

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA, <i>Plaintiff-Appellee,</i> v. JERRY ARBERT POOL, <i>Defendant-Appellant.</i>
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No. 09-10303
D.C. No.
2:09-cr-00015-
EJG-1
OPINION

Appeal from the United States District Court
for the Eastern District of California
Edward J. Garcia, District Judge, Presiding

Argued and Submitted
December 7, 2009—San Francisco, California

Filed September 14, 2010

Before: Mary M. Schroeder and Consuelo M. Callahan,
Circuit Judges, and Carlos F. Lucero,* Circuit Judge.

Opinion by Judge Callahan;
Concurrence by Judge Lucero;
Dissent by Judge Schroeder

*The Honorable Carlos F. Lucero, Circuit Judge for the Tenth Circuit,
sitting by designation.

COUNSEL

Daniel J. Broderick, Federal Defender, and Rachelle Barbour (argued), Sacramento, California, for defendant-appellant Jerry Arbert Pool.

Michael Risher, San Francisco, California, for amicus curiae the American Civil Liberties Union Foundation of Northern California.

Lawrence G. Brown, United States Attorney, and Sean C. Flynn (argued), Assistant United States Attorney, Sacramento, California, for plaintiff-appellee the United States.

OPINION

CALLAHAN, Circuit Judge:

Jerry Arbert Pool challenges the district court's implementation of 18 U.S.C. § 3142(b) and (c)(1)(A), requiring him to give a DNA sample as a condition of his pre-trial release.

Applying the totality of the circumstances test, we affirm the district court. We hold that where a court has determined that there is probable cause to believe that the defendant committed a felony, the government's interest in definitively determining the defendant's identity outweighs the defendant's privacy interest in giving a DNA sample as a condition of pre-trial release in cases in which the government's use of the DNA is limited to identification purposes and there is no indication that the government intends to use the information for any other purpose.

I

On January 8, 2009, Pool was charged in the Eastern District of California by indictment with possessing and receiving child pornography in violation of 18 U.S.C. §§ 2252(a)(2) and 2253. Pool was arrested and brought to court for his arraignment on January 23, 2009. Pool had no prior criminal record and he entered a plea of not guilty. The magistrate judge ordered Pool released on a \$25,000 unsecured bond on the condition that he obey pre-trial conditions. Pool consented to all pre-trial conditions except that he provide a DNA sample.

The court stayed the DNA collection to allow the parties to brief the issue. Pool challenges the constitutionality of amendments to the Bail Reform Act, 18 U.S.C. § 3142(b) and (c)(1)(A), which require the provision of a DNA sample as a condition for pre-trial release.¹ This condition applies to most,

¹The Bail Reform Act, 18 U.S.C. § 3142(b) and (c)(1), provides:

(b) Release on personal recognizance or unsecured appearance bond.—The judicial officer shall order the pretrial release of the person on personal recognizance, or upon execution of an unsecured appearance bond in an amount specified by the court, subject to the condition that the person not commit a Federal, State, or local crime during the period of release and subject to the condition that the person cooperate in the collection of a DNA sample from the person if the collection of such a sample

if not all, federal criminal charges. *See* 42 U.S.C. § 14135(a)(1)(A).²

The government defines DNA as “a double-helix shaped nucleic acid held together by hydrogen bonds and composed of base pairings of Adenine and Thymine, and Cytosine and Guanine, which repeat along the double-helix at different regions (referred to as short-tandem-repeat loci, or STR loci).” In *United States v. Kincade*, 379 F.3d 813 (9th Cir. 2004) (en banc), we stated:

Through the use of short tandem repeat technology

is authorized pursuant to section 3 of the DNA Analysis Backlog Elimination Act of 2000 (42 U.S.C. 14135a), unless the judicial officer determines that such release will not reasonably assure the appearance of the person as required or will endanger the safety of any other person or the community.

(c) Release on conditions.—(1) If the judicial officer determines that the release described in subsection (b) of this section will not reasonably assure the appearance of the person as required or will endanger the safety of any other person or the community, such judicial officer shall order the pretrial release of the person—

(A) subject to the condition that the person not commit a Federal, State, or local crime during the period of release and subject to the condition that the person cooperate in the collection of a DNA sample from the person if the collection of such a sample is authorized pursuant to section 3 of the DNA Analysis Backlog Elimination Act of 2000 (42 U.S.C. 14135a); and

(B) subject to the least restrictive further condition, or combination of conditions, that such judicial officer determines will reasonably assure the appearance of the person as required and the safety of any other person and the community, which may include the condition that the person—

²Section 14135a(a)(1)(A) provides that “[t]he Attorney General may, as prescribed by the Attorney General in regulation, collect DNA samples from individuals who are arrested, facing charges, or convicted or from non-United States persons who are detained under the authority of the United States.”

(“STR”), the Bureau analyzes the presence of various alleles located at 13 markers (or loci) on DNA present in the specimen. These STR loci are each found on so-called “junk DNA” — that is, non-genic stretches of DNA not presently recognized as being responsible for trait coding — and “were purposely selected because they are not associated with any known physical or medical characteristics.” H.R. Rep. No. 106-900(I) at *27. Because there are observed group variances in the representation of various alleles at the STR loci, however, DNA profiles derived by STR may yield probabilistic evidence of the contributor’s race or sex. *Future of Forensic DNA Testing* 35, 39-42. Even so, DNA profiles generated by STR are highly individuated: Due to the substantial number of alleles present at each of the 13 STR loci (between 7 and 20, *see Future of Forensic DNA Testing* 41) and widespread variances in their representation among human beings, the chance that two randomly selected individuals will share the same profile are infinitesimal — as are the chances that a person randomly selected from the population at large will present the same DNA profile as that drawn from crime-scene evidence. *See Future of Forensic DNA Testing* 19-22, 39-42.

Id. at 818-19 (footnotes omitted). We further recognized, however, that “[r]ecent studies have begun to question the notion that junk DNA does not contain useful genetic programming material.” *Id.* at 818 n.6.

Once collected, a DNA sample is turned over to the Director of the Federal Bureau of Investigation (“FBI”). 42 U.S.C. § 14135a(b). The FBI analyzes the DNA sample and includes the results in the Combined DNA Index System (“CODIS”), an FBI-created national database that catalogues DNA profiles from numerous sources. CODIS “allows State and local

forensics laboratories to exchange and compare DNA profiles electronically in an attempt to link evidence from crime scenes for which there are no suspects to DNA samples of convicted offenders on file in the system.” H.R. Rep. 106-900(I) at 8 (2000). The Attorney General has issued regulations concerning the taking of DNA samples from arrestees. 28 CFR Part 28, 73 FR 74932, 2008 WL 5155929. The regulations allow “DNA samples generally to be collected, along with a subject’s fingerprints, as part of the identification process,” but they need not be if the collection of DNA samples “would not be warranted or feasible.”³ 73 FR at 74934.

Pool objected to giving a DNA sample primarily on the ground that doing so violated his rights under the Fourth Amendment. He also challenged the law as unconstitutional under the Eighth Amendment, and the Due Process Clause and violative of the separation of powers doctrine.

Citing our opinion in *Kincade*, 379 F.3d at 839-40, the magistrate applied the “totality of the circumstances” framework to consider the constitutionality of the statute. He determined:

The judicial or grand jury finding of probable cause within a criminal proceeding is a watershed event which should be viewed differently from mere prejudicial involvement gathering of evidence. After such a judicial finding, a defendant’s liberty may be greatly restricted — even denied. As part of his pre-trial release, defendant may be deprived of his very liberty; he can be subject to electronic monitoring;

³The regulation notes, “[f]or example, in relation to non-arrestees, DHS will not be required to collect DNA samples from aliens who are fingerprinted in processing for lawful admission to the United States, or from aliens from whom DNA-sample collection is otherwise not feasible because of operational exigencies or resource limitations.” 73 FR at 74934.

he may be ordered to obey a mandatory curfew. . . . These conditions are almost identical to those conditions which can be imposed on a probationer or parolee for whom a DNA testing requirement has been found appropriate under a totality of the circumstances standard. The court finds that an up-front requirement for finding probable cause that the defendant has committed the charged felony places the issue much more closely with those cases utilizing a totality of the circumstances standard.

Applying the totality of the circumstances standard, the magistrate concluded that “the decision to impose the DNA testing requirement on pre-trial detainees or releasees seems clearly warranted, if not compelling,” because “an arrestee’s identity obviously becomes a matter of legitimate state interest,” and an arrestee “has a diminished expectation in privacy in his own identity.”

In denying Pool relief, the magistrate stressed what his holding did not encompass.

It does not authorize DNA sampling after citation or arrest for infractions or misdemeanors, as in these cases there will be no *judicial* finding of probable cause soon after the arrest or citation, or no *grand jury* finding before or after the arrest. *See* Fed. R. Crim. P. 7(a). It does not authorize police officials to perform DNA sampling prior to a judicial finding of probable cause which must be made within 48 hours after arrest and detention. Again, it is the finding of probable cause on criminal charges which allows the court to set release conditions similar to those of probation and parole, which is the underpinning of the court’s holding in this case.

The magistrate stayed the DNA collection pending Pool’s appeal to the district court judge. The district judge conducted

a de novo review, found the magistrate's findings and analysis to be "exhaustive, well reasoned and supported by the record," and reiterated that "no Fourth Amendment or other Constitutional violation is caused by the universal requirement that a charged defendant undergo a 'swab test' or blood test when necessary, for the purposes of DNA analysis to be used solely for criminal law enforcement identification purposes."

On July 16, 2009, the district court issued an order denying the motion to amend the release order and upholding DNA testing. Pool filed a timely notice of appeal and requested a stay of the DNA collection, which the magistrate granted.

II

Title 18 U.S.C. § 3145(c) provides for an immediate appeal from a release or detention order. The district court's determination that the mandatory DNA collection provision of the Bail Reform Act does not violate Pool's constitutional rights is reviewed de novo. *United States v. Schales*, 546 F.3d 965, 971 (9th Cir. 2008) ("A challenge to the constitutionality of a federal statute is a question of law that is reviewed *de novo*.").

[1] Our review of the district court's order starts with the recognition that "[t]he compulsory extraction of blood for DNA profiling unquestionably implicates the right to personal security embodied in the Fourth Amendment, and thus constitutes a 'search' within the meaning of the Constitution." *Kincade*, 379 F.3d at 821 n.15; *see also Friedman v. Boucher*, 580 F.3d 847, 852 (9th Cir. 2009) (holding that "[t]here is no question that the buccal swab constituted a search under the Fourth Amendment").

[2] Accordingly, as the statute's compulsion of a DNA sample does not contemplate the issue of a search warrant, the provision will pass constitutional muster only if it "falls

within certain established and well-defined exceptions to the warrant clause.” *United States v. Brown*, 563 F.3d 410, 414-15 (9th Cir. 2009) (internal quotation and citation omitted). Here, the district court considered two exceptions to the warrant clause, the “special needs” test and the “totality of the circumstances” test.

A. The Special Needs Test

The use of the special needs test would be problematic. The test was developed in cases outside of the law enforcement context and the Supreme Court has been leery of applying it to criminal cases. *See Ferguson v. City of Charleston*, 532 U.S. 67, 84 (2001). The Court’s language in *Ferguson* renders the government’s suggestion that “special law enforcement interests” can be distinguished from ordinary law enforcement purposes questionable at best.⁴ *Id.*; *see also Friedman*, 580 F.3d at 853 (noting that “[b]ecause the ‘special needs’ exception applies only to non-law enforcement purposes, and the State’s interest here is the use of data for purely law enforcement purposes, the ‘special needs’ exception is inapplicable”); and *United States v. Scott*, 450 F.3d 863, 870 (9th Cir. 2006) (commenting that “[c]rime prevention is a quintessential general law enforcement purpose and therefore is the exact opposite of a special need”).

We need not, however, determine whether the DNA collection provision could meet the special needs test because our precedent directs us to apply the totality of the circumstances

⁴The Court noted:

Because law enforcement involvement always serves some broader social purpose or objective, under respondents’ view, virtually any nonconsensual suspicionless search could be immunized under the special needs doctrine by defining the search solely in terms of its ultimate, rather than immediate, purpose. Such an approach is inconsistent with the Fourth Amendment.

532 U.S. at 84 (footnotes omitted).

test. In *United States v. Kriesel*, 508 F.3d 941, 947 (9th Cir. 2007), we held:

Taking our cue from *Samson* [*v. California*, 547 U.S. 843, 126 S. Ct. 2193 (2006)], we reaffirm that “the touchstone of the Fourth Amendment is reasonableness,” *id.* at 2201 n.4, and adopt the “general Fourth Amendment approach,” which “examin[es] the totality of the circumstances to determine whether a search is reasonable.” *Id.* at 2197 (quoting *United States v. Knights*, 534 U.S. 112, 118, . . . (2001)) (internal quotation marks omitted). “Whether a search is reasonable ‘is determined by assessing, on the one hand, the degree to which it intrudes upon an individual’s privacy, and on the other, the degree to which it is needed for the promotion of legitimate governmental interests.’ ” *Id.* (quoting *Knights*, 534 U.S. at 118-19).

See also Kincade, 379 F.3d at 832 (“We today reaffirm the continuing vitality of *Rise* [*v. Oregon*, 59 F.3d 1556 (9th Cir. 1995)] — and hold that its reliance on a totality of the circumstances analysis to uphold compulsory DNA profiling of convicted offenders both comports with the Supreme Court’s recent precedents and resolves this appeal in concert with the requirements of the Fourth Amendment.”). Accordingly, we review the mandatory DNA collection provision under the totality of the circumstances test.

B. The Totality of the Circumstances Test

[3] The totality of the circumstances test requires the court to balance the intrusion upon the individual’s privacy with the government’s legitimate interests. In *Samson*, the Supreme Court stated: “[w]hether a search is reasonable ‘is determined by assessing, on the one hand, the degree to which it intrudes upon an individual’s privacy and, on the other, the degree to which it is needed for the promotion of legitimate governmen-

tal interests.’ ” 547 U.S. at 848 (quoting *Knights*, 534 U.S. at 118-19). *See also Kriesel*, 508 F.3d at 952 (holding that in *Samson*, the Supreme Court held that the totality of the circumstances test was the proper mode for analyzing a state statute requiring DNA testing as a condition of supervised release).

[4] However, our opinions suggest that there may be a pre-requisite to the application of this test: there must be some legitimate reason for the individual having less than the full rights of a citizen. *See Kincade*, 379 F.3d at 833 (noting “the well-established principle that parolees and other conditional releasees are not entitled to the full panoply of rights and protections possessed by the general public”); *see also Scott*, 450 F.3d at 873 (“Scott had a reduced expectation of privacy because he had signed a form that, on its face, explicitly waived the warrant requirement and implicitly (through the use of the word ‘random’) waived the probable cause requirement for drug testing.”). *But see Rise*, 59 F.3d at 1559 (“Even in the law enforcement context, the State may interfere with an individual’s Fourth Amendment interests with less than probable cause and without a warrant if the intrusion is only minimal and is justified by law enforcement purposes.”).

[5] Here, the magistrate found that the “judicial or grand jury finding of probable cause” was the “watershed event” that distinguished Pool from the general public and allowed for the application of the totality of the circumstances test. He noted that at this point, “defendant may be deprived of his very liberty; he can be subject to electronic monitoring; he may be ordered to obey a mandatory curfew.” Certainly, the magistrate is correct that at this point the government may, through the judiciary, impose conditions on an individual that it could not otherwise impose on a citizen. Thus, the determination that there is probable cause to believe Pool committed

a federal felony, allows the application of the totality of the circumstances test.⁵

Pool argues, citing *Scott*, that the presumption of innocence to which he is entitled precludes the application of the totality of the circumstances test. This approach, however, was rejected by the Supreme Court in *Bell v. Wolfish*, 441 U.S. 520, 533 (1979), when it stated that the presumption of innocence “has no application to the determination of the rights of a pretrial detainee during confinement before his trial has ever begun.” Indeed, in *United States v. Salerno*, 481 U.S. 739, 749 (1987), the Supreme Court indicated that with a person’s arrest the government may have grounds to limit the arrestee’s rights. The Court noted:

Even competent adults may face substantial liberty restrictions as a result of the operation of our criminal justice system. If the police suspect an individual of a crime, they may arrest and hold him until a neutral magistrate determines whether probable cause exists. *Gerstein v. Pugh*, 420 U.S. 103, . . . (1975). Finally, respondents concede and the Court of Appeals noted that an arrestee may be incarcerated until trial if he presents a risk of flight, see *Bell v. Wolfish*, 441 U.S. at 534, . . . or a danger to witnesses.

481 U.S. at 749. When Pool was brought before the magistrate in this case, whatever the prerequisite for the application of the totality of the circumstances test, that requirement was met. Accordingly, we turn to balancing the intrusion upon Pool’s privacy against the government’s legitimate interests.

⁵As this is what the district court held, we need not, and do not, consider what other circumstances might allow for the use of the totality of the circumstances test.

1. *The Degree of Intrusion on Pool's Privacy*

[6] Precedent establishes that the physical intrusion required to take a DNA sample is minimal. *Skinner v. Railway Labor Executives' Ass'n.*, 489 U.S. 602, 625 (1989) (“We said also that the intrusion occasioned by a blood test is not significant, since such ‘tests are a commonplace in these days of periodic physical examinations and experience with them teaches that the quantity of blood extracted is minimal, and that for most people the procedure involves virtually no risk, trauma, or pain.’”) (internal citation omitted); *Kriesel*, 508 F.3d at 948 (“The additional privacy implications of a blood test collecting DNA, as opposed to a cheek swab or other mechanism, do not significantly alter our analysis.”).

Pool’s greater concern, however, is not with the physical intrusiveness of the DNA testing, but with the intrusive nature of the information gathered by the government. The government, however, asserts that it only seeks to determine Pool’s identification. Indeed, it is doubtful that Pool, or any other individual having been indicted by a grand jury or having been subjected to a judicial determination of probable cause, has any right to withhold his or her true identification from the government. *See Kincade*, 379 F.3d at 837 (“the DNA profile derived from the defendant’s blood sample establishes only a record of the defendant’s identity — otherwise personal information in which the qualified offender can claim no right of privacy once lawfully convicted of a qualifying offense (indeed, once lawfully arrested and booked into state custody).”); *Jones v. Murray*, 962 F.2d 302, 306 (4th Cir. 1992) (“when a suspect is arrested upon probable cause, his identification becomes a matter of legitimate state interest and he can hardly claim privacy in it”).

The government argues that by design and law, the collection of DNA is limited to individual identification. The 13 markers on the DNA which the government uses to identify the donor “were purposely selected because they are not asso-

ciated with any known physical or medical characteristics.” *Kincade*, 379 F.3d at 818 (internal quotation and citation omitted). *See also Kriesel*, 508 F.3d at 947. In implementing the Act, the Department of Justice stated that DNA profiles are to be used for identification purposes.⁶ 73 FR at 74937-38. The statute imposes criminal and financial penalties for improper use of DNA samples, 42 U.S.C. § 14135e(c), and limits access to DNA materials, 42 U.S.C. § 14133(b)(1)(A)-(C). There are also provisions for the expungement of the DNA information if the defendant is acquitted or the felony charges are dismissed. 42 U.S.C. § 14132(d)(1)(A).

Pool and the amicus raise two objections. First, they argue that the DNA information collected could reveal much more than the person’s identification. CODIS may focus on the junk DNA, but the DNA sample contains all of an individual’s DNA. Pool is not comforted by the government’s assurance that it will not look at other aspects of a person’s DNA. Second, Pool posits that the government through the use of familial comparisons may suspect innocent people simply because their DNA has some strands that are similar to the defendant’s DNA. Pool and the amicus assert that these arguments help distinguish DNA from fingerprints because fingerprints only identify an individual; they contain no information as to an individual’s heritage or predilections.

Addressing Pool’s concerns in inverse order, it is not clear

⁶The Department of Justice’s regulation states:

the DNA profiles retained in the system are sanitized “genetic fingerprints” that can be used to identify an individual uniquely, but do not disclose an individual’s traits, disorders, or dispositions. The rules governing the operation of CODIS reflect its function as a tool for law enforcement identification, and do not allow DNA information within the scope of the system to be used to derive information concerning sensitive genetic matters. *See* 42 U.S.C. §§ 14132(b), 14133(b)-(c), 14135e.

73 FR at 74937-38.

that familial comparisons raise a constitutional privacy issue or, if they do, whose interests are violated. The concern with familial comparisons or partial matching is that a review of CODIS may disclose an individual whose DNA does not match precisely to crime scene DNA from a perpetrator, but is close enough to create a probability that the perpetrator is a close relative to the identified individual. The familial match is not implicated: by definition the match is not perfect, so the government knows that the match is not the perpetrator. It is questionable whether the rights of the perpetrator (if ultimately identified through the use of familial comparisons) are violated. This seems somewhat analogous to a witness looking at a photograph of one person and stating that the perpetrator has a similar appearance which leads the police to show the witness photos of similar looking individuals, one of whom the witness identifies as the perpetrator. It is questionable whether the person whose photograph helped focus the inquiry, or whose familial comparison helped focus the inquiry, has suffered any invasion of his or her constitutional right to privacy.

Pool's concerns about the government's potential use of DNA are understandable, but several factors mitigate those concerns. First, in *Kriesel* and *Kincade*, we recognized that the DNA collection system was designed not to reveal genetic traits such as physical and medical characteristics. *Kriesel*, 508 F.3d at 947; *Kincade*, 379 F.3d at 818-19. Although there is some scientific evidence to suggest that the "junk DNA" that is the focus of CODIS may contain information that is not "junk," this, at most, indicates that the government *might* be able to ascertain genetic traits from the 13 loci, not that it actually *could* do so.⁷ Second, even if appellant and amicus have shown that it is physically possible for the government to extract genetic traits from the 13 loci, there is no evidence

⁷There is no indication that Pool sought discovery or sought to introduce expert testimony as to the government's ability to extract genetic traits from the DNA sample.

that the government could legally do so without further legislation, or that the government has any intention of doing so. As noted, 42 U.S.C. § 14133(b) limits the present use of DNA information and the government asserts that Congress has prohibited the alteration of the core loci without prior notice and explanation to Congress. *See* P.L. 108-405 § 203(f).

[7] Third, the plurality opinion in *Kincade* considered and rejected similar concerns as to the government's potential use of DNA information. The opinion noted:

But beyond the fact that the DNA Act itself provides protections against such misuse, our job is limited to resolving the constitutionality of the program before us, as it is designed and as it has been implemented. In our system of government, courts base decisions not on dramatic Hollywood fantasies, . . . but on concretely particularized facts developed in the cauldron of the adversary process and reduced to an assessable record. If, . . . and when, some future program permits the parade of horrors the DNA Act's opponents fear — unregulated disclosure of CODIS profiles to private parties, genetic discrimination, state-sponsored eugenics, . . .

— we have every confidence that courts will respond appropriately.

As currently structured and implemented, however, the DNA Act's compulsory profiling of qualified federal offenders can only be described as minimally invasive — both in terms of the bodily intrusion it occasions, and the information it lawfully produces.

379 F.3d at 837-38 (footnotes omitted) (emphasis added). Although *Kincade* dealt with the taking of DNA from convicted offenders, the plurality's determination that the information produced by CODIS is minimally invasive is

applicable to this case. Furthermore, Pool has not offered any evidence that might undermine our determination in *Kincade*.

[8] In sum, prior judicial decisions hold that the physical invasion of a buccal swab or even a blood prick is minimal and that Pool has little or no right to hide his identity from the government. The nature of the privacy invasion, however, is more difficult to evaluate because although CODIS is designed only to facilitate identity, Pool raises non-frivolous concerns that the government could use the DNA materials to determine genetic traits. Nonetheless, the plurality opinion in *Kincade* holds that the Act is “minimally invasive both in terms of the bodily intrusion it occasions, and the information it lawfully produces.” 397 F.3d at 838. We conclude that Pool has not shown any greater intrusion on his privacy than did *Kincade*.⁸

2. *The Government’s Interests*

[9] The government’s interests in DNA samples for law enforcement purposes are well established. It is the most accurate means of identification available.⁹ Furthermore,

⁸Although Judge Gould in his concurring opinion in *Kincade* expressed concern with the possible misuse of DNA information, 379 F.3d at 841-42, he appears to have agreed with the plurality that the issue was not ripe for judicial review. He posed the question of whether the DNA of a person who had “wholly cleared their debt to society” should be erased, and responds that in a proper case “where this issue is presented, we would presumably need to weigh society’s benefit from retention of the DNA records of a felon against that person’s right in a classical sense to privacy.” *Id.*

⁹See *District Attorney’s Office for Third Judicial District v. Osborne*, 129 S. Ct. 2308, 2327 (2009) (“DNA tests can, in certain circumstances, establish to a virtual certainty whether a given individual did or did not commit a particular crime.”) (internal quotations and citations omitted); see also *Kaemmerling v. Lappin*, 553 F.3d 669, 681 (D.C. Cir. 2008) (“DNA testing is the most reliable forensic technique for identifying criminals when biological material is left at the crime scene.”) (internal quotation and citations omitted); and *United States v. Sczubelek*, 402 F.3d 175, 184 (3d Cir. 2005) (noting that compared to fingerprints, “DNA is a further — and in fact a more reliable — means of identification”).

unlike fingerprint evidence that requires that the perpetrator leave a discernable fingerprint at the scene of a crime, it is much more difficult for a perpetrator not to leave some DNA evidence at the scene of a crime. We have recognized the government's interests as "undeniably compelling" and "monumental." *Kriesel*, 508 F.3d at 949.

[10] In *Kriesel*, we addressed collecting DNA samples from felons on supervised release. 508 F.3d at 947-50. Here, we must evaluate the government's interests in collecting a DNA sample after a probable cause determination rather than after a person's conviction. Nonetheless, the government's interests remain substantial. There is usually a lengthy period of time between an initial determination of probable cause and a person's trial (and even more time before a conviction becomes final after an unsuccessful appeal). During this period of time, the government has an interest in determining whether the individual may be released pending trial without endangering society and ensuring that he or she complies with the conditions of his or her release. The collection of a DNA sample allows the government to ensure that the defendant did not commit some other crime and discourages a defendant from violating any condition of his or her pretrial release.¹⁰ In sum, many of the government's interests in collecting a DNA sample after a person's conviction are present at this earlier stage, with the possible exception of the particular needs that arise when the government confines an individual, but these needs are replaced by the equally legitimate concerns of knowing the identity of the person being released to the public and ascertaining and imposing conditions necessary to protect the public.

¹⁰In some instances, it is even possible that the collection of a DNA sample from a defendant may produce exonerating evidence.

3. *The Balance*

[11] If not at the time that a person is arrested, certainly once there has been a determination of probable cause to believe that an individual has committed a federal felony, the individual no longer has any “right” or legitimate expectation of keeping his or her identity from the government. *Kincade*, 379 F.3d at 837. In light of the government’s legitimate interests in determining the true identity of the person, the balance between those rights and the individual’s rights favors the government, at least where, as here, the purpose and the effect of requiring DNA are only to provide the government with the person’s true identity.

[12] Here, Pool does not really challenge that identity is the primary purpose of the Act. Rather, his concerns are that despite the government’s disclaimer of other interests, the collection of DNA, by its very nature, provides the government access to intimate information concerning a person’s genetic traits. We determine that in light of our precedent, these concerns do not outweigh the government’s interests because Pool has not shown that (1) the government could, at this time, actually use the DNA information for arguably improper purposes, (2) the government could do so without further legislation, or (3) the government has any intent to so use the information. Guided by our opinion in *Kincade*, we apply the totality of the circumstances balancing test, and conclude that the government’s legitimate interest in definitively identifying Pool outweighs the intrusion into his privacy.¹¹

¹¹Our use of the totality of the circumstances test is consistent with opinions by the First, Third, Fourth, Fifth, Eighth, Eleventh and D.C. Circuits. See *United States v. Weikert*, 504 F.3d 1, 9 (1st Cir. 2007) (applying “the general Fourth Amendment totality of the circumstances analysis to [defendant’s] challenge to the DNA Act”); *United States v. Sczubelek*, 402 F.3d 175, 184 (3d Cir. 2005) (stating that it believes “that it is appropriate to examine the reasonableness of the taking of the sample under the more rigorous *Knights* totality of the circumstances test rather than the

4. *Our perspective is consistent with the recent decisions relied upon by Pool*

The case by case balancing of the government's asserted legitimate interests and the intrusion into the individual's privacy may be seen in our opinions in *Friedman*, 580 F.3d 847, and *Scott*, 450 F.3d 863.

Friedman concerned the forcible extraction of a DNA sample by a state official from a person who was being held pending trial.¹² We held that Nevada had failed to present

Griffin special needs exception); *Jones*, 962 F.2d at 306-07 (4th Cir. 1992) (applying the totality of the circumstances framework); *Groczman v. United States Dep't of Justice*, 354 F.3d 411, 413-414 (5th Cir. 2004) (per curiam) (noting that "Courts may consider the totality of circumstances, including a person's status as an inmate or probationer, in determining whether his reasonable expectation of privacy is outweighed by other factors"); *United States v. Kraklio*, 451 F.3d 922, 924-25 (8th Cir. 2006) (federal DNA Act) (holding that "based on the totality of the circumstances, the collection of DNA under the DNA Act for inclusion in the CODIS database does not constitute an unreasonable search and seizure in violation of the Fourth Amendment"); *Padgett v. Donald*, 401 F.3d 1273, 1280 (11th Cir. 2005) (stating "[u]tilizing the *Knights* approach, we next address whether the statute is reasonable under a totality of the circumstances analysis"); and *Johnson v. Quander*, 440 F.3d 489, 496 (D.C. Cir. 2006) (commenting that "[t]oday we join this unanimous body of authority, and we conclude that the mandatory collection of Johnson's DNA sample was "reasonable" under the Fourth Amendment's balancing test." (footnote omitted)). Notably, all of these cases upheld the collections of DNA evidence before them under the specific statutes and circumstances presented.

¹²Our opinion in *Friedman* noted:

After *Friedman* repeatedly refused to voluntarily provide a DNA sample, Boucher forced *Friedman*'s jaw open and forcefully took a buccal swab from the inside of *Friedman*'s mouth. This search was not related to the Nevada charges then-pending against *Friedman*. Indeed, [the deputy district attorney] later represented to a Nevada Justice Court that she had ordered the search to use *Friedman*'s DNA in the investigation of cold cases. *Friedman* was not a suspect in any of the cases.

580 F.3d at 851 (footnote omitted).

sufficient legitimate interests or needs to overcome the intrusion of personal privacy. The panel's conclusion of its discussion of the totality of the circumstances approach, or what it refers to as the "reasonable" argument (580 F.3d at 856), states:

The Nevada authorities extracted the DNA from Friedman not because they suspected he had committed a crime, nor to aid in his reintegration into society, nor as a matter of his continuing supervision. Their purpose was simply to gather human tissue for a law enforcement databank, an objective that does not cleanse an otherwise unconstitutional search.

580 F.3d at 858.

Pool's case, however, presents very different factors. First, unlike the situation in *Friedman*, there has been a judicial determination of probable cause to believe that Pool committed a federal felony. Second, the arguments that the opinion in *Friedman* noted were not made by the state in that case are made by the government in this case. Here, the government has probable cause to believe that Pool committed the crime and in determining conditions that would allow the release of Pool to the public pending trial. Third, in *Friedman*, Nevada proffered no statutory authority for collecting a DNA sample, but here, the Attorney General seeks to enforce the Bail Reform Act passed by Congress.¹³ In sum, this case presents very different concerns both as to the individual's legitimate expectation of privacy and the government's legitimate interests. By definition, the totality of the circumstances standard requires that the court consider the individual facts presented in each case. The determination that the circumstances in

¹³Thus, unlike the search in *Friedman*, here the search was requested according to "standardized criteria." See *Florida v. Wells*, 495 U.S. 1, 4 (1990).

Friedman favored the individual does not control our determination that under the totality of the circumstances standard the balance of the distinct facts in this case permits the mandatory collection of DNA as a condition for pre-trial release.

The facts before us in *Scott* were also very different from this case and raised distinct issues under the totality of the circumstances standard. The central issue in *Scott* was “whether police may conduct a search based on less than probable cause of an individual released while awaiting trial.” 450 F.3d at 864. We were troubled by the assertion that the drug test and the search of Scott’s house were valid because he had consented to them as a condition of pre-trial release, and determined that “Scott’s consent to any search is only valid if the search in question (taking the fact of consent into account) was reasonable.” 450 F.3d at 868. We concluded that Nevada had failed to show that the searches were permissible under the special needs approach, noting in passing that Scott’s privacy interest in his home was “at its zenith.” *Id.* at 871-72.

We also held that the search in *Scott* was not reasonable under the totality of the circumstances approach. *Id.* at 872-73. However, both the government’s legitimate interests, as well as Scott’s privacy rights were different from the interests and rights presently at bar. First, the government’s interest in *Scott* was not in identifying Scott. Instead, it sought to condition his pre-trial release on his consent to random drug testing and to having his home searched any time of the day or night. 450 F.3d at 865. While the government’s legitimate interest in definitively identifying a defendant is well established, *Kriesel*, 508 F.3d at 949, we have questioned the government’s authority to otherwise intrude on a defendant’s privacy rights.¹⁴ In *Scott*, we recognized that a person’s privacy inter-

¹⁴In *Scott*, we explained:

The “unconstitutional conditions” doctrine, *cf. Dolan v. City of Tigard*, 512 U.S. 374, 385, 114 S.Ct. 2309, 129 L.Ed.2d 304

est in his home is at a zenith and is not usually reduced by a person's arrest or even a determination of probable cause. *Id.* at 871-72. Moreover, we found the government's alleged purposes for imposing the waiver to be questionable. *Id.* at 870 ("We assume for purposes of our analysis that the non-law-enforcement purpose — the interest in judicial efficiency — is 'primary' in this case. But the connection between the object of the test (drug use) and the harm to be avoided (non-appearance in court) is tenuous."). In addition, we noted that the "government has no concern with integrating people like Scott, who has never left the community, back into the community." *Id.* at 874.

In Pool's case, the government seeks only his definitive identification which it relates to its ability to check on his activities while on pre-trial release. Thus, while we are mindful of our holding in *Scott*, we remain convinced that in this case the government's legitimate interests outweigh Pool's legitimate expectations of privacy.

[13] We recognize that there is language in *Friedman* and *Scott* which may appear to be inconsistent with our decision and our application of *Kincade* and *Kriesel*.¹⁵ We have plotted

(1994), limits the government's ability to exact waivers of rights as a condition of benefits, even when those benefits are fully discretionary. Government is a monopoly provider of countless services, notably law enforcement, and we live in an age when government influence and control are pervasive in many aspects of our daily lives.

450 F.3d at 866 (footnote omitted).

¹⁵For example, the opinion in *Friedman* notes "neither the Supreme Court nor this court has ever ruled that law enforcement officers may conduct suspicion-less searches on pretrial detainees for reasons other than prison security." 580 F.3d at 856-57. However, while in *Friedman* the state failed to show sufficient legitimate interests to outweigh Friedman's privacy interests, here, the application of the totality of the circumstances test — as required by *Kincade* and *Kriesel* — leads to a different conclu-

a course based on the guidance provided by the Supreme Court in *Wolfish*, 441 U.S. at 533, and *Salerno*, 481 U.S. at 749, that respects the concerns asserted in each of our cases. This led us first to conclude that the probable cause determination by the district court allows for the application of the totality of the circumstances standard. We then compared the specific government interests and expectations of privacy in this case to those asserted in the prior cases. We conclude that where a court has determined that there is probable cause to believe that the defendant committed a felony, the government's interest in definitively determining the defendant's identity outweighs the defendant's privacy interest in giving a DNA sample as a condition of pre-trial release where the government's use of the DNA is limited to 13 loci "purposely selected because they are not associated with any known physical or medical characteristics," at least where, as here, there is no evidence that the government may legally extract any other information from the sample or that the government has any intention of attempting to do so.

III

Pool also advances four other constitutional challenges to being required to give a DNA sample in order to qualify for pre-trial release. He asserts that "the mandatory DNA testing and profiling condition" (1) "violates procedural due process because it eliminates an independent judicial determination as to the necessity of the condition," (2) violates his "Eighth Amendment right to be released on conditions that are not excessive in light of his circumstances," (3) "violates the separation of powers by depriving the court of its role in deter-

sion. The claim that neither the Supreme Court nor this court has previously reached the conclusion we do today, does not militate against our application of the totality of the circumstances test to the particular facts presented and concluding that the government's legitimate interests outweigh Pool's privacy interests.

mining release conditions,” and (4) “is an unconstitutional extension of federal power.” We do not find any of these arguments to be persuasive.

A. Pool has not shown that requiring him to provide a DNA sample violates his rights to due process.

[14] Pool asserts that he was denied procedural due process because the district court could not consider his specific situation in determining whether to require a DNA sample. This argument fails in light of the Supreme Court’s opinion in *Connecticut Department of Public Safety v. Doe*, 538 U.S. 1, 4 (2003). *See also Doe v. Tandeske*, 361 F.3d 594, 596 (9th Cir. 2004) (quoting *Conn. Dep’t.*). In *Connecticut Department of Public Safety*, the Supreme Court held that the state’s decision to require registration as a sex offender on the basis of a person’s prior conviction rather than on the basis of the person’s dangerousness did not amount to a violation of due process because “due process does not require the opportunity to prove a fact that is not material to the State’s statutory scheme.” 538 U.S. at 4. Here, Congress’s determination to require a DNA sample as a condition of pre-trial release where the district court has made a probable cause determination similarly does not deny Pool procedural due process.

[15] To the extent that Pool also claims a violation of substantive due process based on his fundamental “liberty interest in remaining free of compelled DNA production,” his assertions are not persuasive. As we have previously noted, at least once a probable cause determination has been made, if not before, Pool has no right to withhold his identification from the government. *See Kincade*, 379 F.3d at 837; *see also Jones*, 962 F.2d at 306 (holding that “when a suspect is arrested on probable cause, his identification becomes a matter of legitimate state interest and he can hardly claim privacy in it”). In addition, although Pool may have a right against the physical invasion occasioned by giving a DNA sample, it is firmly established that blood tests — which are considerably more

invasive than a cheek swab — are commonplace and not significant invasions. *Kincade*, 379 F.3d at 836 (citing *Skinner*, 489 U.S. at 625). In light of these precedents, we cannot find that requiring Pool to provide a DNA sample is a violation of his right to substantive due process.¹⁶

B. Pool has not shown that requiring him to provide a DNA sample violates his right under the Bail Clause of the Eight Amendment.

Pool argues that requiring him to provide a DNA sample as a condition for pre-trial release constitutes excessive bail under the Eighth Amendment because “DNA testing and profiling is simply not relevant to the two issues to be addressed by pretrial conditions of release: assuring the appearance of the defendant in the court case, and providing for the safety of the community.” We do not find this argument persuasive. In *Salerno*, the Supreme Court noted that “[t]he only arguable substantive limitation of the Bail Clause is that the Government’s proposed conditions of release or detention not be ‘excessive’ in light of the perceived evil.” 481 U.S. at 754. Here, in light of Pool’s minimal interest against providing identification, the limited nature of the intrusion, and the potential value of the DNA identification in solving crimes and deterring the commission of future crimes, we cannot say that requiring a DNA sample is “excessive.”

C. Pool has not shown that requiring him to provide a DNA sample violates the constitutional doctrine of separation of powers.

Pool asserts, referencing *United States v. Klein*, 80 U.S. 128, 146-47 (1871), that Congress violated the separation of powers doctrine in enacting the Bail Reform Act because “it

¹⁶The alleged intrusion on any of Pool’s rights is also reduced by the provision that the DNA sample may be expunged if he is found not guilty or his case is dismissed. See 42 U.S.C. § 14132(d)(1)(A).

prescribes a rule for courts to follow without allowing courts to exercise independent judicial power.” More recent precedent renders Pool’s argument less than persuasive. In *Chapman v. United States*, 500 U.S. 453 (1991), the Supreme Court noted that “Congress has the power to define criminal punishments without giving the courts any sentencing discretion,” and that “[a] sentencing scheme providing for individualized sentences rests not on constitutional commands, but on public policy enacted into statutes.” *Id.* at 467 (internal quotations and citations omitted). Moreover, in *United States v. Lujan*, 504 F.3d 1003, 1007 (9th Cir. 2007), we rejected a separation of powers argument challenging the collection of DNA from a convicted felon as a condition of supervised release. We do not think that the expansion of the class of persons covered by the statute changes the nature, or result, of the separation of powers analysis.

D. Pool’s argument that requiring him to provide a DNA sample is an unconstitutional extension of federal power is not well taken.

Finally, Pool attempts to argue that § 14135a is unconstitutional because it “extends broadly to all individuals who are arrested, facing charges, or convicted, without regard to whether they fall within any federal criminal jurisdiction.” Again, we do not find Pool’s assertion to be well taken. First, as Pool admits, the district court here only interpreted the statute as it applies to federal arrestees, defendants and convicts. We too limit our review to Pool’s claim as a person who has been charged with a federal felony. In *United States v. Reynard*, 473 F.3d 1008, 1021 (9th Cir. 2007), we rejected an argument that a statute was “unconstitutional because the federal government lacks the authority under the Commerce Clause to require a federal offender to provide a DNA sample as a condition of his supervised release.”¹⁷ Although the stat-

¹⁷We explained:

ute here at issue is broader than the statute before us in *Reynard*, our reasoning in *Reynard* if not binding is persuasive.

IV

[16] In this case, we agree with the magistrate that his finding of probable cause was a “watershed event” that allows for the totality of the circumstances exception to the Fourth Amendment’s warrant requirement. We conclude that here, the government’s interest in definitively determining Pool’s identity outweighs his privacy interest in giving a DNA sample as a condition of pre-trial release in part because the government’s use of the DNA is limited to identification purposes and there is no indication that the government intends to use the information for any other purpose or may legally do so. Finally, we decline Pool’s claims that the mandatory DNA collection provision of 42 U.S.C. § 3142(b) and (c)(1)(A) is unconstitutional because it (1) violates his right to due process, (2) violates his rights under the Bail Clause of the Eighth Amendment, (3) violates the doctrine of separation of powers, and (4) is an improper extension of federal power. The district court’s order requiring Pool to give a DNA sample as a condition to pre-trial release is **AFFIRMED**.

Reynard’s argument lacks merit. The federal government’s authority to regulate the conditions of a federal offender’s supervised release arises when the individual commits a federal crime. The federal government is not required to demonstrate that it has independent authority to impose each individual condition of supervised release upon an offender. Nonetheless, in this instance, the individual condition of supervised release at issue, standing alone, is a valid exercise of the federal government’s authority pursuant to its Commerce Clause power. Further, such an exercise of Congress’s Commerce Clause power does not offend principles of federalism.

473 F.3d at 1021-22.

LUCERO, Circuit Judge, concurring:

I concur in the majority opinion, but write separately for two reasons. First, I seek to stress the narrowness of our holding, identifying several issues we do not decide today. Second, I wish to state my basis for agreeing that *Friedman v. Boucher*, 580 F.3d 847 (9th Cir. 2009), does not control the outcome of this appeal.

I

A

1

In analyzing the interests of Pool at stake in this litigation, the majority opinion properly distinguishes between the physical intrusion of a buccal swab and the more amorphous—and more serious—invasion of privacy caused by governmental collection of information contained in DNA samples and profiles. In addition, we must distinguish between the collection of a DNA sample and use of a DNA profile.

An individual’s genome—the full complement of DNA contained in each cell of his body—consists of several billion base pairs of DNA. Henry T. Greely et al., *Family Ties: The Use of DNA Offender Databases to Catch Offenders’ Kin*, 34 J.L. Med. & Ethics 248, 249 (2006). As the majority opinion notes, DNA *profiles* used in the government’s Combined DNA Index System (“CODIS”) do not contain information about an individual’s entire genome; the profiles contain only information about short tandem repeat (“STR”) occurring at thirteen different points, “loci,” in the genome. (Majority Op. 14019 (citing *United States v. Kincade*, 379 F.3d 813, 818-19 (9th Cir. 2004) (en banc)).)

These STRs are stretches of DNA for which the DNA-replication process appears to “stutter,” resulting in repeated

iterations of a specific sequence of base pairs. *See* Greely, *supra*, at 249. For example, at a specific locus on a chromosome, a particular series of base pairs may appear three times in a row for some people, but five times in a row for others. Each variation in the number of repeats is identified as a different allele. *See id.* at 250. For each of the thirteen loci used in the CODIS database, between seven and twenty-three alleles appear in significant numbers among the population. *Id.* The DNA profiles contained in the CODIS database consist of a series of numbers corresponding to the length of STRs at each of the selected loci. *Id.* The number of STRs evaluated for an individual's DNA profile represents a small fraction of the STRs throughout a person's genome. *Id.* at 249-50.

Although the biological purpose, if any, of STRs remains debated, *id.*, STRs are not "genes": Unlike genes, STRs have not been shown to code for specific molecules of ribonucleic acid ("RNA").¹ *Id.*; *see also* *Kincade*, 379 F.3d at 818 ("These STR loci are each found on . . . non-genic stretches of DNA not presently recognized as being responsible for trait coding"); Kaye, *supra*, at 54.

These DNA profiles differ significantly from DNA *samples*. The term "DNA sample" is defined by statute as "tissue, fluid, or other bodily sample of an individual on which a DNA analysis can be carried out." 42 U.S.C. § 14135a(c)(1). That is, the sample is made up of cells from an individual which contain that person's entire genome. If fully analyzed, a sample would yield far more information than that con-

¹"Code for" is a term of art related to the process of transcription and translation. If a stretch of DNA "codes for" RNA, that stretch will produce a certain type of RNA during the process of transcription. RNA, in turn, usually codes for protein, which means that the RNA will produce a certain protein during the process of translation. *See* Greely, *supra*, at 249. These proteins can affect an individual's physical characteristics, such as eye color or propensity to develop certain diseases. *See* David H. Kaye, *GINA's Genotypes*, 108 Mich. L. Rev. First Impressions 51, 54 (2010).

tained in a CODIS profile, including information about all of the trait-coding DNA in the individual's genome—that is, the precise content of each of her genes.

2

Despite Pool's protestations to the contrary, at present CODIS DNA profiles are essentially useless for all but identification purposes. In this respect, they are quite similar to the information gained from fingerprinting and photographing—routine booking procedures.

Pool cites to several articles suggesting that so-called “junk DNA”² may actually play an important biological function, including affecting how and when genes are expressed. *E.g.*, Cole, *supra* note 2, at 56; Justin Gillis, *Genetic Code of Mouse Published; Comparison With Human Genome Indicates ‘Junk DNA’ May be Vital*, Wash. Post, Dec. 5, 2002, at A1. Yet even these articles do not support Pool's assertion: “Although biologists are discovering functions for some types of ‘junk DNA,’ none have yet claimed that the forensic STRs do function.” Cole, *supra* note 2, at 56 (footnote omitted); *see also* Gillis, *supra* (surmising that in the future a small percentage of non-coding DNA “will prove to be regulatory regions”).

Even if the STRs used in CODIS contained some limited biological information, the same is true of fingerprints and photographs. As the majority opinion discusses, booking photographs might yield clues as to familial relationships. (Majority Op. 14029-30.) Such photographs necessarily contain information regarding an individual's race, gender, and

²“Junk DNA” is a term that generally refers to any non-genic DNA, that is, stretches of DNA that do not code for RNA. Simon A. Cole, *Is the “Junk” DNA Designation Bunk?*, 102 Nw. U.L. Rev. Colloquy 54, 56-57 (2007). STRs are one of several types of non-genic DNA sequence. *See* Greely, *supra*, at 249.

ethnic characteristics. Fingerprints, too, may correlate with certain traits. See Bert-Jaap Koops & Maurice Schellekens, *Forensic DNA Phenotyping: Regulatory Issues*, 9 Colum. Sci. & Tech. L. Rev. 158, 160 & n.4 (2008) (noting that fingerprint patterns may correlate with gender, homosexuality, ethnicity, and health conditions such as congenital heart disease).³

Pool's efforts to categorically distinguish the information contained in CODIS DNA profiles from that contained in fingerprints are ultimately unpersuasive. Although the historical basis for allowing fingerprinting is not entirely clear, the near universal acceptance of the practice casts a long shadow over this case. See *Napolitano v. United States*, 340 F.2d 313, 314 (1st Cir. 1965) (“[Fingerprinting defendants on pretrial release] is universally standard procedure, and no violation of constitutional rights.”); *United States v. Iacullo*, 226 F.2d 788, 793 (7th Cir. 1955) (“[Defendant's] constitutional rights were not violated when his fingerprints were taken and at the trial used as a basis for comparison with fingerprints found on newspapers used to wrap narcotics.”). As Judge Augustus

³Pool points to one study showing some association between TH01 (one of the CODIS loci) and the insulin minisatellite (an STR not included in the CODIS database), which correlates to susceptibility to polycystic ovary syndrome, obesity, and type-1 and type-2 diabetes. John D.H. Stead, *Influence of Allele Lineage on the Role of the Insulin Minisatellite in Susceptibility to Type 1 Diabetes*, 9 Human Molecular Genetics 2929, 2929-31 (2000). Even assuming this study could be considered admissible evidence and that it has not been discounted in the past decade, it underscores my point. By looking at a booking photograph, the government could judge whether or not Pool is obese and, consequently, glean information regarding his risk of type-2 diabetes. And reference to Pool's gender shows his susceptibility to ovarian disorders is not an issue.

Not every disease has visible risk factors, of course, and genetic data is undoubtedly more precise than visual assessment in judging the probabilities associated with certain diseases. I remain unconvinced, however, that the information contained in the CODIS database at the present time categorically differs from the information already contained in the booking photo lineups on the bookshelf of virtually every police station in the country.

Hand opined in presaging the Court's Fourth Amendment balancing jurisprudence by several decades: "Any restraint of the person may be burdensome. But some burdens must be borne for the good of the community. The slight interference with the person involved in finger printing seems to us one which must be borne in the common interest." *United States v. Kelly*, 55 F.2d 67, 68 (2d Cir. 1932) (citations omitted). Pool has not provided a basis for weighing the interests in DNA profiling in a manner that is different from the interests involved in fingerprinting and photography.

Yet I stress that we do not purport to decide the hypothetical case in which a future litigant may demonstrate that CODIS loci do code for RNA, or that the number of repeats at CODIS loci yield information of a type unavailable in a fingerprint or a photograph; nor do we consider a case in which the nature of the genetic information stored in the CODIS database is changed from present practice.⁴ In such a case, a defendant's interests could be vastly different. If that day arrives, a future court will conduct a totality-of-the-circumstances test anew. But for now, Pool's CODIS profile reveals only his identity, and the majority rightly factors only Pool's interest in that identity into its Fourth Amendment balancing.

B

Although a CODIS profile contains less information than a DNA sample by several orders of magnitude, law enforcement must, of course, collect a DNA sample to create a DNA profile. These two actions—collection of a DNA sample and

⁴I note with trepidation that the DNA Analysis Backlog Elimination Act does not facially limit DNA analysis to STRs or even non-coding DNA sequences. *See* 42 U.S.C. § 14135a(c)(2) (defining the DNA analysis allowed by the act as any "analysis of the deoxyribonucleic acid (DNA) identification information in a bodily sample"). Nonetheless, the executive branch has sensibly limited the information stored in CODIS, and it is that program we must evaluate today.

the creation of a DNA profile to be loaded onto the CODIS database—are squarely challenged by Pool. Our majority opinion affirms the district court’s holding that the government may collect a DNA sample from Pool that may be “used solely for criminal law enforcement identification purposes,” (Dist. Ct. Order 3), specifically, to create a DNA profile to be loaded onto the CODIS database. Having stated what the majority opinion holds, I take pains to clarify what we do not hold.

The first point, one the majority states in no uncertain terms but which bears repeating, is that this case condones DNA testing for individuals for whom a judicial or grand jury probable cause determination has been made; it does not address such sampling from mere arrestees. (*See* Majority Op. 14026-27, 14043.) That distinction is highly significant.⁵ A judicial probable cause determination limits the opportunities for mischief inherent in a suspicionless search regime. As discussed further in Part II, *infra*, the Supreme Court has permitted some suspicionless searches when they are subject to “standardized criteria, or established routine.” *Florida v. Wells*, 495 U.S. 1, 4 (1990) (citations omitted). However, the

⁵There is no doubt that conviction is the key moment in reconfiguring the relationship between an individual’s privacy interests and the governmental interests that may impinge upon them. Nevertheless, we cannot blind ourselves to the various other gradations in our criminal justice system. Although *United States v. Scott*, 450 F.3d 863 (9th Cir. 2006), clearly holds that a pre-trial releasee’s “privacy and liberty interests [a]re far greater than a probationer’s,” *id.* at 873, *Scott* does not stand for the proposition that there is no meaningful distinction between an ordinary citizen and an individual for whom a judicial probable cause determination has been made. As this court acknowledged, “pretrial releasees must suffer certain burdens that ordinary citizens do not.” *Id.* at 872 n.11. In this case, unlike *Scott*, we consider a restriction “designed to ensure [a defendant’s] appearance in court.” *Id.*

We must not ignore admittedly finer distinctions in an effort to cram every individual into one of two categories—convict or citizen. Doing so will not remove the DNA profiling issue from the slippery slope; it would serve only to slicken the incline.

Court has been careful to caution that such “programmatic” searches may not be used as “a ruse for a general rummaging in order to discover incriminating evidence.” *Id.*

By permitting programmatic searches in the absence of particularized suspicion, we introduce a substantial danger that law enforcement personnel will use the DNA-testing regime as a pretext for obtaining evidence against individual suspects rather than as a broad-based tool for ensuring the identity of convicts and pre-trial releasees. Because of this potential for abuse, the Court has limited its approbation of programmatic searches to those “administered in good faith.” *Colorado v. Bertine*, 479 U.S. 367, 374 (1987); *see also Wells*, 495 U.S. at 4. Interposing the judiciary between the executive and the citizenry provides a pre-hoc bulwark against abuse in addition to the post-hoc good faith inquiry.

The second important limitation on our holding today is that we do not consider a claim of misuse of the CODIS system. Pool focuses his argument on the potential that the government may harvest intimate and revealing information from his DNA sample. We must not underestimate these legitimate concerns. Although the CODIS database uses only DNA profiles, the government must obtain a DNA sample to create the profiles. Government possession of the entire sample, with its potential to provide much more personal information, presents an unquestionable opportunity for abuse.

Nonetheless, Pool has advanced no evidence suggesting that the government will engage in the misconduct of which he warns, and we must be cognizant of the penalties for such misconduct, *see* 42 U.S.C. § 14135e(c). Whenever the government conducts a search, there is a risk that it will abuse its powers. For example, a law enforcement search for a firearm in a residence pursuant to a valid warrant typically involves control of the entire residence. While in control of the home, officers could commit any conceivable number of unlawful acts. Yet the potential for abuse does not trump the issue of

legality of a search. Admittedly, the potential for intrusion into the widest spectrum of human privacy is present in a DNA sample, but the nature of our legal analysis remains constant.

It might also be objected that this analogy is inapt because the government exercises control over a home for only a short period of time, but seeks to maintain Pool's entire DNA sample permanently. This brings me to my third and final point regarding the limits of today's majority: We do not decide here whether the government may indefinitely retain Pool's DNA sample. Rather, we permit the government to collect Pool's DNA sample to create a DNA profile for the CODIS database. Because Pool's DNA has yet to be collected, we need not examine whether the government may retain his sample beyond the creation of the defendant's profile.

In the event Pool is acquitted, or that the charges against him are otherwise dismissed, Pool may have his sample and profile expunged. *See* 42 U.S.C. § 14132(d)(1)(A). If he is convicted, this statutory provision would not apply; nevertheless, the majority opinion does not hold that indefinite retention is permissible. As noted in the *Kincade* concurrence, the proposition that the government may retain an individual's entire DNA sample forever presents unique questions. *See* 379 F.3d at 841-42 (Gould, J., concurring); *cf. Cole, supra* note 2, at 57 n.15 ("Even those who are sanguine about the privacy threat posed by profiles are concerned about the storage of samples."). It is of concern that § 14132(d)(1)(A) places the burden upon a former defendant with respect to removal. However, as was the case in *Kincade*, the legality of such a practice is not before us. Not until we are faced with a litigant whose case has been finalized and has left the penal system will these issues be decided. *See Kincade*, 379 F.3d at 841-42.

II

I write separately for a second reason: to expand upon the majority opinion's discussion of *Friedman v. Boucher*, 580

F.3d 847 (9th Cir. 2009). In addition to the differences between this case and *Friedman* stated in the majority opinion, I credit the fact that the DNA collection at issue here is conducted generally of all federal pre-trial releasees, *see* 18 U.S.C. § 3142(b), (c)(1). The search in *Friedman* was directed at a single prisoner. *See* 580 F.3d at 854 (concluding the search was not conducted pursuant to a statutory regime). It does appear counterintuitive that a search may be permissible because it is *less* particularized, but the Supreme Court's holdings regarding "programmatically" searches compel this conclusion. *See, e.g., Samson v. California*, 547 U.S. 843, 855 n.4 (2006).

"Prior to *Samson*, the Court had never held that the totality of the circumstances was the appropriate test to apply in a suspicionless search of a conditional releasee. Thus, several courts had concluded that a suspicionless search could not be justified absent a special need (or some other exception)." *United States v. Weikert*, 504 F.3d 1, 9 (1st Cir. 2007) (emphasis omitted); *see also Kincade*, 379 F.3d at 843 (Reinhardt, J., dissenting) (arguing, prior to *Samson*, that the Court had never approved "a programmatic search designed to produce and maintain evidence relating to ordinary criminal wrongdoing, yet conducted without any level of individualized suspicion"). This framework was upended by the Court in *Samson*, which held that suspicionless searches have been sanctioned both in cases involving "special needs" and in those considering "programmatically" searches. 547 U.S. at 855 n.4. The *Samson* Court further explained that it has "never held that these are the only limited circumstances in which searches absent individualized suspicion could be 'reasonable' under the Fourth Amendment." *Id.*

The Court has provided little guidance as to the nature of a "programmatically" search. In *Brigham City v. Stuart*, 547 U.S. 398 (2006), it described "checkpoints to combat drunk driving or drug trafficking" as fitting within the programmatic category. *Id.* at 405. It also cited *Wells*, which held that the per-

missibility of an inventory search following impoundment turns on the degree to which such searches are standardized. *Brigham City*, 547 U.S. at 405; *see also Wells*, 495 U.S. at 4 (“Our view that standardized criteria, or established routine, must regulate the opening of containers found during inventory searches is based on the principle that an inventory search must not be a ruse for a general rummaging in order to discover incriminating evidence.” (citations omitted)); *see also id.* at 8 (Brennan, J., concurring) (“Our cases clearly hold that an inventory search is reasonable under the Fourth Amendment only if it is done in accordance with standard procedures that limit the discretion of the police.” (citation omitted)); *cf. Bertine*, 479 U.S. at 374 n.6 (“Our decisions have always adhered to the requirement that inventories be conducted according to standardized criteria.” (citation omitted)).

The dissent in *Samson* provides additional guidance. Criticizing the majority’s holding as an abandonment of the rule that a suspicionless search must be supported by a “special need,” Justice Stevens argued that “if individualized suspicion is to be jettisoned, it must be replaced with measures to protect against the state actor’s unfettered discretion.” *Samson*, 547 U.S. at 860 (Stevens, J., dissenting). These “programmatic safeguards [must be] designed to ensure evenhandedness in application.” *Id.*

Unlike the search held unconstitutional in *Friedman*, the statute challenged by Pool imposes a uniform burden on all federal pre-trial releasees. It is “programmatically” in the sense the Supreme Court appears to recognize as relevant to whether a suspicionless search is reasonable.

Obviously, the programmatic nature of a search does not mitigate its impact on individuals’ privacy rights. But programmatic searches do fulfill another “essential purpose of a warrant requirement,” namely “to protect privacy interests by assuring citizens subject to a search or seizure that such intru-

sions are not the random or arbitrary acts of government agents.” *Skinner v. Ry. Labor Executives’ Ass’n*, 489 U.S. 602, 621-22 (1989). And standard practices do limit the ability of government to use DNA profiling as a means of targeting “political opponents and disfavored minorities,” *Kincade*, 379 F.3d at 848 (Reinhardt, J., dissenting), or harassing disfavored individuals. When combined with the legitimate government interest in ensuring Pool appears for trial and the limited intrusion upon Pool’s privacy, I am convinced that the programmatic nature of the DNA profiling program is reasonable.

III

This is a vexing case. The DNA profiling system at issue promises enormous potential as an investigatory tool, but its expansion or misuse poses a very real threat to our privacy. The distinctions I attempt to draw in this concurrence are dwarfed by the magnitude of these competing interests, but we must draw lines as best we can. I therefore concur, leaving for another day difficult questions regarding the administration of CODIS and the government’s retention of DNA samples.

SCHROEDER, Circuit Judge, dissenting:

This is a case in which the government seeks to extract a DNA sample as a condition of every pretrial release without either a warrant or a showing of probable cause to conduct DNA profiling. No circuit has ever before approved such a warrantless search or seizure before an individual has been convicted of any crime. DNA sampling can of course confirm identity, but it also provides infinitely more information about an individual than fingerprints. The majority and the concurring opinions now uphold the constitutionality of the proposed search and seizure because they find that Pool has failed to

show that they would unduly burden his reduced privacy interests as a pretrial defendant. I disagree and would hold that the government fails to justify a Fourth Amendment exemption of this magnitude.

The latest congressional enactments challenged in this case extend mandatory DNA testing requirements to individuals who have not yet been convicted of any crime. *See* DNA Fingerprint Act of 2005, Pub. L. No. 109-162, §§ 1004(a)(1)(A), 1004(b), 119 Stat. 2960, 3085-86 (2006) (codified at 18 U.S.C. §§ 3142(b) and (c)(1)(A); 42 U.S.C. § 14135a(a)(1)(A)); Adam Walsh Child Protection and Safety Act of 2006, Pub. L. No. 109-248, § 155, 120 Stat. 587, 611 (2006) (codified at 42 U.S.C. § 14135a(a)(1)(A)). The relevant provisions require pretrial defendants to submit to DNA testing as a condition of pretrial release. *See* 18 U.S.C. §§ 3142(b). The Attorney General has promulgated regulations ordering all federal agencies to obtain DNA samples to the extent authorized by the statute. *See* 28 C.F.R. § 28.12(b).

The majority would uphold the warrantless pretrial seizure by applying the “totality of the circumstances” test that balances the intrusion into privacy of the individual against the interest in protecting society as a whole. The Supreme Court has upheld searches as a condition of release under this test only after an individual has been convicted of a crime and hence has a lowered privacy interest. *See, e.g., Samson v. California*, 547 U.S. 843 (2006) (upholding search conducted pursuant to California law requiring parolees to consent to suspicionless searches at any time as condition of release); *United States v. Knights*, 534 U.S. 112 (2001) (holding that only reasonable suspicion was needed to justify search where probationer had consented to be searched as a condition of probation).

We have twice considered statutes requiring mandatory DNA testing of those involved in the criminal justice system, and in both a majority upheld the DNA seizure only because

the earlier statutes that were at issue in those cases limited the warrantless DNA seizure to persons who had been convicted of crimes. In the first, *United States v. Kincade*, 379 F.3d 813, 816-17 (9th Cir. 2004) (en banc), we considered the constitutionality of the DNA Analysis Backlog Elimination Act of 2000, Pub. L. No. 106-546, 114 Stat. 2726 (2000), which required DNA testing of individuals who had been convicted of certain enumerated violent felonies and who were incarcerated or on parole, probation, or supervised release. The case generated significant debate among the members of our court, and ultimately resulted in a divided en banc decision upholding the constitutionality of the search on the basis of two different Fourth Amendment theories. *Compare id.* at 816-40 (O’Scannlain, J., plurality opinion) (upholding DNA testing under “totality of the circumstances” theory), *with id.* at 840-42 (Gould, J., concurring) (concurring in judgment under special needs theory). The fact of conviction, however, was indispensable to both theories. *Id.* at 834 (plurality opinion) (recognizing the “transformative changes wrought by a lawful conviction”); *id.* at 840 (Gould, J. concurring) (focusing on special need to deter recidivism by convicted felons). Moreover, five judges dissented, concluding that the intrusion into privacy occasioned by DNA sampling could not be justified even after a lawful conviction. *See id.* at 842-871 (Reinhardt, J., dissenting); 871-75 (Kozinski, J., dissenting); 875-76 (Hawkins, J., dissenting). The dissenting judges objected to the fact that the government sought to conduct “a programmatic search designed to produce and maintain evidence relating to ordinary criminal wrongdoing . . . without any level of individualized suspicion.” *Id.* at 843 (Reinhardt, J., dissenting). They also predicted a slippery slope toward ever-expanding warrantless DNA testing. *See id.* at 872 (Kozinski, J., dissenting) (“If collecting DNA fingerprints can be justified [here], then it’s hard to see how we can keep the database from expanding to include everybody.”).

We revisited the issue when Congress expanded the same statute to reach individuals convicted of any federal felony,

crime of violence, or sexual abuse crime. *See United States v. Kriesel*, 508 F.3d 941 (9th Cir. 2007) (considering constitutionality of Justice For All Act of 2004, Pub. L. No. 108-405, § 203(b), 118 Stat. 2260, 2270 (2004)). *Kriesel* was again contentious, with the majority upholding the constitutionality of the statutory expansion on narrow grounds, over a vigorous dissent. *Compare id.* at 942-50 (McKeown, J., majority opinion) *with id.* at 950-58 (B. Fletcher, J., dissenting). The majority explicitly limited its constitutional ruling to the case before it, in which the individual raising the Fourth Amendment challenge was a convicted felon. *Id.* at 943 n.3 (majority opinion). The dissent contended that the reasoning of *Kincade*, and the government's purported interests, did not extend to those convicted of non-violent crimes. *See id.* at 953-58 (B. Fletcher, J., dissenting).

We consider here, for the first time, a statute and associated regulations requiring mandatory DNA testing as a condition of pretrial release for every individual charged with a federal offense, a condition imposed before the individual can plead or stand trial. The majority relies on our prior holdings in *Kincade* and *Kriesel* to find Congress's expansion of DNA testing to pretrial defendants constitutional, but ignores our rationale in those cases. We held that mandatory DNA testing is consistent with the Fourth Amendment after conviction because (a) a convicted felon's privacy interest is greatly reduced in comparison to the general citizenry; and (b) the government's interest in invading such a person's privacy is greater. *Kincade*, 379 F.3d at 834; *Kriesel*, 508 F.3d at 947, 949. In *Kincade*, we explained that a conviction changed the analysis on both sides of the balance:

[The] transformative changes wrought by a lawful conviction and accompanying term of conditional release are well-recognized by the Supreme Court, which often has noted that conditional releasees enjoy severely constricted expectations of privacy relative to the general citizenry—and that the gov-

ernment has a far more substantial interest in invading their privacy than it does in interfering with the liberty of law-abiding citizens.

379 F.3d at 834. None of these considerations apply here. Similarly, in *Kriesel*, we recognized that “[a]s a direct consequence of [an individual’s] status as a supervised releasee, he has a diminished expectation of privacy” and held that the governmental interests advanced in *Kincade* applied to convicted non-violent felons “with equal force.” 508 F.3d at 947, 949. If there was, as the majority describes, a “watershed event” that justified what would otherwise be an unconstitutional seizure, the event was a conviction; not a post-arrest probable cause determination.

It is because a conviction is what distinguishes parolees, probationers, and those on supervised release from members of the general public that our court has squarely held that warrantless searches and seizures violate pretrial defendants’ Fourth Amendment rights. In *United States v. Scott*, 450 F.3d 863 (9th Cir. 2006), we held that conditioning pretrial release upon a defendant’s consent to warrantless drug testing was unconstitutional. We so held even though such testing provides very limited information and could serve a rehabilitative purpose. Our court has also decided that forcible extraction of a DNA sample from a pretrial detainee is unconstitutional. See *Friedman v. Boucher*, 580 F.3d 847 (9th Cir. 2009). In *Friedman*, the government acknowledged the DNA was taken for the law enforcement purpose of placing it in a cold case data bank. *Id.* at 851. We held that as a pretrial detainee, the defendant retained his clearly established Fourth Amendment rights. *Id.* at 860. *Friedman* squarely rejected the contention that the testing could be justified by our holdings in *Kincade* and *Kriesel*, because “both of those cases concerned extracting DNA from convicted felons still under state supervision,” whereas *Friedman* had not yet been convicted of the crime with which he was charged. *Id.* at 857.

The majority and concurring opinions thus conflict with both *Friedman* and *Scott* in holding that a probable cause determination, rather than a conviction, constitutes the “watershed event” that results in a diminished expectation of privacy. My colleagues try to circumvent *Friedman* by suggesting that in *Friedman*, there was no statute authorizing the search, but a statute does not trump the Constitution. They dismiss *Scott* by suggesting that the privacy interest in one’s home, which we recognized in *Scott*, is greater than the privacy interest in one’s body. This is not supported by authority or common sense. See, e.g., *Schmerber v. California*, 384 U.S. 757, 769-70 (1966) (recognizing the heightened privacy interest “with respect to intrusions beyond the body’s surface”).

My colleagues point as well to prison security cases that deal with pretrial defendants who are being temporarily detained in a jail or prison facility. See *Bell v. Wolfish*, 441 U.S. 520 (1979). They similarly point to authority involving the detention of defendants who present a demonstrated danger to the community. See *United States v. Salerno*, 481 U.S. 739 (1987). These cases, which deal with the conditions of confinement, and the individualized decision to detain a defendant until trial, are inapposite here, when the defendant has not yet been determined to present any flight risk or danger to the community and we are not concerned with prison security.

Absent a warrant or a showing of probable cause to conduct DNA profiling in this case, the government bears the burden to show that a Fourth Amendment exception justifies that the searches or seizures are “reasonable.” *United States v. Brown*, 563 F.3d 410, 414-15 (9th Cir. 2009) (“A warrantless search is unconstitutional unless the government demonstrates that it ‘fall[s] within certain established and well-defined exceptions to the warrant clause.’”). The government cannot demonstrate that an exception under the “totality of the circumstances” approach applies because Pool, as a pretrial

defendant, does not have the reduced privacy interests of the convicted felons in *Kincade* or *Kriesel*. Nor, as the majority opinion acknowledges, can the government plausibly rely on the “special needs” exception, because that exception cannot apply to searches and seizures conducted for general law enforcement purposes. *See Friedman*, 580 F.3d at 853. Pool does not bear the burden to establish that the government will fail to protect his privacy interests after the DNA sample is taken. Both of my colleagues misallocate the burden of proof.

Because Pool’s privacy interests have not been diminished as a result of any conviction, the “intrusion” the government must justify is significant. The government seeks to seize, and indefinitely retain, not only individuals’ DNA profiles, but rather samples of individuals’ entire DNA. *See* 42 U.S.C. § 14132(b)(3); 73 Fed. Reg. 74,932-01, 74,937-38 (Dec. 10, 2008). These samples contain “massive amounts of personal, private data” including information about a “person’s health, propensity for particular disease, race and gender characteristics, and perhaps even propensity for certain conduct.” *Kincade*, 379 F.3d at 842 (Gould, J., concurring). The statute permits DNA samples to be disclosed to criminal justice agencies, in judicial proceedings, for criminal defense purposes, and even, if personally identifiable information is removed, for research purposes. 42 U.S.C. § 14132(b)(3).

The privacy concerns implicated by the seizure, and storage, of DNA material, and the personal information it contains, is certainly substantial. The concurring opinion makes much of the difference between DNA samples and DNA profiles, but it rightly acknowledges that the DNA sample, if fully analyzed, contains a vast amount of information. The concurring opinion diminishes the significance of the fact that the government cannot seize a DNA profile; it must seize a DNA sample in order to create a profile. The seizure and indefinite storage of the sample, which is what that the government must justify under a Fourth Amendment exception,

is very different from fingerprinting and other traditional booking procedures.

The majority also errs when it suggests that we are bound by *Kincade*'s characterization of the information produced from a DNA sample as "minimally invasive." This is not binding circuit law, as this aspect of the plurality's opinion failed to garner majority support. *See Kincade*, 379 F.3d at 842 (Gould, J., concurring) ("DNA stores and reveals massive amounts of personal, private data about that individual, and the advance of science promises to make stored DNA only more revealing in time."). Moreover, this court's decision in *Kriesel* held instead that any privacy concerns were reduced because of the defendant's lawful conviction. 508 F.3d at 948. It expressly refused to adopt the *Kincade* plurality's reasoning on the degree of invasion, noting that "[t]he concerns about DNA samples being used beyond identification purposes are real and legitimate." *Id.* Indeed, the Supreme Court held in *Schmerber* that "[t]he interests in human dignity and privacy which the Fourth Amendment protects forbid any . . . intrusions [beyond the body's surface] on the mere chance that desired evidence might be obtained." 384 U.S. at 769-70.

Finally, the majority errs in equating the government's interests in this case with those identified in *Kincade* and *Kriesel* because under *Friedman* and *Scott*, the government may not rely on those interests when pretrial detainees are involved. Our decision in *Friedman* squarely forecloses the government's reliance on using the DNA samples of pretrial defendants to solve past and future crimes. *See* 580 F.3d at 858. *Friedman* held that DNA extraction from a pretrial defendant violated the Constitution where the government's purpose "was simply to gather human tissue for a law enforcement databank, an objective that does not cleanse an otherwise unconstitutional search." *Id.* Nor may the government rely on a generalized interest in preventing the commission of crimes by pretrial defendants. *Scott* rejected "the assumption that [a pretrial defendant is] more likely to com-

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mit crimes than other members of the public, without an individualized determination to that effect.” 450 F.3d at 874. Finally, an interest in “reducing recidivism” is meaningless where the defendant has not yet been convicted of an initial crime. In this case, Pool has no prior criminal record.

For all of the forgoing reasons, I respectfully dissent.