly balance increased access with concerns about state resources. *Public Hearing*, *supra* note 123 (statement of Renata Kendrick Cooper). The inverse is also true; a more restrictive materiality requirement, such as limiting touch DNA testing to theories of exclusion, mandates a broader biological material requirement to properly balance the competing interests.

Although these principles can, and should, be applied to the revision of the IPA, the statute's structure requires a slightly different analysis.¹⁹⁹ The current proposed amendment broadens the statute to include touch DNA, but fails to address the concerns raised by the *Hood* court. The strict definition of "biological material" is in place to support the preservation requirement, and thus cannot be changed without affecting that section of the IPA.²⁰⁰ The two sections serve different purposes and should be treated differently.

Consequently, the IPA's current definition of biological material, with the "visible" qualification, should stand. However, that definition should only apply to the section of the IPA providing for the *preservation* of such material.²⁰¹ DNA testing requirements should reflect the need and justification for greater access to testable materials, and thus should be restricted only to "forensic DNA testing,"²⁰² which is essentially the same as defining "biological material" as "any product of a human body containing DNA."²⁰³ This can be accomplished by altering section 22-4131's definition of "DNA testing" to reflect this language, and by amending section 22-4133 to allow for "DNA testing," provided that the other requirements are met.²⁰⁴

B. "Strict" Materiality: Invoking Exclusionary Principles

The proper materiality requirement in a post-conviction DNA testing statute requires a relationship between the outcome of the testing and the applicant's

199. The use of the same definition of "biological material" across each of the four substantive statutes of the IPA, regardless of each statute's different purpose, makes it difficult to simply redefine the term. See D.C. CODE § 22-4131(a) (2001 & Supp. 2012).

200. See *Hood v. United States*, 28 A.3d 553, 562 & n.28 (D.C. 2011). Bill 19-880 proposed to redefine "biological material" without addressing the interplay between the sections of the IPA. See B. 19-880, 19th Council Period (D.C. 2012).

201. See D.C. CODE § 22-4134 (2001 & Supp. 2012) (requiring preservation of biological material). Such a limitation allays MPD concerns about resource conservation. See D.C. COMM. REP., *supra* note 82.

202. See CONN. GEN. STAT. § 54-102jj(a)(1) (2009). Connecticut's statutory language is similar to the definition already incorporated by the IPA, less the reference to "biological material." D.C. CODE § 22-4131(5) (defining "DNA Testing" as "forensic DNA analysis of biological material").

203. See OHIO REV. CODE ANN. § 2953.71(B). Ohio's definition of biological material is similar to any state with a "catchall provision" that allows for testing of anything containing DNA. See, e.g., MD. CODE ANN., CRIM. PROC. § 8-201(c)(1) (LexisNexis 2008 & Supp. 2012). Although the two definitions serve the same purpose, Ohio's definition dispenses with unnecessary examples of biological material rendered superfluous by the catch-all provision.

204. Therefore, D.C. Code section 22-4133(a) would appear as: "A person in custody pursuant to the judgment of the Superior Court of the District of Columbia for a crime of violence may, at any time after conviction or adjudication as a delinquent, apply to the court for DNA testing. . . ." The pre-conviction DNA testing provision would be similarly implicated, allowing for DNA testing without the limiting "biological material" language. See D.C. CODE § 22-4132 (2001 & Supp. 2012). Consequently, the definition of "DNA testing" would read: "'DNA testing' means forensic analysis of DNA." See D.C. CODE § 22-4131(5) (2001 & Supp. 2012).

guilt or innocence.²⁰⁵ Importantly, a stricter materiality requirement reduces the amount and type of testing available to the petitioner, which in turn helps to conserve state resources and ensure the finality of judgment.²⁰⁶ This type of materiality requirement, however, does not preclude the use of touch DNA evidence in the proper context; a request for touch DNA testing can satisfy most materiality standards if the testing is performed for exclusionary purposes only.²⁰⁷ Although a more liberally construed statute will permit touch DNA testing to exclude the petitioner,²⁰⁸ even the most conservative and restrictive materiality standards can support touch DNA testing for purposes of exclusion.²⁰⁹

A materiality requirement necessitating exclusionary testing can also combat some of the problems with touch DNA technology.²¹⁰ Restricting touch DNA testing to exclusion nullifies concerns about touch DNA testing's deficiencies in positively identifying third-party perpetrators.²¹¹ The petitioner could use the testing to indicate that his or her DNA was not present at the crime scene at all, thus excluding him or her as the culpable party.²¹² The important interests a strict materiality standard serves, coupled with the benefits of the exclusionary requirement such a standard would mandate, indicate that a

205. *But see* MD. CODE ANN., *Crim. Proc.* § 8-201(c)(1) (LexisNexis 2008 & Supp. 2012) (resembling a relevancy requirement and connecting the testing only to a general “claim of wrongful conviction or sentencing”). This is undoubtedly a less severe requirement of materiality.

206. *State v. Dupigney*, 988 A.2d 851, 860 (Conn. 2010) (citing Dist. Attorney’s Office for the Third Judicial Dist. v. Osborne, 557 U.S. 52, 80–84 (2009) (Alito, J., concurring)).

207. *See supra* Part II.A.2 (explaining, in part, that strict materiality requirements can still allow for touch DNA testing).

208. Because Maryland’s section 8-201 requires only that the testing be relevant to a claim of wrongful conviction, testing is allowable in order to implicate a third party. *See* MD. CODE ANN., CRIM. PROC. § 8-201(c)(1); *Gregg v. State*, 976 A.2d 999, 1002–03 (Md. 2009) (permitting touch DNA testing to identify the true perpetrator of the crime). The absence of the petitioner’s DNA would be equally relevant, and perhaps more probative.

209. *See supra* notes 169–73 and accompanying text (explaining how exclusionary testing of touch DNA could satisfy the materiality requirements of the District of Columbia and Texas); *see also* *Montez v. State*, 86 So. 3d 1243, 1245 (Fla. Dist. Ct. App. 2012) (describing the probative value of exclusion by noting that “in [a] case involving largely circumstantial evidence, it is difficult to imagine that the existence of another person’s [touch] DNA on the murder weapon [thus excluding the petitioner] would not have created at least some reasonable doubt in the minds of jurors”).

210. *See supra* notes 59–65 and accompanying text (discussing some problems that limit touch DNA testing’s acceptance).

211. *See, e.g., Hood v. United States*, 28 A.3d 553, 565 (D.C. 2011) (explaining that “the presence of third-party skin cells on [the] objects [in question] might mean someone other than appellant or [victim] touch them *at some point in time*; but that proves nothing, because it would not mean that the cells were deposited on the items” at the time of the crime).

212. The idea of using DNA for exclusionary purposes is not novel. With the development of PCR amplification, scientists found that the differences between PCR and its RFLP predecessor made PCR more appropriate for exclusion. *United States v. Morrow*, 374 F. Supp. 2d 51, 65 (D.D.C. 2005).

materiality requirement implicating the petitioner's guilt or innocence is the most appropriate to ensure the effective use of touch DNA analysis.²¹³ Consequently, the IPA's current materiality requirement should remain intact, with the understanding that touch DNA testing is only material where it can exclude the petitioner.²¹⁴

IV. CONCLUSION

The District of Columbia is in a unique position. Not only has the jurisdiction's highest court been the first to definitively repudiate the use of touch DNA testing post-conviction, but the D.C. Council has initiated an amendment process to correct the unduly restrictive IPA in order to better reflect its purpose: to confer a post-conviction right to a petitioner to prove his or her actual innocence. Therefore, the District of Columbia has the opportunity to serve as an example, both for those jurisdictions that have not yet considered touch DNA and for those that have. The effective revision of the IPA has the potential to ensure a statutory construction that will allow for touch DNA testing in appropriate situations.

The most effective post-conviction DNA testing statute recognizes the relationship between the materiality and biological material requirements. They impose both a materiality requirement that restricts touch DNA testing to exclusionary situations and a technologically neutral biological material requirement, which remove the determination of whether evidence will produce a usable sample from the discretion of the court. This statutory structure appropriately balances the rights of the petitioner to potentially exonerative evidence with the preservation of state resources, a balance that many post-conviction testing statutes are designed to reflect but have been unable to achieve. Balancing these requirements is paramount to provide wrongfully convicted petitioners access to the same testing that aided in the exoneration of Timothy Masters.

213. See, e.g., CONN. GEN. STAT. § 54-102kk(b)(1) (2009) (requiring that testing establish a reasonable probability that a jury would not have convicted the petitioner if he had presented exculpatory DNA evidence at trial); D.C. CODE § 22-4133(d) (2001 & Supp. 2012) (requiring a reasonable probability that testing will help in proving actual innocence); TEX. CODE CRIM. PROC. ANN. art. 64.03(a)(2)(A) (West 2006 & Supp. 2012) (requiring that the petitioner establish by a preponderance of the evidence that if exculpatory DNA testing had been admitted at trial, the jury would not have convicted him or her). Each of these requirements are conceptually similar, requiring evidence that speaks to the petitioner's guilt, albeit based on different standards of proof.

214. The materiality language in D.C. CODE § 22-4133(d) reads:

The court shall order DNA testing pursuant to an application made under subsection (a) of this section upon a determination that the application meets the criteria set forth in subsections (a) and (b) of this section and there is a reasonable probability that testing will produce non-cumulative evidence that would help establish that the applicant was actually innocent of the crime for which the applicant was convicted or adjudicated as delinquent.