

1 LAW OFFICES OF THE ALTERNATE DEFENDER  
2 DAVID EPPS, # 160173  
3 ALFONSO LOPEZ, # 203564  
4 BRIAN MATTHEWS, # 191508  
5 BICKA BARLOW, # 178723  
6 701 Miller Street, First Floor  
7 San Jose, CA 95110  
8 Telephone: (408) 299-7234  
9 [brian.matthews@ado.sccgov.org](mailto:brian.matthews@ado.sccgov.org)

10 *Attorneys for Antolin Garcia-Torres*

11 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

12 IN AND FOR THE COUNTY OF SANTA CLARA

13 People of the State of California, ) Case No.: 213515  
14 Plaintiff, )  
15 -vs.- ) Supplemental Brief  
16 Antolin Garcia-Torres, ) Motion to Suppress  
17 Defendant. )

18 In a letter dated August 30, 2016, the defense was informed by the prosecution that  
19 "that effective this week, CA SDIS has directed the removal of samples that have a moderate  
20 match estimate (MME) < 10<sup>5</sup>. The sample from 169108-5ec qualifies for removal because it  
21 does [not] exceed that figure." The letter continued:

22 This action is a result of policy being set by both NDIS and CA SDIS and is  
23 not unique to this particular sample. All samples that do not exceed the MME  
24 threshold are being removed. The District Attorney's Office has requested  
25 that the sample remain, however because it does not meet the MME  
threshold, it will be rejected by CA SDIS software. As a result, it will not be  
searched and therefore it will have to be deleted.

26 In response to this letter, the defense team made a public records request of Cal DOJ for  
27 documentation of the change in DOJ policy requiring that the profile be removed. In

**FILED**

OCT 6 2016

DAVID H. YAMASAKI

Chief Executive Officer/Clerk  
Superior Court of the County of Santa Clara

BY \_\_\_\_\_ DEPUTY

1 response, Cal DOJ produced an email exchange between Linton von Beroldigen and  
2 California LDIS administrators which included SCCCL personnel Amanda Cardenas and  
3 Brooke Barloewen.<sup>1</sup> The letter explained that the MME California only acceptance  
4 threshold would be set at 100,000 and that profiles with MME's between 100,000 and  
5 1,000,000 would require permission from the state for upload. The purpose of this change is  
6 to provide a "safety net that will prevent any unintentional uploads that will fortuitously hit a  
7 large number of specimens." The MME essentially represents the probability of hitting on  
8 an individual in a database of a given size. Since the California database is just over 2 million  
9 profiles, a profile with an MME of 1 in 1 million would potentially hit on two people, while a  
10 profile with an MME of 1 in 100,000 would potentially return 20. In this case, the sample  
11 uploaded to the database, 169108-5ec, had an average MME of 1 in 32,000, well below the 1  
12 in 100,000 threshold. An MME of 1 in 32,000 could potentially hit on approximately 46  
13 individual in a database of 1.5 million.

14  
15  
16 As set forth in defendant's moving papers, the defense has argued that the database  
17 itself and thus the initial collection of Mr. Garcia-Torres DNA sample as an arrestee, violates  
18 the 4<sup>th</sup> Amendments right to be free from unreasonable searches. The United States  
19 Supreme Court in Maryland v King upheld the taking of an arrestees DNA stating:

20  
21 The legitimate government interest served by the Maryland DNA Collection  
22 Act is one that is well established: *the need for law enforcement officers in  
23 a safe and accurate way to process and identify the persons and  
24 possessions they must take into custody.*<sup>2</sup>

25 <sup>1</sup> Exhibit A

<sup>2</sup> 133 S.Ct. 1958 (2013), at 1970 [emphasis added].

1  
2 To Justice Kennedy, who wrote the majority opinion, the purpose of identification of  
3 the individual legitimates the search. “An individual’s identity is more than just his name or  
4 Social Security number, and the government’s interest in identification goes beyond ensuring  
5 that the proper name is typed on the indictment.”<sup>3</sup> The majority focused on the accuracy of  
6 DNA identification and that the use of the database would be to aid in law enforcement by  
7 providing a more accurate identification and criminal history by linking the defendant to  
8 other crimes, not to charge him but to inform.<sup>4</sup> In *King*, the Court dismissed the long  
9 passage of time from the taking of a sample and obtaining of identifying information  
10 identifying information as “go[ing] only to the efficacy of the search for its purpose of  
11 prompt identification, not the constitutionality of the search.”

13 The Ninth Circuit Court of Appeals in *Haskell v. Harris* also based its reasoning in  
14 upholding the constitutionality of California’s database on the use of the sample in  
15 identifying an individual. It said, “the California DNA Act is clearly intended to allow law  
16 enforcement officials to identify criminal suspects.”<sup>5</sup> The Court emphatically states that  
17 “DNA identification is more robust and reliable than fingerprint identification.”<sup>6</sup> In  
18 determining the constitutionality of the California statutory scheme, the Court rejected  
19 “hypothetical” misuses of the DNA database proffered by the plaintiff’s, noting that the  
20

21  
22  
23  
24 <sup>3</sup> *Id.* at 1971.

<sup>4</sup> *Id.*

<sup>5</sup> 669 F.3d 1049, 1057, 1059 (9th Cir 2012).

<sup>6</sup> *Id.* at 1060.

1 Court's "job is limited to resolving the constitutionality of the program before us, as it is  
2 designed and as it has been implemented."<sup>7</sup>

3 What both *King* and *Haskell* did not appreciate is that, as used in California, the DNA  
4 database is fundamentally different from the AFIS database. AFIS is used to identify  
5 individuals, at the time of arrest or for civil purposes, by comparison of ten print cards to a  
6 database of ten print cards.<sup>8</sup> The results of the search of millions of ten print cards are  
7 usually returned within one minute.<sup>9</sup>

8 The operation of the CODIS database in California is quite different. The only  
9 notification that is received by law enforcement is when a "hit" is made between an  
10 offender<sup>10</sup> and a forensic unknown.<sup>11</sup> There is no mechanism in place to "identify" an  
11 individual and provide that identifying information to law enforcement absent a "hit" to a  
12 forensic profile.<sup>12</sup> The CODIS database in California is designed to be used to link and  
13 individual to an unsolved crime and will not return an "identification" as was contemplated  
14 in *King*. AFIS will return an "identification" at the time of arrest, when the prints entered  
15 match an entry in the database. CODIS on the other hand, will not return an identification  
16  
17  
18  
19  
20

---

21 <sup>7</sup> *Id.* [quoting *United States v. Kincaid*, 379 F.3d 813, 838 (9th Cir.2004)]

22 <sup>8</sup> Moses, Ken, *Automated Fingerprint Identification System*, Chapter 6, THE FINGERPRINT SOURCEBOOK, at 6-9 to 6-  
23 10, U.S. Department of Justice, Office of Justice Programs. Last accessed October 3, 2016,  
<https://www.ncjrs.gov/pdffiles1/nij/225326.pdf> AFIS can also be used to identify suspects via a separate database  
24 search where latent prints are compared to 10 print cards. However, this is not the primary use of AFIS as described  
25 by law enforcement or the courts.

<sup>9</sup> *Id.* at 6-10.

<sup>10</sup> The term offender to describe the known profiles in the database which consists of convicted offenders, arrestees,  
legal and suspect known profiles.

<sup>11</sup> California DOJ CODIS Unit Technical Procedures, at 16-17.

<sup>12</sup> 133 S.Ct. at 1976.

1 when an entered profile hits against an already entered offender sample. That type of hit is  
2 called an “offender duplicate” and it does not trigger a hit notification to law enforcement.<sup>13</sup>

3 It appears that the *King* opinion contemplated the latter type of search and notification  
4 process. If that identification and notification process does not exist, then the nature of the  
5 database shifts from a tool to identify individuals and provide information to law  
6 enforcement, to a tool to investigate cold cases. In fact, given the operation of the CODIS  
7 database, there will never be a “notification” to law enforcement of an individual’s identity.

8 Law enforcement is barred from obtaining the identification information of an individual  
9 absent a hit to a forensic unknown. The identification purpose that *King* weighed against the  
10 individual 4<sup>th</sup> Amendment right to be free from unreasonable searches, does not exist in  
11 California. In *King*, in dissent, Justice Scalia states:  
12

13  
14 No matter the degree of invasiveness, suspicionless searches are never allowed  
15 if their principal end is ordinary crime-solving. A search incident to arrest  
16 either serves other ends (such as officer safety, in a search for weapons) or is  
17 not suspicionless (as when there is reason to believe the arrestee possesses  
18 evidence relevant to the crime of arrest).<sup>14</sup>

19 The database in California has become “an ordinary crime-solving” tool, not the  
20 identification tool envisaged by the Supreme Court.

21 Here, there is evidence that the state of California has allowed the database to be  
22 misused by allowing participating labs to upload profiles that “would fortuitously hit” on a  
23

24 <sup>13</sup> Even the identification of an “offender duplicate” occurs when offender profiles are searched against forensic  
25 unknown profiles. Defendants have asked for searches that would identify matching or partially matching  
individuals by searching the offender database against itself, which the government strongly opposes.

<sup>14</sup> *King, supra*, J. Scalia, dissenting at 1982.

1 large number of individuals who, by definition, cannot be the perpetrator of a specific crime.  
2 The definition of fortuitous is “happening or produced by chance; accidental.”<sup>15</sup> The type  
3 of search that the state of California was allowing subverts the constitutionally valid purpose  
4 of the database. Rather than being used to identify an individual, the database was being  
5 used solely to identify groups, not individuals. Contrary to the use of the database described  
6 in *King* and *Haskell*, the California database is being used as a purely investigative tool. It no  
7 longer is a robust and reliable means to identify an individual for the law enforcement  
8 purposes stated in *King*.

10         Additionally, when a wide net is cast, labs are provided with the DNA profiles of all  
11 of the partially matching individuals, not just the one individual who ultimately is deemed to  
12 be the “match.” Indeed, it is possible that for a particular case, none of the individuals  
13 returned may be deemed a match. This process of providing the profiles of individuals who  
14 are subsequently dispositioned as a non-match, violates their constitutional right to privacy  
15 by allowing the examination of their DNA profile by lab personnel when they are not and  
16 cannot be suspects in a particular case. This takes the use of the database well beyond that  
17 of “identification” to one of repeated searches of large groups of individuals, rather than a  
18 targeted search for one specific individual.

20         Since the inception of the laws regarding DNA databases, DNA testing has changed  
21 dramatically. In 2003, a Spanish lab reported that over a four year time period from 1997  
22

---

25 <sup>15</sup> Dictionary.com [last accessed September 27, 2016].

1 until 2000, only 6.7% of samples were mixtures.<sup>16</sup> Of those 6.7%, 95% were two person  
2 mixtures, and only 0.3% were suggestive of more than two individuals. By 2007-2008, a  
3 study of North American labs found that 55% samples were single source, 34% were two  
4 person mixtures, and just over 11% were mixtures with more than two contributors.<sup>17</sup> With  
5 the advent of “trace” or touch DNA samples, the number of mixtures rose as well. A study  
6 in Lyon, France from 2011 found that of the trace samples tested, 51% were mixtures of  
7 more than two individuals, while only 6% of body fluid samples were mixtures.<sup>18</sup> With the  
8 introduction of the Identifiler Plus system in 2010, which is designed to test even smaller  
9 amount of DNA, the number of mixtures is on the rise.

11 In 2003, the NDIS system implemented a rule known as “4x4” in which an profile  
12 could be uploaded to the database if it “up to 4 alleles at a maximum of 4 core loci, any of  
13 the remaining 9 core loci shall have no more than 2 alleles at each locus.”<sup>19</sup> Over time the  
14 definition of what is acceptable has changed, and NDIS created a new database within the  
15 larger CODIS system, named “Forensic Mixtures.”<sup>20</sup> In the 2013 NDIS manual the upload  
16 criteria for a mixture was:

18 4.2.1.5 A forensic mixture DNA record submitted to NDIS shall not have  
19 more than 4 alleles at any locus.<sup>21</sup>

22 <sup>16</sup> Butler, John, ADVANCED TOPICS IN FORENSIC DNA TYPING: INTERPRETATION, at 132 (2015).

23 <sup>17</sup> *Id.*

24 <sup>18</sup> *Id.*

25 <sup>19</sup> National DNA Index System (NDIS) Operational Procedures, Created 11 January 2000, Revised 4 May 2005, at  
pg 2.

<sup>20</sup> From review of various NDIS manual dated 2005, 2013, 2014 and 2015, the database “forensic mixture” appears  
for the first time in 2013.

<sup>21</sup> National DNA Index System (NDIS) Operational Procedures, Version 1, Effective January 31, 2013

1 In the 2014<sup>22</sup> and 2015<sup>23</sup> versions the language remained the same. When compared to the  
2 language from 2005, this search broadens the net cast by allowing up to 4 alleles at all loci,  
3 rather than the more constrained search of 4 alleles at 4 loci and no more than two at the  
4 remaining loci. The latter language requires a much more defined profile that would hit on  
5 far few people. By allowing 4 alleles in a mixture at all loci, more individuals would be  
6 identified by this search. For example, if at locus X, the lab uploaded 12, 13, 15, 17, then a  
7 moderate search would return a match at any of the four alleles, as compared to an upload of  
8 only a 12, 13 which would be limited to either of the two alleles. So as the number of loci  
9 increases, the number of possible “hits” increases. As recognized by the email from DOJ,  
10 the risk of fortuitous hits rises.  
11

12 In 2016, the following language was added.  
13

14 4.2.1.7 Forensic mixture and forensic partial DNA records submitted to NDIS  
15 shall be reviewed by the submitting laboratory to ensure the DNA records  
16 have a minimum of 8 CODIS Core Loci and satisfy a statistical threshold for  
17 match rarity of one in ten million at moderate stringency (moderate match  
18 estimate).<sup>24</sup>

19 This shift in language which has mirrors that found in the DOJ emails, acts to  
20 constrain the search by requiring that the profile uploaded is quite rare. Clearly both the FBI  
21 —the author of the NDIS manuals—and Cal DOJ recognize that the fortuitous hits that are  
22 occurring must be curtailed.  
23

24 <sup>22</sup> National DNA Index System (NDIS) Operational Procedures, Version 2, Effective January 31, 2014

25 <sup>23</sup> National DNA Index System (NDIS) Operational Procedures, Version 3, Effective January 1, 2015

<sup>24</sup> National DNA Index System (NDIS) Operational Procedures, Version 4, Effective May 1, 2016



1 The database was not used by the state in a way to ensure the identification of a  
2 single individual and contrary to the statements and rationale of *Haskell* and *King*, the  
3 database is being used as a purely investigative tool. The removal of these profiles does not  
4 cure the violation of the law for all those whose DNA samples were collected prior to  
5 September 1, 2016.  
6

### 7 CONCLUSION

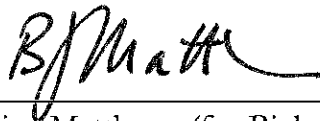
8 The manner in which the California CODIS database is structured, the lack of  
9 notification process for duplicate entries, and the allowance of poor quality DNA profiles  
10 from forensic unknowns to be searched, have led to a facially unconstitutional database.  
11

12 At the time that the buccal swab was taken from Mr. Garcia-Torres, he was an  
13 arrestee. In June 2010, his profile was uploaded to the arrestee database (Lab Bates 4521).  
14 No information was provided to law enforcement to assist in identifying Mr. Garcia-Torres  
15 was provided until March 30, 2012, when he was linked to the charged crimes in this case  
16 (Lab Bates 4519). Facially, and as applied, the California DNA database served only as an  
17 investigative tool, not a means to identify Mr. Garcia-Torres in the case that was the basis of  
18 his original arrest in 2010. The search, conducted here with a forensic profile that yielded an  
19 MME of approximately 1 in 30,000 and returned in 2012, hits to 13 candidates, cast a wide  
20 net not contemplated by *King* and *Haskell*.  
21  
22  
23  
24  
25

1 The defendant requests that the Court find that the California DNA database, as it is  
2 used within the state to conduct searches violates the 4<sup>th</sup> Amendment's right to be free from  
3 unreasonable searches.

4 Dated: Oct. 5, 2016

5  
6  
7 Respectfully Submitted,

8 

9 

---

 Brian Matthews (for Bicka Barlow)

EXHIBIT A

EXHIBIT A

9/12/2016  
"B"

**Linton von Beroldingen**

---

**From:** CODIS  
**Sent:** Tuesday, August 09, 2016 4:39 PM  
**To:** Amanda Cardenas; Brooke Barloewen ( );  
(Redacted List of CA LDIS Administrators)

**Subject:** RE: MME threshold reminder

CA CODIS colleagues,

For clarification on the last part of this message -

The 13-core locus MME of 100,000 is a minimum and is the threshold that we will set in the CODIS software. Therefore anything less than this will automatically be rejected.

The 13-core locus MME of 100,000 to 1,000,000 is a low value range. We would like to have you ask us before uploading, just so we can avoid adventitious matches. So, a specimen in this range will not be rejected, but for your sake and ours, we should discuss it before it is uploaded.

Please let us know if you still have any questions.

Thank you,

Cal-DNA CODIS Team

CA Department of Justice

Bureau of Forensic Services

Jan Bashinski DNA Laboratory

---

**From:** (Redacted LDIS Administrator)  
**Sent:** Tuesday, August 09, 2016 2:01 PM  
**To:** CODIS  
**Subject:** RE: MME threshold reminder

Im not clear on the last part of the email about the thresholds...

*For clarity on the thresholds, all specimens that are uploaded to SDIS in the CA-only Index need to have:*

1. at least 7 loci AND
2. a 13 core-locus MME >100,000 ( $10^5$ )

If your specimen has at least 7 loci, and a 13 core-locus MME between  $10^5$  and  $10^6$ , please ask us if the specimen can be uploaded. This will be decided on a case-by-case basis.

<b>Loci</b>	8	5	7	8
<b>Core-locus MME</b>	90,000	120,000	1,100,000	800,000
<b>Status</b>	Not accepted	Not accepted	Accepted	Ask us

First it says we need 7 loci with a core 13 of 100,000 but then it says if we have 7 loci and MME between 100,000 and 1 million then we need to ask...

Can I have a clarification on that part please?

**From:** CODIS

**Sent:** Tuesday, August 09, 2016 11:25 AM

**To:** Amanda Cardenas; Brooke Barloewen (Administrators)

); (Redacted List of CA LDIS

**Cc:** Yeung Kung; Linton von Beroldingen

**Subject:** MME threshold reminder

Dear CA CODIS colleagues,

We would like to set the CA-only MME (Moderate Match Estimate) acceptance threshold for the CA Forensic Mixture (CAFm) and CA Forensic Partial (CAFP) specimen categories of one hundred thousand ( $10^5$  or 100,000) on September 1, 2016. This is a safety net that will prevent any unintentional uploads that will fortuitously hit a large number of specimens.

- a. The CAFm and CAFP specimen categories are still populated with 113 profiles that violate the proposed threshold.
- b. We cannot set the threshold until these 113 profiles are removed.
- c. Our CODIS unit has already sent to each of you a list of your profiles that have an MME of  $< 10^5$ .
- d. We would like to have all of these necessary removals accomplished by September 1, 2016.
- e. On that date, if there are any remaining specimens that have an MME  $< 10^5$ , we will delete them at SDIS and then establish (turn on) the threshold.
- f. After this threshold is set, you will get an upload recon error of 'me' if it is less than 100,000.

For clarity on the thresholds, all specimens that are uploaded to SDIS in the CA-only Index need to have:

1. at least 7 loci AND
2. a 13 core-locus MME >100,000 ( $10^5$ )

If your specimen has at least 7 loci, and a 13 core-locus MME between  $10^5$  and  $10^6$ , please ask us if the specimen can be uploaded. This will be decided on a case-by-case basis.

<b>Loci</b>	8	5	7	8
-------------	---	---	---	---

<b>Core-locus MME</b>	<b>90,000</b>	<b>120,000</b>	<b>1,100,000</b>	<b>800,000</b>
<b>Status</b>	<b>Not accepted</b>	<b>Not accepted</b>	<b>Accepted</b>	<b>Ask us</b>

For any unaccepted profiles that you would like searched at SDIS, contact our CODIS unit for discussion. You may need to request a custom keyboard search.

Thank you,  
Cal-DNA CODIS Team  
CA Department of Justice  
Bureau of Forensic Services  
Jan Bashinski DNA Laboratory

1 LAW OFFICES OF THE ALTERNATE DEFENDER  
2 DAVID EPPS, # 160173  
3 ALFONSO LOPEZ, # 203564  
4 BRIAN MATTHEWS, # 191508  
5 BICKA BARLOW, # 178723  
6 701 Miller Street, First Floor  
7 San Jose, CA 95110  
8 Telephone: (408) 299-7234  
9 [brian.matthews@ado.sccgov.org](mailto:brian.matthews@ado.sccgov.org)

10 *Attorneys for Antolin Garcia-Torres*

11 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

12 IN AND FOR THE COUNTY OF SANTA CLARA

13 People of the State of California,	)	Case No.: 213515
	)	
14 Plaintiff,	)	
	)	Proof of Service
15 --vs.--	)	
	)	
16 Antolin Garcia-Torres,	)	
	)	
17 Defendant.	)	

18 I am a citizen of the United States and employed in Santa Clara County. I am over  
19 the age of eighteen years and not a party to this action. My business address is 701 Miller  
20 Street, San Jose, CA 95110.

21 On October 5, 2016 I served the attached Supplemental Brief (Motion to Suppress)  
22 on the plaintiff, through Dep. District Attorney David Boyd, by electronic mail.

23 I declare under penalty of perjury that the foregoing is true and correct. Executed on  
24 this 5<sup>th</sup> day of October 2016 at San Jose, California.

25   
\_\_\_\_\_

**FILED**  
OCT 6 2016

DAVID H. YAMASAKI  
Chief Executive Officer/Clerk  
Superior Court of Santa Clara County of Santa Clara  
BY \_\_\_\_\_ DEPUTY