

No. 12-207

In the Supreme Court of the United States

STATE OF MARYLAND, PETITIONER

v.

ALONZO JAY KING, JR.

*ON WRIT OF CERTIORARI
TO THE COURT OF APPEALS OF MARYLAND*

**BRIEF FOR THE UNITED STATES
AS AMICUS CURIAE SUPPORTING PETITIONER**

DONALD B. VERRILLI, JR.
*Solicitor General
Counsel of Record*

LANNY A. BREUER
Assistant Attorney General

MICHAEL R. DREEBEN
Deputy Solicitor General

ELAINE J. GOLDENBERG
*Assistant to the Solicitor
General*

ROBERT A. PARKER
CHRISTOPHER J. SMITH
Attorneys

*Department of Justice
Washington, D.C. 20530-0001
SupremeCtBriefs@usdoj.gov
(202) 514-2217*

QUESTION PRESENTED

Whether the collection and analysis of DNA from persons arrested and charged with serious crimes is reasonable under the Fourth Amendment to the Constitution.

TABLE OF CONTENTS

	Page
Interest of the United States	1
Statement.....	2
Summary of argument	8
Argument:	
The collection and analysis of an arrestee’s DNA to generate an identification profile is reasonable under the Fourth Amendment.....	11
A. The reasonableness of DNA collection and analysis should be assessed through a balancing of interests.....	11
B. The privacy interest of an arrestee in avoiding disclosure of DNA identification information is minimal.....	14
C. States and the federal government have a strong interest in obtaining DNA identification profiles from arrestees	25
D. The government’s interests outweigh the arrestee’s	31
Conclusion.....	34

TABLE OF AUTHORITIES

Cases:

<i>Albright v. Oliver</i> , 510 U.S. 266 (1994)	15
<i>Anderson v. Commonwealth</i> , 650 S.E. 2d 702 (Va. 2007)	20
<i>Bell v. Wolfish</i> , 441 U.S. 520 (1979)	13, 14, 15, 17, 28, 29
<i>Boroian v. Mueller</i> , 616 F.3d 60 (1st Cir. 2010).....	24
<i>Camara v. Municipal Court</i> , 387 U.S. 523 (1967)	13, 33
<i>City of Indianapolis v. Edmond</i> , 531 U.S. 32 (2000)	32
<i>City of Ontario v. Quon</i> , 130 S. Ct. 2619 (2010)	26
<i>County of Riverside v. McLaughlin</i> , 500 U.S. 44 (1991)	15

IV

Cases—Continued:	Page
<i>Cupp v. Murphy</i> , 412 U.S. 291 (1973)	18
<i>Davis v. Mississippi</i> , 394 U.S. 721 (1969)	16
<i>Delaware v. Prouse</i> , 440 U.S. 648 (1979)	33
<i>District Atty’s Office for Third Judicial Dist. v.</i> <i>Osborne</i> , 557 U.S. 52 (2009)	26, 29, 30
<i>Dow Chem. Co. v. United States</i> , 476 U.S. 227 (1986)	25
<i>Florence v. Board of Chosen Freeholders</i> , 132 S. Ct. 1510 (2012)	13, 15, 28
<i>Garcia v. Texas</i> , 131 S. Ct. 2866 (2011)	25
<i>Griffin v. Wisconsin</i> , 483 U.S. 868 (1987)	15, 28, 32
<i>Hayes v. Florida</i> , 470 U.S. 811 (1985)	20
<i>Hiibel v. Sixth Judicial Dist. Court</i> , 542 U.S. 177 (2004)	25
<i>INS v. Delgado</i> , 466 U.S. 210 (1984)	25
<i>Illinois v. Lafayette</i> , 462 U.S. 640 (1983)	13, 16, 26, 33
<i>Illinois v. Lidster</i> , 540 U.S. 419 (2004)	32
<i>Illinois v. McArthur</i> , 531 U.S. 326 (2001)	12
<i>Johnson v. Quander</i> , 440 F.3d 489 (D.C. Cir.), cert. denied, 549 U.S. 945 (2006)	24
<i>Kentucky v. King</i> , 131 S. Ct. 1849 (2011)	12
<i>Maryland v. Wilson</i> , 519 U.S. 408 (1997)	13
<i>Michigan Dept. of State Police v. Sitz</i> , 496 U.S. 444 (1990)	14
<i>NASA v. Nelson</i> , 131 S. Ct. 746 (2011)	23
<i>National Treasury Empls. Union v. Von Raab</i> , 489 U.S. 656 (1989)	23
<i>New Jersey v. T.L.O.</i> , 469 U.S. 325 (1985)	11, 13, 15
<i>Pennsylvania v. Mimms</i> , 434 U.S. 106 (1977)	11
<i>Samson v. California</i> , 547 U.S. 843 (2006)	8, 11, 13, 14, 27
<i>Schmerber v. California</i> , 384 U.S. 757 (1966)	12, 13

Cases—Continued:	Page
<i>Skinner v. Railway Labor Execs' Ass'n</i> , 489 U.S. 602 (1989)	13, 14, 18, 24, 33
<i>Smith v. United States</i> , 324 F.2d 879 (D.C. Cir. 1963), cert. denied, 377 U.S. 954 (1964)	16
<i>Terry v. Ohio</i> , 392 U.S. 1 (1968)	11, 12, 15, 18
<i>United States v. Amerson</i> , 483 F.3d 73 (2d Cir.), cert. denied, 552 U.S. 1042 (2007)	14
<i>United States v. Edwards</i> , 415 U.S. 800 (1974)	24
<i>United States v. Karo</i> , 468 U.S. 705 (1984)	25
<i>United States v. Kelly</i> , 55 F.2d 67 (2d Cir. 1932)	16, 26, 33
<i>United States v. Kincade</i> , 375 F.3d 813 (9th Cir. 2004), cert. denied, 544 U.S. 924 (2005)	29, 30
<i>United States v. Knights</i> , 534 U.S. 112 (2001)	<i>passim</i>
<i>United States v. Martinez-Fuerte</i> , 428 U.S. 543 (1976)	12
<i>United States v. Mitchell</i> , 652 F.3d 387 (3d Cir. 2011), cert. denied, 132 S. Ct. 1741 (2012)	<i>passim</i>
<i>United States v. Robinson</i> , 414 U.S. 218 (1973)	12, 15
<i>United States v. Salerno</i> , 481 U.S. 739 (1987)	15, 28
<i>United States v. Sczubelek</i> , 402 F.3d 175 (3d Cir. 2005), cert. denied, 548 U.S. 919 (2006)	26
<i>Vernonia Sch. Dist. 47J v. Acton</i> , 515 U.S. 646 (1995)	11, 16, 23, 27
<i>Winston v. Lee</i> , 470 U.S. 753 (1985)	18
<i>Wyoming v. Houghton</i> , 526 U.S. 295 (1999)	11
Constitution, statutes, regulations and rules:	
U.S. Const. Amend. IV	1, 8, 14, 24
The Debbie Smith Act of 2004, Pub. L. No. 108-405, Tit. II, § 203(f), 118 Stat. 2271	3

VI

Statutes, regulations and rules—Continued:	Page
Violent Crime Control and Law Enforcement Act of	
1994, 42 U.S.C. 14131 <i>et seq.</i>	2
42 U.S.C. 14131 <i>et seq.</i>	2
42 U.S.C. 14131	3
42 U.S.C. 14132(a)	1
42 U.S.C. 14132(b)	22
42 U.S.C. 14132(b)-(c)	3
42 U.S.C. 14132(b)(3)-(c)	5
42 U.S.C. 14132(c)	20, 22
42 U.S.C. 14132(d)(1)	5
42 U.S.C. 14133	3
42 U.S.C. 14133(c)	5
42 U.S.C. 14135(a)(1)	3
42 U.S.C. 14135a	5
42 U.S.C. 14135a(a)(1)(A)	1, 5
42 U.S.C. 14135a(c)(2)	3, 22
42 U.S.C. 14135e(a)-(c)	3
42 U.S.C. 14135e(c)	5, 22
18 U.S.C. 3142(c)	15
18 U.S.C. 3142(g) (2006 & Supp. V 2011)	27
18 U.S.C. 3145	28
28 U.S.C. 531 (Note)	22
Md. Code Ann., Crim. Law § 14-101 (LexisNexis	
2012)	4
Md. Code Ann., Crim. Proc. § 5-202 (LexisNexis	
Supp. 2012)	15
Md. Code Ann., Pub. Safety (LexisNexis 2011):	
§ 2-501	3
§ 2-502(c)(3)	4
§ 2-504	5

VII

Statutes, regulations and rules—Continued:	Page
§ 2-504(a)(3).....	3
§ 2-504(c)	4
§ 2-504(d)	4
§ 2-508	4
§ 2-511	5
§ 2-512	4, 20, 22
Md. Code Ann., Pub. Safety § 2-510 (LexisNexis Supp. 2012)	4
28 C.F.R.:	
Section 28.11	22
Section 28.12	5, 22
Section 28.12(b)	1, 5
Md. Rule:	
Rule 4-216.1(c)	28
Rule 4-216(f).....	28
Rule 4-216(g).....	15
Miscellaneous:	
Bureau of Justice Statistics, Federal Justice Statistics, 2009 (Dec. 2011), at 10 (Table 8).....	30
Bruce Budowle et al., <i>Population Data on the Thirteen CODIS Core Short Tandem Repeat Loci</i> , 44 J. Forensic Sci. 1277 (1999)	2
John M. Butler:	
<i>Advanced Topics in Forensic DNA Typing: Methodology</i> (Acad. Press 2012)	20
<i>Genetics and Genomics of Core STR Loci Used in Human Identity Testing</i> , 51 J. Forensic Sci. (Mar. 2006).....	20

VIII

Miscellaneous—Continued:	Page
151 Cong. Rec. S13,756-13,758 (daily ed. Dec. 16, 2005)	30
<i>DNA leads to suspect in 3 slayings in Spokane area 22 years ago</i> , Seattle Times (Nov. 20, 2012)	30
Jules Epstein, “ <i>Genetic Surveillance</i> ”— <i>The Bogeyman Response to Familial DNA Investigations</i> , 2009 U. Ill. J.L. Tech. & Pol’y 141 (2009)	18
FBI:	
<i>CODIS—Expungement Policy</i> , http://www.fbi.gov/about-us/lab/biometric-analysis/codis/codis_expungement (last visited Dec. 28, 2012)	5
<i>CODIS and NDIS Fact Sheet</i> , http://www.fbi.gov/about-us/lab/codis/codis-and-ndis-fact-sheet (last visited Dec. 28, 2012).....	19, 20, 26
<i>CODIS-NDIS Statistics</i> , http://www.fbi.gov/about-us/lab/biometric-analysis/codis/ndis-statistics (last visited Dec. 28, 2012)	31
<i>Integrated Automated Fingerprint Identification System</i> , http://www.fbi.gov/about-us/cjis/fingerprints_biometrics/iafis/iafis (last visited Dec. 28, 2012)	16
<i>Planned Process and Timeline for Implementation of Additional CODIS Core Loci</i> , http://www.fbi.gov/about-us/lab/biometric-analysis/codis/planned-process-and-timeline-for-implementation-of-additional-codis-core-loci (last visited Dec. 28, 2012)	22
73 Fed. Reg. (Dec. 10, 2008):	
pp. 74,933-74,934	30
p. 74,934	27, 28, 29
pp. 74,934-74,942	26

IX

Miscellaneous—Continued:	Page
p. 74,937	20
pp. 74,937-74,938.....	3, 22
p. 74,940	21
Memorandum from Eric H. Holder, Jr., Att’y Gen., <i>DNA Sample Collection from Federal Arrestees and Defendants</i> (Nov. 18, 2010), http://www. justice.gov/ag/ag-memo-dna-collection111810.pdf (last visited Dec. 28, 2012)	17
H.R. Rep. 900, 106th Cong., 2d Sess. Pt. 1 (2000).....	2, 19
Sara H. Katsanis & Jennifer K. Wagner, <i>Characterization of the Standard and Recom- mended CODIS Markers</i> , 57 J. Forensic Sci. 1 (2012)	21
Karen Kreeger, <i>Reconciling ENCODE and CODIS</i> , Penn Medicine News (Sept. 18, 2012), http://news. pennmedicine.org/blog/2012/09/reconciling-encode- and-codis.html	21
Nat’l Comm’n on the Future of DNA Evidence, U.S. Dep’t of Justice, <i>What Every Law Enforcement Officer Should Know About DNA Evidence</i> (1999)	24
Nat’l Research Council, <i>The Evaluation of Forensic DNA Evidence</i> (Nat’l Acad. Press 1996).....	19
Office of the Inspector General, U.S. Dep’t of Justice <i>Audit of the FBI’s Convicted Offender, Arrestee, and Detainee DNA Backlog</i> (Sept. 2011)	28
91 Op. Md. Att’y Gen. 135 (June 20, 2006)	3
John Roman et al., Urban Inst., <i>The DNA Field Experiment: Cost-Effectiveness Analysis of the Use of DNA in The Investigation of High-Volume Crimes</i> (2008)	29

Miscellaneous—Continued:	Page
Julie Samuels et al., <i>Collecting DNA From Arrestees: Implementation Lessons</i> , Nat'l Inst. Just. J. (June 2012), http://www.ncjrs.gov/pdffiles1/nij/238484.pdf	5
Scientific Working Grp. DNA Analysis Methods, <i>SWGDM Executive Board Considerations for Claims that the CODIS Core Loci are 'Associated' with Medical Conditions/Diseases</i> (Sept. 17, 2012), http://www.swgdam.org/SWGDM_State_v_Abernathy.pdf	2, 21
<i>State DNA Database Laws Qualifying Offenses As of Sept. 2011</i> (2011), http://www.dnaresource.com/documents/statequalifyingoffenses2011.pdf	5
Peter M. Vallone, <i>Rapid Forensic DNA Typing: Protocols and Instrumentation</i> (presentation at Nov. 28, 2012 Forensics@NIST 2012 Meeting), http://www.nist.gov/oles/upload/10_Vallone-rapid-DNA-2.pdf	28
Jennifer K. Wagner, <i>Out with the "Junk DNA" Phrase</i> , J. Forensic Sci. (Sept. 2012), http://onlinelibrary.wiley.com/doi/10.1111/j.1556-4029.2012.02252.x/abstract	21

In the Supreme Court of the United States

No. 12-207

STATE OF MARYLAND, PETITIONER

v.

ALONZO JAY KING, JR.

*ON WRIT OF CERTIORARI
TO THE COURT OF APPEALS OF MARYLAND*

**BRIEF FOR THE UNITED STATES
AS AMICUS CURIAE SUPPORTING PETITIONER**

INTEREST OF THE UNITED STATES

This case presents the question whether the collection and analysis of an arrestee’s DNA to produce an identification profile is reasonable under the Fourth Amendment. Like 27 other States, Maryland collects DNA samples from arrestees, analyzes the samples for identifying information, and submits those identifiers to the Combined DNA Index System (CODIS), a statutorily authorized national system of “DNA identification records.” 42 U.S.C. 14132(a). The United States also “collect[s] DNA samples from individuals who are arrested, facing charges, or convicted” of federal crimes to create an identification record for inclusion in CODIS. 42 U.S.C. 14135a(a)(1)(A); 28 C.F.R. 28.12(b). Accordingly, the United States has a substantial interest in the resolution of this case.

STATEMENT

1. a. In 1994, Congress authorized the FBI to establish an index of certain DNA profiles. See 42 U.S.C. 14131 *et seq.* Pursuant to that authority, the FBI created CODIS, a computer system that allows forensic laboratories all over the country “to exchange and compare DNA profiles electronically.” H.R. Rep. No. 900, 106th Cong., 2d Sess. Pt. 1, at 8 (2000) (H.R. Rep. No. 900).

A profile—often called a “DNA fingerprint”—is a record of the number of times specific sequences of genetic material repeat themselves at 13 locations on the DNA molecule. See *United States v. Mitchell*, 652 F.3d 387, 400-401 (3d Cir. 2011) (en banc), cert. denied, 132 S. Ct. 1741 (2012).¹ That string of numbers is a powerful tool for identification because of the infinitesimal likelihood (less than one in ten billion) that two individuals who are not identical twins will share the same number of copies of the same material at all 13 loci. See Bruce Budowle et al., *Population Data on the Thirteen CODIS Core Short Tandem Repeat Loci*, 44 J. Forensic Sci. 1277, 1284 (1999). A DNA identification profile, however, is not useful for any other purpose. The 13 loci are found on stretches of DNA that “were purposely selected because they are not associated with any known physical or medical characteristics.” H.R. Rep. No. 900, at 27 (letter from Department of Justice appended to

¹ Here is an example of a DNA fingerprint: “11,11,12,12,12,13, 10,20,29,30,16,18,12,13,09,11,11,15,23,24,06,9.3,08,08,17,19.” Scientific Working Grp. DNA Analysis Methods, *SWGDAM Executive Board Considerations for Claims that the CODIS Core Loci are ‘Associated’ with Medical Conditions/Diseases 2* (Sept. 17, 2012), http://www.swgdam.org/SWGDAM_State_v_Abernathy.pdf.

House Report); see 73 Fed. Reg. 74,937-74,938 (Dec. 10, 2008).²

CODIS contains DNA identification profiles from crime-scene evidence, unidentified remains, and missing persons' relatives. See 42 U.S.C. 14132(a). It also contains such information from federal and state DNA collection programs. See *ibid.*; 42 U.S.C. 14135(a)(1) (authorizing grants to States for DNA analysis); 42 U.S.C. 14131, 14132(b)-(c), 14133, 14135a(c)(2), 14135e(a)-(c) (detailing quality assurance standards, limitations on use of CODIS, and prohibitions on disclosure of DNA information, as well as criminal and other penalties for non-compliance). The DNA identification profiles in CODIS are associated with information about the originating laboratory, but not with names or other personal identifiers. See Pet. App. 66a.

b. In 1994, Maryland enacted the DNA Collection Act, authorizing the collection of DNA samples from certain convicted offenders for the purpose of creating DNA identification profiles. Pet. App. 17a-18a. That law was intended to “allow the State to participate in [the] nationwide DNA data base network maintained by the [FBI],” 91 Op. Md. Att’y Gen. 135 (June 20, 2006), and to assist in investigation of crimes, see Md. Code Ann., Pub. Safety § 2-505.

Effective January 1, 2009, Maryland expanded the Act to cover people arrested for a crime of violence, an attempted crime of violence, a burglary, or an attempted burglary. Md. Code Ann., Pub. Safety §§ 2-501, 2-504(a)(3); see Pet. App. 17a n.13. A “crime of violence” is defined to include murder, rape, first-degree assault,

² Any change to the “core genetic markers” used in CODIS requires prior notice to Congress. Pub. L. No. 108-405, Tit. II, § 203(f), 118 Stat. 2271.

and other serious offenses. See Md. Code Ann., Crim. Law § 14-101.

When an arrestee is charged and his traditional fingerprints are taken, a trained collector also obtains a DNA sample by using a “buccal swab”—a cotton swab brushed against the inside of the cheek. See Md. Code Ann., Pub. Safety § 2-504(c); Pet. App. 4a-5a. The sample is not analyzed by a laboratory until after the arrestee’s first appearance before a judicial officer. See Md. Code Ann., Pub. Safety § 2-504(d).

The analysis is conducted in accordance with “FBI/CODIS standards.” Pet. App. 21a; see *id.* at 80a; Md. Code Ann., Pub. Safety § 2-502(c)(3). Accordingly, the laboratory looks only at specified loci that do not “code” for any physical attributes, and it generates only “a numerical representation” of the repeats “at each loc[us]”—the string of numbers that constitutes a DNA fingerprint. Pet. App. 21a-22a.

The DNA fingerprint is then uploaded to CODIS. Pet. App. 21a-22a. If the uploaded information matches a profile derived from crime-scene evidence, authorities have probable cause for a warrant to obtain another DNA identification profile from the suspect, which can be introduced at trial. Md. Code Ann., Pub. Safety § 2-510.

Maryland law restricts the use of a DNA profile and its source sample. Disclosure of DNA information to unauthorized persons, obtaining such information without authorization, and “willfully test[ing] a DNA sample for information that does not relate to the identification of individuals” are crimes punishable by a substantial fine and up to five years in prison. Md. Code Ann., Pub. Safety § 2-512; see *id.* § 2-508. Maryland law also provides for automatic expungement of records and de-

struction of DNA samples when an individual is cleared or pardoned. See *id.* §§ 2-504, 2-511.

c. Twenty-seven other States and the federal government collect DNA from arrestees in order to create DNA identification profiles.³ See Julie Samuels et al., *Collecting DNA From Arrestees: Implementation Lessons*, Nat'l Inst. Just. J. 19 (June 2012), <http://www.ncjrs.gov/pdffiles1/nij/238484.pdf>. The laws are generally similar, but some of their details vary. See, *e.g.*, *id.* at 20-21, 23. For example, the federal government, like Maryland, collects DNA samples from arrestees by buccal swab, limits analysis to the creation of DNA identification profiles, safeguards the privacy of those profiles, and penalizes misuse. See, *e.g.*, 42 U.S.C. 14132(b)(3)-(c), 14133(c), 14135a, 14135e(c); 28 C.F.R. 28.12. But unlike Maryland, the federal government collects DNA samples from all of its arrestees, not just those arrested for particular crimes, and may analyze a sample before an arrestee's appearance in court. See 42 U.S.C. 14135a(a)(1)(A); 28 C.F.R. 28.12(b). In addition, unlike Maryland arrestees, federal arrestees who are not convicted must affirmatively request expungement. See 42 U.S.C. 14132(d)(1); FBI, *CODIS-Expungement Policy*, http://www.fbi.gov/about-us/lab/codis/codis_expungement (last visited Dec. 28, 2012).

2. a. On April 10, 2009, respondent was arrested and charged with four counts of first-degree assault and one count of second-degree assault. Pet. App. 2a; J.A. 49. The same day, authorities collected a sample of his DNA through a buccal swab; they also took his fingerprints

³ All 50 States, along with the federal government, take DNA samples from some convicted offenders. See *State DNA Database Laws Qualifying Offenses As of Sept. 2011* (2011), <http://www.dnaresource.com/documents/statequalifyingoffenses2011.pdf>.

and “other identifying information.” J.A. 49; see Pet. App. 4a-5a. A few days later, he appeared before a judicial officer. J.A. 49. At that point, a laboratory analyzed his DNA sample to generate his DNA identification profile. On July 13, 2009, that profile was uploaded to CODIS. Pet. App. 5a-6a; J.A. 72.

On September 16, 2009, respondent entered an *Alford* plea on the charge of second-degree assault—a crime that does not independently trigger DNA collection from a convicted offender under Maryland law. Pet. App. 2a n.2, 4a n.3, 67a & n.34. Respondent was sentenced to four years of imprisonment, with all but 12 months of that sentence suspended. *Id.* at 4a n.3; J.A. 49.

b. Meanwhile, on August 4, 2009, CODIS matched respondent’s DNA profile with the DNA evidence collected during a forensic examination of the victim of a 2003 rape. Pet. App. 2a, 6a-7a; J.A. 50. The rapist—a man wearing a hat and a scarf over his face—broke into the Maryland home of a 53-year-old woman, threatened her with a gun, ordered her not to look at him, and raped her while holding the gun to her head. Pet. App. 6a-7a.

On October 13, 2009, a grand jury indicted respondent for the rape. Pet. App. 7a; J.A. 50. On November 18, 2009, the circuit court issued an order authorizing a second buccal swab of respondent. The DNA profile from the second swab once again matched the DNA profile from the rape-kit evidence. Pet. App. 3a, 7a.

Respondent moved to suppress his DNA profile, arguing both that he never gave a DNA sample at all in April 2009 and that collection of DNA from him at that time was unreasonable under the Fourth Amendment.

Pet. App. 8a & n.9; J.A. 45-46, 54, 61. The circuit court denied the motion. Pet. App. 9a-10a; J.A. 50-55, 82.

On July 27, 2010, respondent was convicted of first-degree rape. He was sentenced to life in prison without the possibility of parole. Pet. App. 3a, 10a.

3. Respondent appealed. A divided Maryland Court of Appeals reversed the suppression ruling. Pet. App. 70a.

Applying a “totality of the circumstances balancing test,” the court held that respondent “generally has a sufficiently weighty and reasonable expectation of privacy against warrantless, suspicionless searches that is not outweighed by the State’s purported interest in assuring proper identification of him.” Pet. App. 3a; see *id.* at 11a, 14a-17a, 58a-59a. With respect to respondent’s privacy interest, the court deemed the analogy between DNA fingerprints and traditional fingerprints “tenuous”; discounted Maryland’s restrictions on use of the “vast genetic treasure map” found in a DNA sample; and relied on an arrestee’s presumption of innocence. *Id.* at 61a-63a. With respect to the government’s interest, the court gave little weight to the State’s “generalized interest” in solving crimes; saw no legitimate need for a DNA sample when the State had identified respondent “confidently through photographs and fingerprints”; and asserted that “DNA collection can wait until a person has been convicted.” *Id.* at 3a, 65a-67a. The court held the Maryland DNA Collection Act unconstitutional as applied to respondent. *Id.* at 4a.

Judge Barbera, joined by Judge Wilner, dissented. Pet. App. 72a-85a. The dissent explained that the majority “overinflat[ed] an arrestee’s interest in privacy and underestimate[d] the State’s interest in collecting arrestee DNA.” *Id.* at 73a. The dissenters would have

held that a DNA fingerprint is akin to a traditional fingerprint in light of the legal restrictions on testing of a DNA sample. *Id.* at 76a-83; see *id.* at 80a-81a. In the dissenters' view, balancing the State's interests in "identifying arrestees, solving past crimes, and exonerating innocent individuals" against "the significantly diminished expectation of privacy attendant to taking a buccal swab of an arrestee" yields the "obvious answer" that the search is "reasonable." *Id.* at 83a, 85a.

4. On July 30, 2012, the Chief Justice granted a stay of the judgment, explaining that it "implicates an important feature of day-to-day law enforcement practice in approximately half the States and the Federal Government" and results in "concrete harm to Maryland's law enforcement and public safety interests." Pet. App. 90b-91b.

SUMMARY OF ARGUMENT

The Fourth Amendment permits the government to obtain a DNA sample from a person who has been arrested, but has not yet been convicted of a crime, and to analyze that sample in order to generate an identification profile.

A. The touchstone of the Fourth Amendment is reasonableness, which is assessed by balancing the degree to which a search intrudes on a person's privacy interests against the degree to which it is needed to promote legitimate governmental interests. See *United States v. Knights*, 534 U.S. 112, 118-199 (2001). In many contexts, a search is impermissible without individualized suspicion and a warrant. But this Court has held in a variety of circumstances that the results of the balancing test may permit the government to dispense with those conditions—for instance, where the privacy interest at issue is minimal, where the government's purpose

will be frustrated by requiring a warrant, and where alternative safeguards limit the discretion of officers in the field. See, *e.g.*, *Samson v. California*, 547 U.S. 843 (2006).

B. DNA fingerprinting is a minimal incursion on an arrestee's privacy interests. Those interests are already much diminished in light of an arrestee's status and the various intrusions and restrictions to which he is subject—and that is particularly true of any interest in preventing law enforcement from obtaining his identifying information. The physical intrusion involved in swabbing the inside of an arrestee's cheek is negligible. And the limited analysis of the DNA sample to obtain a DNA identification profile is also an insignificant intrusion. A DNA profile is only a list of numbers; like a traditional fingerprint, it exposes nothing about a person's physical characteristics, propensities, or medical conditions. Accordingly, neither speculation that a DNA identification profile based on the CODIS criteria might someday reveal such matters, nor the theoretical possibility that government use of DNA samples might someday expand in a manner implicating privacy concerns, plays a proper role in the Fourth Amendment analysis in this case.

C. In contrast, the government's interests in obtaining DNA identification profiles from arrestees are very powerful. First, the government has a strong interest in identifying a person in its custody, including learning his criminal record and whether he is wanted for a crime. DNA fingerprinting serves that interest, and does so more effectively than traditional fingerprinting in certain circumstances. Second, DNA fingerprinting advances the government's interests in making informed decisions about whether to detain or release an arrestee

pending trial, and how to supervise him in either event. It also helps to deter a released person from committing additional crimes in the pretrial period and to ensure that a defendant will actually appear for trial. Finally, the government—and society at large—has an overwhelming interest in solving crimes, which has the concomitant benefit of aiding victims and exonerating anyone wrongly suspected or accused. DNA fingerprinting improves the government's ability to bring offenders to justice, as the facts of this case and others compellingly illustrate.

D. The balancing of interests favors the government; indeed, the government's interests very significantly outweigh an arrestee's interest in avoiding the minimal intrusion of collection of a DNA sample for the limited purpose of creating a DNA fingerprint. In addition, like many of this Court's previous cases approving a warrantless search, this is a case in which requiring a warrant would completely frustrate those interests—a particularly unnecessary result in light of the various safeguards in the law that divest officers of discretion and provide the same specifics that a warrant otherwise would.

The analogy between DNA fingerprinting and traditional fingerprinting of arrestees is compelling. Both are critical to law enforcement, minimally intrusive, and, for the same reasons, a reasonable procedure under all the circumstances.

ARGUMENT

THE COLLECTION AND ANALYSIS OF AN ARRESTEE’S DNA TO GENERATE AN IDENTIFICATION PROFILE IS REASONABLE UNDER THE FOURTH AMENDMENT

A. The Reasonableness Of DNA Collection And Analysis Should Be Assessed Through A Balancing Of Interests

The Fourth Amendment provides that “[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated” and that “no Warrants shall issue, but upon probable cause.” The “touchstone” of a Fourth Amendment analysis “is always ‘the reasonableness in all the circumstances of the particular governmental invasion of a citizen’s personal security.’” *Pennsylvania v. Mimms*, 434 U.S. 106, 108-109 (1977) (per curiam) (quoting *Terry v. Ohio*, 392 U.S. 1, 19 (1968)).

This Court determines what is reasonable, and what safeguards may be necessary in a particular context, by balancing the interests at stake in light of “the totality of the circumstances.” *Samson v. California*, 547 U.S. 843, 848 (2006) (citation omitted). That balancing weighs “‘on the one hand, the degree to which [the search] intrudes upon an individual’s privacy and, on the other, the degree to which it is needed for the promotion of legitimate governmental interests.’” *United States v. Knights*, 534 U.S. 112, 119 (2001) (quoting *Wyoming v. Houghton*, 526 U.S. 295, 300 (1999)); see *id.* at 117-118 (describing balancing as “general Fourth Amendment approach”); *New Jersey v. T.L.O.*, 469 U.S. 325, 337 (1985) (stating that “[t]he determination of the standard of reasonableness” requires balancing).

This Court has interpreted the Amendment to incorporate a presumption in favor of a warrant and probable cause to justify a search. See *Vernonia Sch. Dist. 47J v.*

Acton, 515 U.S. 646, 652-653 (1995) (“Where a search is undertaken by law enforcement officials to discover evidence of criminal wrongdoing, this Court has said that reasonableness generally requires the obtaining of a judicial warrant.”); see also *Kentucky v. King*, 131 S. Ct. 1849, 1856 (2011) (warrantless search within a home is “presumptively unreasonable”); *Schmerber v. California*, 384 U.S. 757, 770 (1966) (same for “intrusions into the human body”). But that procedure is by no means inflexibly required. See, e.g., *United States v. Robinson*, 414 U.S. 218-235 (1973) (search incident to arrest); *Terry*, 392 U.S. at 19-22 (protective frisk); *Schmerber*, 384 U.S. at 769-772 (warrantless blood draw of arrested drunk driver). Rather, the Court has held in a variety of circumstances that the balancing of interests permits the government to dispense with a warrant or a requirement of individualized suspicion. See *Knights*, 534 U.S. at 121 (“Although the Fourth Amendment ordinarily requires the degree of probability embodied in the term ‘probable cause,’ a lesser degree satisfies the Constitution when the balance of governmental and private interests makes such a standard reasonable.”); *United States v. Martinez-Fuerte*, 428 U.S. 543, 554-555 (1976).

A search without probable cause or a warrant is particularly likely to be found reasonable when it involves modest intrusions on the individual’s privacy; the governmental need is especially great, or especially likely to be frustrated by a warrant requirement; and protections are in place that limit the discretion of officers in the field. See, e.g., *Illinois v. McArthur*, 531 U.S. 326, 330-331 (2001) (“When faced with special law enforcement needs, diminished expectations of privacy, minimal intrusions, or the like, the Court has found that certain general, or individual, circumstances may render a war-

rantless search or seizure reasonable.”); *Skinner v. Railway Labor Execs’ Ass’n*, 489 U.S. 602, 623-633 (1989); see also *T.L.O.*, 469 U.S. at 342-343; *Camara v. Municipal Court*, 387 U.S. 523, 534-540 (1967).

This Court recently engaged in just that kind of balancing in *Samson v. California*, *supra*. The search at issue in *Samson* was a warrantless, suspicionless search of the person of a parolee. See 547 U.S. at 846. The Court applied its “general Fourth Amendment approach” of “examin[ing] the totality of the circumstances” and weighing the various interests at stake. *Id.* at 848 (citation omitted). Because the parolee had “severely diminished expectations of privacy by virtue of [his] status alone,” and because the State—which had protections in place against harassment—had a “substantial” interest in supervising parolees, preventing “future criminal offenses,” and promoting public safety, the balance favored the government. *Id.* at 851-853, 855 n.4, 856; see *Knights*, 534 U.S. at 119.

The “general Fourth Amendment” approach employed in *Samson* is not limited to cases involving convicted offenders. See, e.g., *Florence v. Board of Chosen Freeholders*, 132 S. Ct. 1510, 1516 (2012) (arrestees); *Maryland v. Wilson*, 519 U.S. 408, 411-412 (1997) (passengers in traffic stop); *Bell v. Wolfish*, 441 U.S. 520, 559-560 (1979) (pretrial detainees); see also *Illinois v. Lafayette*, 462 U.S. 640, 643-649 (1983) (assessing a warrantless “inventory search” of a shoulder bag, which was “an incidental administrative step following arrest and preceding incarceration,” by balancing interests). Nor, as the *Samson* Court expressly stated, is it limited to cases involving “special needs” beyond the usual need for enforcement of the criminal laws, or to cases involving “programmatic” or administrative searches. See 547

U.S. at 855 n.4 (explaining that the Court has never held that “programmatic and special needs searches” are “the only limited circumstances in which searches absent individualized suspicion could be ‘reasonable’”); *Michigan Dept. of State Police v. Sitz*, 496 U.S. 444, 450 (1990) (rejecting argument that “a showing of some special governmental need” is required “before a balancing analysis is appropriate”).

Maryland unquestionably searched respondent when it obtained his DNA sample and generated a DNA fingerprint. See *Skinner*, 489 U.S. at 616-617. Accordingly, consistent with *Samson* and other precedent, the court below properly engaged in a balancing of private and public interests under the Fourth Amendment. See Pet. App. 58a.⁴ It erred, however, in determining that the balancing test favored the arrestee rather than the State.

B. The Privacy Interest Of An Arrestee In Avoiding Disclosure Of DNA Identification Information Is Minimal

1. An arrest based on probable cause significantly reduces an individual’s privacy interest and, in particular, sharply diminishes any interest in keeping his identity private. See generally *Samson*, 547 U.S. at 850-851; *Bell*, 441 U.S. at 545-546. The diminished character of that interest must be taken into account in determining “the degree to which” the search at issue “intrudes upon an individual’s privacy.” *Knights*, 534 U.S. at 118-119.

⁴ The majority of courts upholding laws requiring DNA fingerprinting have also employed that test. See, e.g., *United States v. Mitchell*, 652 F.3d 387, 402-403 (3d Cir. 2011), cert. denied, 132 S. Ct. 1741 (2012). A few other courts have upheld such laws on the ground that they serve “special needs.” See, e.g., *United States v. Amerson*, 483 F.3d 73, 78 (2d Cir.), cert. denied, 552 U.S. 1042 (2007).

By definition, an arrestee “do[es] not enjoy ‘the absolute liberty to which every citizen is entitled.’” *Knights*, 534 U.S. at 119 (quoting *Griffin v. Wisconsin*, 483 U.S. 868, 874 (1987)). “An arrest is the initial stage of a criminal prosecution” and is “inevitably accompanied by future interference with the individual’s freedom of movement.” *Terry*, 392 U.S. at 26.

An arrestee is also subject to other serious restrictions and intrusions. See Pet. App. 76a. Law enforcement officers may search an arrestee’s person and belongings in his immediate possession, see *United States v. Robinson*, 414 U.S. 218, 235 (1973); they may confine him, pending his appearance before a judicial officer, in conditions not conducive to personal privacy, see generally *County of Riverside v. McLaughlin*, 500 U.S. 44, 56 (1991); and, before confining him in a jail’s general population, they may subject him to a strip search, including the requirement “to lift [his] genitals or cough in a squatting position,” see *Florence*, 132 S. Ct. at 1520. If an arrestee is charged with a crime, authorities may detain him before guilt or innocence is established if he is found dangerous or at risk of flight, and may subject him to monitoring techniques designed to ensure prison safety. See *United States v. Salerno*, 481 U.S. 739, 748-750 (1987); *Bell*, 441 U.S. at 558. And if he is released pending trial, authorities may impose a variety of conditions, including the requirement that he agree to be searched, wear a tracking device, remain inside a defined area, and abide by a curfew. See, e.g., Md. Rule 4-216(g); Md. Code Ann., Crim Proc. § 5-202; 18 U.S.C. 3142(c); see also *Albright v. Oliver*, 510 U.S. 266, 277-279 (1994) (Ginsburg, J., concurring) (explaining that released arrestee facing charges effectively remains in the government’s “custody”).

Amidst all of those intrusions, an arrestee must also undergo routine booking procedures, including photographing and fingerprinting, designed to reveal his identity and permanently record it. Compare, *e.g.*, *Smith v. United States*, 324 F.2d 879, 882 (D.C. Cir. 1963) (Burger, J.) (“[I]t is elementary that a person in lawful custody may be required to submit to * * * fingerprinting as part of routine identification processes.”), cert. denied, 377 U.S. 954 (1964), and *United States v. Kelly*, 55 F.2d 67, 69-70 (2d Cir. 1932) (Augustus Hand, J.) (same), with *Davis v. Mississippi*, 394 U.S. 721, 724-726 (1969) (finding that fingerprinting without probable cause or lawful arrest violated the Fourth Amendment). Authorities use that information to call up an arrestee’s criminal record and to determine whether he is wanted for a crime. See, *e.g.*, FBI, *Integrated Automated Fingerprint Identification System*, http://www.fbi.gov/about-us/cjis/fingerprints_biometrics/iafis/iafis (last visited Dec. 28, 2012). An arrestee therefore can hardly claim any right to shield his identity from law enforcement.

In light of an arrestee’s loss of control over his person in all of those ways, his remaining store of privacy is not large—particularly with respect to information that serves to identify him. Although he retains greater privacy interests than does a convicted offender, his interests are less than those of the person on the street. See *Lafayette*, 462 U.S. at 643-649 (noting “evolution of interests along the continuum from arrest to incarceration”); cf. *Vernonia*, 515 U.S. at 656-657 (finding that students have “a lesser expectation of privacy than members of the population generally” based in part on the various medical examinations and procedures they must undergo (citation omitted)).

That is true regardless of an arrestee's presumption of innocence at trial. The court below placed heavy reliance on that presumption, finding it "critical" to this case. Pet. App. 62a; see *id.* at 29a, 58a-59a ("The State bears the burden of overcoming the arrestee's presumption of innocence."). That reliance was misplaced. This Court has made clear that while "[t]he presumption of innocence * * * allocates the burden of proof in criminal trials," it has "no application to a determination of the rights of a pretrial detainee during confinement before his trial has even begun." *Bell*, 441 U.S. at 533. The presumption therefore has no bearing on an assessment of an arrestee's privacy interests before trial.⁵

2. The physical collection of DNA from an arrestee is not a significant invasion of privacy. The DNA sample in this case was obtained using a buccal swab—a cotton-tipped stick that resembles a large Q-tip. See Pet. Br. 13; see also Memorandum from Eric. H. Holder, Jr., Att'y Gen., *DNA Sample Collection from Federal Arrestees and Defendants* 2 (Nov. 18, 2010), <http://www.justice.gov/ag/ag-memo-dna-collection111810.pdf>. The swab is rubbed briefly and gently on the inside of the cheek to absorb genetic material. See Pet App. 5a n.5.

That intrusion is at most a minimal one. The inside of the cheek is readily accessible, visible to others when an individual speaks, yawns, or eats, and accustomed to touching with a toothbrush. Swabbing that area takes

⁵ As noted, see pp. 4-5, *supra*, Maryland provides for expungement of DNA records if the defendant is not convicted or is pardoned. Contrary to the decision below (Pet. App. 62a-63a), that provision does not elevate an arrestee's privacy interests in his identity (or negate the government's interests, see pp. 25-31, *infra*). An event that triggers expungement cannot be foreseen, and before it occurs, the defendant is subject to the same restrictions as any other arrestee.

only seconds and “involves no penetration of the skin, pain, or substantial inconvenience,” Jules Epstein, “*Genetic Surveillance*”—*The Bogeyman Response to Familial DNA Investigations*, 2009 U. Ill. J.L. Tech. & Pol’y 141, 152 (2009), and no “risk of infection,” *Schmerber*, 384 U.S. at 771-772.

This Court has repeatedly described far more invasive or embarrassing procedures as insignificant incursions. For instance, in *Skinner*, *supra*, the Court held that a blood test—which involves piercing a vein with a needle—was not a “significant” intrusion. 489 U.S. at 625 (quoting *Schmerber*, 384 U.S. at 771); see *Winston v. Lee*, 470 U.S. 753, 762 (1985). And in *Vernonia School District 47J v. Acton*, 515 U.S. 646 (1995), the Court held that when urine collection is not directly observed, “the privacy interests compromised by the process of obtaining the urine sample are * * * negligible.” *Id.* at 657-659.

A buccal swab is an even more “negligible” intrusion than either of those methods of collecting a biological sample. See *Skinner*, 489 U.S. at 625 (approving “breath test,” which is “even less intrusive” than a blood test because it does not “require piercing the skin and may be conducted safely outside a hospital environment”). Any physical contact may intrude on “cherished personal security.” *Cupp v. Murphy*, 412 U.S. 291, 295 (1973) (characterizing scraping under fingernails as “‘severe, though brief, intrusion’” (quoting *Terry*, 392 U.S. at 24-25)). But a buccal swab is quite low on the scale of contacts. Accordingly, it barely registers in the Fourth Amendment balance—especially for an arrestee, who has diminished privacy interests at the moment of collection.

3. The analysis of the genetic material collected by means of the swab also does not result in anything more than a minimal invasion of the arrestee's privacy. Because the analysis is strictly limited, and gives law enforcement access only to a string of numbers, it reveals nothing private about the arrestee at all. The result is equivalent to a fingerprint—a form of arrestee identification that has been routinely used by law enforcement in this country for a century.

a. A DNA fingerprint is nothing more than a long list of numbers that reflects the repeated occurrence of particular genetic material at each of 13 loci. Those carefully selected loci are in highly variable regions of the DNA to better differentiate between people; in addition, they do not encode protein sequences—that is, they do not “code” for physical traits, propensities, or susceptibilities. See Pet. App. 80a; H.R. Rep. No. 900, at 27; FBI, *CODIS and NDIS Fact Sheet*, <http://www.fbi.gov/about-us/lab/codis/codis-and-ndis-fact-sheet> (last visited Dec. 28, 2012) (*CODIS and NDIS Fact Sheet*). And the repeats themselves are simply sequences of the nucleobases adenine (A), cytosine (C), guanine (G), and thymine (T) (*e.g.*, GATA or AATG) that recur over a short stretch. One person may have seven and eight repeats at a particular locus, while another has three and four. See *Mitchell*, 652 F.3d at 401. When all 13 loci are taken into account, the probability that the DNA of different people will yield the same string of numbers is “vanishingly small.” Nat'l Research Council, *The Evaluation of Forensic DNA Evidence* 47 (Nat'l Acad. Press 1996).

DNA identification profiles stored by CODIS—as Maryland law contemplates—have no identifying information associated with them. CODIS contains the number-string itself and information about the laboratory

that generated it; only in the event of a “hit” in the database can the record ultimately be traced back to a particular arrestee. See *CODIS and NDIS Fact Sheet*.⁶

A DNA fingerprint therefore yields no private information at all. Rather, it is equivalent in a privacy analysis to the pattern of whorls on the tips of the fingers: a “sanitized ‘genetic fingerprint[]’ that can be used to identify an individual uniquely, but do[es] not disclose an individual’s traits, disorders, or dispositions.” 73 Fed. Reg. at 74,937; see John M. Butler, *Genetics and Genomics of Core STR Loci Used in Human Identity Testing*, 51 J. Forensic Sci. 253 (Mar. 2006); see also *Hayes v. Florida*, 470 U.S. 811, 814-816 (1985) (explaining that fingerprinting does not involve “any of the probing into private life and thoughts that often marks interrogation and search”); John M. Butler, *Advanced Topics in Forensic DNA Typing: Methodology* 228-229 (Acad. Press 2012).⁷

Respondent attempts (Br. in Opp. 15) to undermine the comparison to fingerprints by pointing to research (known as the “ENCODE project”) suggesting that the so-called “junk” DNA where the 13 loci are located may play a role in the way that other genetic material expresses physical traits. But that research does not indicate that DNA identification profiles actually reveal any

⁶ Use of CODIS also requires compliance with quality control and privacy restrictions, see 42 U.S.C. 14132(c); *CODIS and NDIS Fact Sheet*, and Maryland law contains its own similar restrictions, see, e.g., Md. Code Ann., Pub. Safety § 2-512.

⁷ Many courts have embraced the comparison between DNA fingerprinting and traditional fingerprinting. See, e.g., *Mitchell*, 652 F.3d at 400-401; *Anderson v. Commonwealth*, 650 S.E.2d 702, 705 (Va. 2007) (concluding that DNA fingerprinting “is no different in character than acquiring fingerprints upon arrest”).

personal information. Even if the loci—a very small subset of all “junk” DNA—are located in an area that has some function in genetic regulation, that does not mean that the number of repeats at a particular locus has any predictive value in determining what that function might be, especially in the absence of additional information about a person’s genetic makeup. See Scientific Working Grp. DNA Analysis Methods, *supra*. Thus, a recent study concludes that “[t]he utility of the CODIS profile itself, even in light of the significance of * * * roles of non-coding [genetic material], is limited to identification purposes at this time,” since “there is no evidence that any particular repeat genotypes” (the numbers that make up the DNA fingerprint) “are indicative of phenotype” (physical characteristics). Sara H. Katsanis & Jennifer K. Wagner, *Characterization of the Standard and Recommended CODIS Markers*, 57 J. Forensic Sci. 1, 3 (2012) (Katsanis & Wagner); see Karen Kreeger, *Reconciling ENCODE and CODIS*, Penn Medicine News (Sept. 18, 2012), <http://news.pennmedicine.org/blog/2012/09/reconciling-encode-and-codis.html> (noting that the “recent ENCODE publications” do not “implicate CODIS markers”); see also Jennifer K. Wagner, *Out with the “Junk DNA” Phrase*, J. Forensic Sci. (Sept. 2012), <http://onlinelibrary.wiley.com/doi/10.1111/j.1556-4029.2012.02252.x/abstract> (stating that it is “appropriate to warn nonscientists” that “imply[ing]” that “the CODIS loci are each or collectively involved in gene expression and are now important for a wide array of traits and conditions” is “unfounded”).⁸

⁸ The FBI is considering whether to expand the number of loci used to generate a DNA fingerprint. The loci under consideration serve the same limited function as the existing 13 loci. Katsanis & Wagner, *supra*, at 1-3. Whether and when such a

In short, the number string does not give rise to any inference about the personal information or characteristics of the person to whom it uniquely belongs. Obtaining those numbers therefore does not meaningfully invade an arrestee's privacy.

b. The court below did not question the extremely limited nature of the information derived from analysis of the core loci. See Pet. App. 61a. It did, however, express fear that by taking a DNA sample the State gained access to a "vast genetic treasure map," since the sample could theoretically be analyzed in other ways. See *ibid.*

That fear is unfounded. Maryland law makes anyone who "willfully test[s] a DNA sample for information that does not relate to the identification of individuals as specified in this subtitle" subject to five years of imprisonment, a fine of up to \$5,000, or both, see Md. Code Ann., Pub. Safety § 2-512; the same punishment deters disclosure of information from a DNA fingerprint or the underlying sample, see *ibid.* Similar safeguards apply under federal law. See, e.g., 42 U.S.C. 14132(b), 14133(c) 14135a(c)(2), 14135e(c); 28 C.F.R. 28.11, 28.12; 73 Fed. Reg. at 74,937-74,938.

In addition, generating a DNA identification profile using the designated loci does not incidentally reveal any other information about the genetic material found in a sample. Authorities do not look at all the available genetic information in order to pluck out a string of numbers; rather, they use specific scientific processes

change will be implemented is uncertain. See FBI, *Planned Process and Timeline for Implementation of Additional CODIS Core Loci*, <http://www.fbi.gov/about-us/lab/biometric-analysis/codis/planned-process-and-timeline-for-implementation-of-additional-codis-core-loci> (last visited Dec. 28, 2012); 28 U.S.C. 531 (Note).

that allow them to see *only* the specified string of numbers, while the rest of the “genetic treasure map” remains written in invisible ink. Indeed, “it would be practically impossible to divert the relevant * * * laboratory processes for preparation of CODIS DNA profiles,” which involve the use of specific chemical reagents and equipment settings, “so as to extract and misuse genetically sensitive information.” 73 Fed. Reg. at 74,940. So far as the United States is aware, that kind of misuse of a DNA sample taken from an arrestee or a convicted offender has never taken place. See *NASA v. Nelson*, 131 S. Ct. 746, 761-763 (2011) (explaining that a “statutory or regulatory duty to avoid unwarranted disclosures’ generally allays * * * privacy concerns” (citation omitted)).

This Court has often held that Fourth Amendment analysis in cases involving biological samples should focus only on the use permitted under governing law. For example, in *Vernonia School District, supra*, the Court recognized that testing the urine of student athletes could potentially “disclose[]” a variety of facts “concerning the state of the subject’s body, and the materials * * * ingested,” but deemed it “significant that the tests at issue * * * look only for drugs, and not for whether the student is, for example, epileptic, pregnant, or diabetic.” 515 U.S. at 658; see also *National Treasury Emps. Union v. Von Raab*, 489 U.S. 656, 673 n.2 (1989) (noting that program was limited to analyzing urine for “specified drugs,” while “[t]he use of samples to test for any other substances” was “prohibited”); *Skinner*, 489 U.S. at 616, 625-626 (relying on mandatory limits on blood testing).

The same analysis is appropriate here. The States and the federal government are not permitted to exam-

ine the “vast genetic treasure map” that could be derived from a buccal-swab DNA sample. The government’s possession of the sample threatens privacy no more (and perhaps less) than its possession of the cells sloughed off onto a fingerprint card. See generally Nat’l Comm’n on the Future of DNA Evidence, U.S. Dep’t of Justice, *What Every Law Enforcement Officer Should Know About DNA Evidence* 3 (1999). The presence of personal genetic information in a DNA sample is therefore irrelevant to whether an arrestee’s privacy is invaded by analysis of that sample to obtain a DNA identification profile.

4. It is possible that future changes in the scientific or legal landscape might require a reassessment of the intrusion on an arrestee’s privacy occasioned by DNA fingerprinting. If an arrestee’s DNA is analyzed in some new way, or an existing analysis yields some new information, and that change in the status quo infringes the arrestee’s reasonable expectation of privacy, then a new Fourth Amendment analysis might well be in order.⁹ See generally *Skinner*, 489 U.S. at 616; *United States v. Edwards*, 415 U.S. 800, 803-804 (1974); see also, e.g., *Mitchell*, 652 F.3d at 408-409.

This Court’s precedents make clear, however, that only an *actual* intrusion on privacy—and not any additional intrusion that can possibly be imagined—weighs in the Fourth Amendment balance. See *Dow Chem. Co. v. United States*, 476 U.S. 227, 239 (1986) (“Fourth Amendment cases must be decided on the facts of each

⁹ Merely running searches in a database does not infringe any expectation of privacy or trigger any fresh constitutional analysis. See *Boroian v. Mueller*, 616 F.3d 60, 68 (1st Cir. 2010); *Johnson v. Quander*, 440 F.3d 489, 498-499 (D.C. Cir.), cert. denied, 549 U.S. 945 (2006).

case, not by extravagant generalizations.”); *United States v. Karo*, 468 U.S. 705, 712 (1984) (Court has never held that “potential, as opposed to actual, invasions of privacy constitute searches”). Accordingly, neither speculation that DNA identification profiles might someday yield up private information nor the remote chance that government use of DNA samples might someday expand is relevant to the outcome in this case. See *Garcia v. Texas*, 131 S. Ct. 2866, 2867 (2011) (per curiam) (Court’s “task is to rule on what the law is, not what it might eventually be”).

C. States And The Federal Government Have A Strong Interest In Obtaining DNA Identification Profiles From Arrestees

1. The government has a powerful interest in knowing the identity of individuals who have entered the criminal justice system. See, e.g., *Hiibel v. Sixth Judicial Dist. Court*, 542 U.S. 177, 186 (2004); *INS v. Delgado*, 466 U.S. 210, 216 (1984). “In every criminal case,” the Court has explained, “it is known and must be known who has been arrested and who is being tried.” *Hiibel*, 542 U.S. at 191. Among other things, knowledge of identity permits the police to determine whether “a suspect is wanted for another offense, or has a record of violence or mental disorder,” and “may help clear a suspect and allow the police to concentrate their efforts elsewhere.” *Id.* at 186.

For those reasons, routine police procedure has long included photographing an arrestee, taking his fingerprints, and running those fingerprints through a database in a search of a match. See p. 16, *supra*. Those indisputably constitutional procedures give the police valuable information about the person in their custody. See *Kelly*, 55 F.2d at 68, 70 (stating that fingerprinting

is a “means for the identification of prisoners,” including ascertaining whether they are “second offenders”); see also *Lafayette*, 462 U.S. at 643-649.

DNA identification of arrestees serves the same interests—but more powerfully, because of its unequalled accuracy. See *District Atty’s Office for Third Judicial Dist. v. Osborne*, 557 U.S. 52, 55, 62 (2009). An arrestee may give a false name and change his appearance to avoid recognition. Fingerprint records may be unavailable, incomplete, or inconclusive. See 73 Fed. Reg. at 74,934, 74,942. A DNA fingerprint, however, is unique and unalterable. A comparison between an arrestee’s DNA profile and the other DNA profiles stored in CODIS therefore may yield information about his identity that is not available through any other means. See *CODIS and NDIS Fact Sheet*, *supra*; *United States v. Sczubelek*, 402 F.3d 175, 184-186 (3d Cir. 2005), cert. denied, 548 U.S. 919 (2006).

Even if DNA fingerprinting only duplicated other available information, the government could still permissibly acquire it to confirm or ascertain identity. See *City of Ontario v. Quon*, 130 S. Ct. 2619, 2632 (2010) (stating that this Court has “repeatedly refus[ed] to declare that only the ‘least intrusive’ search practicable can be reasonable” (quoting *Vernonia*, 515 U.S. at 663)). But DNA fingerprinting has benefits in identifying arrestees that fingerprinting alone cannot realize, and thus performs a distinct and important function.

2. In addition, DNA fingerprinting promotes the government’s powerful interest in supervising an arrestee who is facing charges. Authorities must decide whether such an arrestee can safely be released during the pretrial period, what restrictions are necessary if he is released, what precautions should be taken if he is

placed in pretrial detention, and how to ensure that he complies with the rules that govern him and ultimately appears for trial. Information derived from DNA identification profiles can play a vital role in making those decisions, which have serious implications for the public's safety and the integrity of the justice system. See 73 Fed. Reg. at 74,934; cf. *Samson*, 547 U.S. at 853 (noting state's "'overwhelming interest' in supervising parolees").

Initially, "[w]hether an arrestee is possibly implicated in other crimes is critical to the determination of whether or not to order detention pending trial." *Mitchell*, 652 F.3d at 414; see 73 Fed. Reg. at 74,934. An arrestee's DNA may match the DNA found in crime-scene evidence from a murder, rape, or other serious offense. Such a match would suggest that the arrestee is a danger to the public; it also would suggest that he has an incentive to flee, lest his involvement in other crimes be discovered. That kind of information is highly relevant to whether an arrestee should remain in custody. See, e.g., 18 U.S.C. 3142(g) (2006 & Supp. V 2011) (release decision by judicial officer must take into account "the history and characteristics of the person, including * * * past conduct, * * * criminal history, and * * * the nature and seriousness of the danger to any person or the community that would be posed by the person's release"); Md. Rule 4-216(f) (same); cf. *Griffin*, 483 U.S. at 879.¹⁰

¹⁰ The information may be generated quickly enough to be used in an initial determination of whether to detain or release an arrestee. See, e.g., Office of the Inspector Gen., U.S. Dep't of Justice, *Audit of the FBI's Convicted Offender, Arrestee, and Detainee DNA Backlog* 2-3 (Sept. 2011); see also Peter M. Vallone, *Rapid Forensic DNA Typing: Protocols and Instrumentation* (presentation at Nov. 28,

Regardless whether an arrestee is detained or released, database-match information can bear strongly on the mode by which the government supervises the arrestee and the effectiveness of that supervision. If an arrestee remains in custody, authorities can use that information to determine where to confine him and under what security measures. See *Florence*, 132 S. Ct. at 1518, 1520-1522 (noting the “undoubted security imperatives involved in jail supervision” and observing that “[p]eople detained for minor offenses can turn out to be the most devious and dangerous criminals”); *Bell*, 441 U.S. at 546 (stating that “institutional security and * * * internal order and discipline are essential goals” as to “pretrial detainees”); 73 Fed. Reg. at 74,934. If an arrestee is released pending trial, that information can influence the appropriate conditions of release. *Ibid.* An arrestee’s knowledge that his DNA is on file may also deter him from violating release conditions or from engaging in other criminal activity. See *Salerno*, 481 U.S. at 749-750 (“The government’s interest in preventing crime by arrestees is both legitimate and compelling.”).

Finally, possession of DNA identification profiles can aid the government in apprehending detainees who have escaped or releasees who have absconded. If a person who has fled commits a crime and leaves DNA at the crime scene, his linkage to that crime through DNA fingerprint matching provides a lead as to his present location. See 73 Fed. Reg. at 74,934; cf. *United States v.*

2012 Forensics@NIST 2012 Meeting), http://www.nist.gov/oles/upload/10_Vallone-rapid-DNA-2.pdf (explaining new technology that can generate a DNA fingerprint rapidly). If not, it can be the basis for modification of status, including revocation of release. See, e.g., Md. Rule 4-216.1(c); 18 U.S.C. 3145.

Kincade, 379 F.3d 813, 838 (9th Cir. 2004), cert. denied, 544 U.S. 924 (2005). The government has a strong interest in ensuring that defendants—whether detained or released—ultimately appear for trial. See *Bell*, 441 U.S. at 536.

3. DNA fingerprinting of arrestees also serves society’s fundamental interest in accurately solving crimes where the criminal left his DNA at the crime scene and other evidence is insufficient to identify him. As this Court has recognized, “[m]odern DNA testing can provide powerful new evidence unlike anything known before. * * * It is now often possible to determine whether a biological tissue matches a suspect with near certainty.” *Osborne*, 557 U.S. at 62. Thus, “DNA testing has an unparalleled ability * * * to identify the guilty. It has the potential to significantly improve both the criminal justice system and police investigative practices.” *Id.* at 55; see John Roman et al., Urban Inst., *The DNA Field Experiment: Cost-Effectiveness Analysis of the Use of DNA in The Investigation of High-Volume Crimes* 4, 147 (2008) (concluding based on randomized experiment that “DNA evidence led to a considerably higher number of suspect identifications and arrests than fingerprint evidence”).

States and the federal government unquestionably have an “interest in apprehending violators” through DNA, *Knights*, 534 U.S. at 121, and in doing so as quickly as possible. Bringing the guilty to justice vindicates the law and protects the public—even where an arrestee would ultimately be incarcerated for some period of time as punishment for the crime that prompted the arrest. Identifying the true perpetrator of a crime also can exonerate the innocent, who may be suspected or even convicted and incarcerated despite the presence of an-

other person's DNA at the crime scene. See *Osborne*, 557 U.S. at 55; *Mitchell*, 652 F.3d at 415; H.R. Rep. 900, at 10. And solution of crimes brings closure to victims, who may live in fear that they will be victimized again so long as the criminals responsible for injuring them remain at large. See *Kincade*, 379 F.3d at 839; 73 Fed. Reg. at 74,933-74,934. Those benefits are at the very heart of government's basic responsibility to maintain order and shield its citizens from harm.

They are also far from hypothetical. The facts of this case provide an excellent illustration: the DNA profile that the State obtained from respondent at arrest identified him as the rapist in a crime that had gone unsolved for six years. See Pet. Br. 25. Jurisdictions around the country with laws requiring DNA samples from arrestees have made similar reports. Recently, for example, the DNA fingerprint of an arrestee facing a federal weapons charge matched DNA found under the fingernails of one of three young women who were shot and killed in 1990. See *DNA leads to suspect in 3 slayings in Spokane area 22 years ago*, *Seattle Times* (Nov. 20, 2012); see generally 151 Cong. Rec. S13,756-13,758 (daily ed. Dec. 16, 2005) (remarks of Sen. Kyl, sponsor of federal DNA legislation) (discussing "real life examples"); FBI, *CODIS-NDIS Statistics*, <http://www.fbi.gov/about-us/lab/biometric-analysis/codis/ndis-statistics> (last visited Dec. 28, 2012) (taking into account arrestees and convicted offenders and stating that "[a]s of November 2012, CODIS has produced over 195,600 hits assisting in more than 187,700 investigations"). Arrestees as a class are highly likely to include recidivists, see, e.g., Bureau of Justice Statistics, *Federal Justice Statistics*, 2009 (Dec. 2011), at 10 (Table 8) (nearly two-thirds of federal defendants had at least one prior con-

viction, and more than one-fifth had more than five), and society has a surpassing interest in promptly determining whether they are responsible for unsolved crimes—an interest that cannot be served as effectively by any means other than DNA fingerprinting.

4. The court below believed that governmental interests would be equally well served by DNA fingerprinting after conviction. See Pet. App. 67a. Later DNA collection, however, would deprive authorities of critical information for making decisions about pretrial detention and release—an area in which mistakes can result in new serious offenses. It would sacrifice the benefits of deterring crime by arrestees who are released before trial. And it would delay the solution of some crimes by months or years.¹¹ During that delay, scarce law enforcement resources would be squandered; victims would continue to suffer; and innocent people could be wrongly suspected, accused, or convicted of those crimes. See *Mitchell*, 652 F.3d at 414-415.

The relevant governmental interests, therefore, are not merely generalized interests in obtaining a DNA fingerprint early in the criminal process. They are concrete practical interests in obtaining that unique identifier from *arrestees* to serve pressing goals at that time.

D. The Government's Interests Outweigh The Arrestee's

Analyzing the totality of the circumstances, the scales tip decidedly in favor of the government's interests in obtaining DNA identification profiles from arrestees. The minimal intrusion into the privacy of someone who

¹¹ Those benefits would also be lost if DNA fingerprinting were permitted only when authorities could not learn the name of an arrestee through traditional fingerprinting or other means. See Pet. App. 4a.

has already been taken into custody—a light swab of the cheek and analysis limited to identification information—is outweighed by the powerful need to identify the individual who has been arrested, make decisions about his supervision and placement, and solve and deter crimes.¹²

In addition to the relative strength of those interests, this case shares other features with cases where this Court has found a warrantless search reasonable. A warrant requirement would entirely thwart the government’s interests, while the restraints on official discretion in taking DNA are already substantial. DNA fingerprinting “is not the kind of event that involves suspicion, or lack of suspicion, of the relevant individual.” *Lidster*, 540 U.S. at 424-425; see *Lafayette*, 462 U.S. at 643-644 (where “justification” for search “does not rest on probable cause, * * * the absence of a warrant is immaterial”). Rather, its value comes in routinely identifying an individual, and potentially shedding light on his past conduct, after probable cause has justified his arrest. Requiring a warrant would thus “jeopard[ize]”

¹² Because the totality of the circumstances dictates reversal, this Court need not analyze whether this case involves “special needs.” But such needs—“beyond the normal need for law enforcement,” *City of Indianapolis v. Edmond*, 531 U.S. 32, 37 (2000)—do exist here. The law at issue is not targeted at investigating any *particular* crime, and a DNA fingerprint standing alone is not incriminating (unlike a blood sample containing illegal drugs). Moreover, the law’s goals include exoneration of the innocent, supervision of arrestees in the period before trial, and improvement in future public safety—all of which are outside the government’s “general interest in crime control.” *Illinois v. Lidster*, 540 U.S. 419, 424 (2004); see *Griffin*, 483 U.S. at 875, 879 (deeming interest in ensuring that the “community is not harmed by the probationer’s being at large” a special need).

the benefits of DNA fingerprinting. *Skinner*, 489 U.S. at 624. At the same time, the Maryland law (like analogous laws in other jurisdictions) serves many of the purposes of a warrant. See *Martinez-Fuerte*, 428 U.S. at 565-566. It applies to a defined group of people and includes numerous restrictions, thus ensuring that DNA fingerprinting is “not ‘subject to the discretion of the official in the field.’” *Delaware v. Prouse*, 440 U.S. 648, 654-655 (1979) (quoting *Camara*, 387 U.S. at 532). Accordingly, “a warrant requirement here would make little contribution.” *Martinez-Fuerte*, 428 U.S. at 565.

In those respects, DNA fingerprinting is virtually indistinguishable from traditional fingerprinting. Both are critical to the safety of the public, and both are reasonable exercises of government power in light of the reduced privacy interest of arrestees in their identities. See *Kelly*, 55 F.2d at 68 (“The slight interference with the person involved in finger printing seems to us one which must be borne in the common interest.”). Thus, although DNA fingerprinting is a recent development, it is effectively backed by a long history. The court below was wrong to distinguish the two practices.

CONCLUSION

The judgment of the Court of Appeals of Maryland
should be reversed.

Respectfully submitted.

DONALD B. VERRILLI, JR.
LANNY A. BREUER
Assistant Attorney General
MICHAEL R. DREEBEN
Deputy Solicitor General
ELAINE J. GOLDENBERG
*Assistant to the Solicitor
General*
ROBERT A. PARKER
CHRISTOPHER J. SMITH
Attorneys

JANUARY 2013