TESTIMONY OF:

Clinton Hughes
Forensic DNA Attorney

BROOKLYN DEFENDER SERVICES

Presented before
The New York City Council Committee on Public Safety
Jointly with the Committee on Justice System

Oversight - DNA Collection and Storage in NYC

February 25, 2020

My name is Clinton Hughes. I am the Forensic DNA Attorney at Brooklyn Defender Services (BDS). I have practiced as a public defender for 23 years, seven of which I have specialized in forensic DNA litigation. I am part of the Forensic Science Practice at BDS. The Forensic Science Practice’s mission is to provide resource and support counsel services to trial attorneys facing complex forensic issues in misdemeanor, felony, and homicide cases in Brooklyn Criminal and Supreme Court. In that role, the Practice monitors the development of emerging scientific, technical, digital, and surveillance techniques, educates our trial lawyers regarding those techniques, and analyzes the legal and scientific or technical issues raised by the techniques themselves as well as their use or misuse.

BDS provides multi-disciplinary and client-centered criminal, family, and immigration defense, as well as civil legal services, social work support and advocacy, for nearly 30,000 clients in Brooklyn every year.

I thank Chair Donovan Richards and Chair Rory Lancman for inviting us to testify today about DNA Collection and Storage in NYC.

BDS joins with the other defenders in calling for the City Council to abolish the unauthorized suspect database maintained by the New York City Office of Chief Medical Examiner, in conjunction with the New York Police Department.
Background

In 1997, the OCME implemented a system for collecting previously-typed DNA profiles into a searchable local database. Originally, the OCME’s local database was called LINKAGE. In 2014, the lab absorbed the LINKAGE database into the local level of the CODIS database, called the Local DNA Index System ("LDIS").

By way of brief background, CODIS (Combined DNA Index System) is actually the software databasing package developed and provided by the Federal Bureau of Investigation to DNA laboratories around the country. The CODIS database system consists of three levels: the National DNA Index System (NDIS); the State DNA Index System (SDIS); and the Local DNA Index System (LDIS). As the administrator of the CODIS database system, the FBI promulgates detailed regulations governing the types of samples that can be uploaded to NDIS, as well as quality assurance standards for labs conducting testing that feeds into NDIS.

In New York, the New York State legislature created the State DNA Databank in 1994 with the passage of Executive Law § 995. The database became operational in 1996. By law, when it comes to known contributors, the New York database can only house DNA collected from convicted offenders. While the list of crimes for which a conviction permits DNA sample collection has grown five times since 1996, the New York State legislature has repeatedly rebuffed efforts to expand DNA collection to arrestees.¹

Despite New York State’s careful calibration of the balance between the individual’s rights to genetic and basic privacy, as well as due process, and the State’s interest in crime solving, the City of New York’s agencies—the NYPD and the OCME—have chosen to operate a rogue DNA database that reaches samples taken from persons not authorized for collection. In other words, the OCME’s “LDIS” does an end run around New York State’s carefully prescribed scheme in pursuit of crime solving.

And over the last five years, the OCME’s rogue database has been growing.²

¹ It is worth noting that, in 1999, the legislative record reflects that then-Mayor Rudy Giuliani even specifically requested that the legislature expand collection to arrestees. Mayor Giuliani asserted: “While the City enthusiastically supports this legislation and acknowledges the positive effect it will have on solving crime, it should be noted that the City of New York believes DNA testing upon arrest would allow for even greater efficiency and effectiveness in law enforcement. Examining DNA samples at the time of arrest would dramatically increase the ability of police to accurately identify or negate one’s potential culpability while under arrest.” The New York State Legislature refused to expand the database to arrestees.

Growth of the OCME’s Rogue Database

This unauthorized database has been fed in part by the surreptitious collection of individuals’ saliva samples by the NYPD.

The NYPD’s practice has developed into stacking up cartons of Newport cigarettes – the most popular cigarette in our clients’ communities. The police then hand them out like candy during interrogations at precincts. No nervous arrestee or detainee, even if they were completely innocent, would envision that accepting the cigarette to smoke in the middle of a public building with the blessing of the police would mean that their profile would end up in perpetuity in a database.

We have watched videos where our clients have asserted their right to counsel as they drink from a water bottle or smoke an offered cigarette. Then they are led out of the interrogation room, the cigarette butts are left in the ashtray – what are our clients going to do, eat them? Put them in their pockets? – and the police collect the cigarette butts for evidence. The same little game plays out with water cups or bottles, and DNA profiles are collected by the thousands.

Self-regulation is not the answer here. What started as a self-regulated, unauthorized database has emerged into a vast invasion of the genetic privacy of thousands of New Yorkers, many if not most of whom, are poor people of color.

The local database is in contravention to Executive Law § 995-d, which dictates that the results of DNA testing are confidential and which specifically protects the right of a defendant to nondisclosure of his or her DNA information.

As Dr. Howard Baum, former Technical Leader of the OCME and creator of the local database has stated, he never envisioned that the database would become the repository of profiles that the NYPD dragnetted from neighborhoods of color. Our clients at BDS have been directly impacted by dragnets – the systematic search for someone like a black male in Brownsville -- practices that target our clients particularly because they are Black or because they are male or because they reside in a particular neighborhood.

Dr. Baum never envisioned that the database would include thousands of profiles who were tricked into handing over their DNA without consent or court-order. Even our clients who consented to have their DNA taken have told us that they had no real understanding that their cooperation meant that their DNA would lead to their profiles staying in a government database forever.

Dr. Baum never envisioned that the local database would include people who were merely detained – sometimes never even arrested, and many never being convicted of any crimes.

The local database was also set up long before the NYPD’s Domain Awareness System was created. The Domain Awareness System (“DAS”) is a software program created by the NYPD and Microsoft that aggregates data collected by the NYPD across the city. While the DAS’s role in aggregating surveillance camera video is well known, another DAS function is its ability to
inform officers whether or not an individual detainee’s DNA profile is in the database – thus making the detainee a target for DNA collection by individual police officers.

**The OCME and NYPD DNA collection and storage practice’s threat to our community’s liberty is also growing.**

The practices of the NYPD mean that not just the numerical profiles of Black and brown folks get warehoused in an electronic database. For each of those warehoused profiles, the OCME maintains extracts of the DNA in tiny vials like these:

![DNA vial](image)

As technologies emerge, law enforcement and the lab can go back to that little vial and effectively interrogate the DNA to invade the genetic privacy of the individual’s genetic code in even deeper and more disturbing ways. Genetic genealogy, which has been much reported-on in the news recently, is only the latest incarnation. This technique uses DNA analysis methods that mine more of the human genome for sensitive information than a traditional forensic DNA test, and surveil not just the individuals’ DNA but also the DNA of that individual’s entire family line.

The DNA technique employed in genetic genealogy—Single Nucleotide Polymorphism (SNPs) testing or Next Generation Sequencing—is being considered for widespread forensic uses by the law enforcement community as we speak. Whereas traditional DNA testing—Short Tandem Repeat (STR) testing—only measures the lengths of certain segments of non-coding regions on our genome, SNPs and NextGen testing actually codes the genome (revealing the specific As, Gs, Ts, and Cs we all learned about in high school) and potentially reveals deeply intimate details including things like predisposition to disease and susceptibility to addiction. And where STR testing only looks at a very small percentage of the overall genome, SNPs testing looks at huge percentages of the overall genome, revealing the most private elements of our selves.

In the face of this brave new world of genetic testing and the overall threat to privacy, as well as our First Amendment associational freedoms, we need to think about vulnerable communities when considering emerging technologies. The OCME and the NYPD, without oversight or regulation are effectively building a warehoused library of entire community’s genetic extracts. With emerging technologies like genetic genealogy and so-called Next Generation Sequencing, the genetic privacy of not only the individual but the individual’s family will come under surveillance by law enforcement.

We now know that ‘Junk DNA’ is not really “junk” at all: it can by tied by inference to other areas on the human genome, that in turn can reveal sensitive information like susceptibility to
disease.\textsuperscript{3} As technologies emerge and forensic profiles become even more revealing of a person’s biological status, it is really incumbent upon our elected officials to protect the genetic privacy of its citizens and their families.

A pledge by the NYPD to review cases it has submitted in order to ‘clean up’ the database is not enough. First, this self-regulation does not address that the database is not authorized by law. Second, the City Council cannot rely on the NYPD to self-regulate a problem that it has created and perpetuated with unbridled zeal.

The time is now for the Council to abolish this rogue database and allow law enforcement to work under the structure set up by the state legislature Executive Law Section 995.

\textsuperscript{3} See “Statistical Detection of Relatives Typed with Disjoint Forensic and Biomedical Loci,” \textit{Cell} 175, 848–858, October 18, 2018, and “Linkage disequilibrium matches forensic genetic records to disjoint genomic marker sets,” \textit{PNAS} | May 30, 2017 | vol. 114 | no. 22 | 5671–5676.