NYPD

Thursday, December 14, 2017

STATEMENT OF DEPUTY CHIEF EMANUEL KATRANAKIS
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NEW YORK CITY POLICE DEPARTMENT

BEFORE THE NEW YORK CITY COUNCIL
PUBLIC SAFETY COMMITTEE AND HEALTH COMMITTEE
COMMITTEE ROOM, CITY HALL
THURSDAY, DECEMBER 14, 2017

Good Afternoon Chair Gibson, Chair Johnson, and Members of the Council. I am Deputy Chief Emanuel Katranakis, the Commanding Officer of the New York City Police Department's (NYPD) Forensic Investigations Division. I am joined here today by my colleague, Oleg Chernyavsky, the NYPD's Director of Legislative Affairs. On behalf of Police Commissioner James P. O'Neill, I wish to thank the City Council for the opportunity to speak to you today about the NYPD Forensic Investigations Division's Police Laboratory.

The NYPD's Forensic Investigations Division consists of the Police Laboratory, Crime Scene Unit, Latent Print Section and the DNA Liaison Unit. The mission of the NYPD's Forensic Investigations Division is to provide the highest quality of forensic services to the criminal justice system with objectivity, impartiality and integrity. To wit, NYPD forensic investigators support the criminal justice system in the "pursuit of truth through science."

The focus of today's hearing, the NYPD's Police Laboratory (Laboratory), is charged with performing forensic examinations on an immense volume of physical evidence and to do so in a manner that ensures the integrity, quality, accuracy and timeliness of the scientific findings. The Laboratory receives approximately 155,000 cases each year and performs examinations on one-third of those cases.

The New York City Police Department operates an accredited forensic laboratory. The Laboratory is accredited by ANAB, a National Accreditation Board of the American National Standards Institute and the American Society for Quality, under the specific scope of ISO (International Organization of Standardization) 17025 standards. Accreditation is based on assessment of an agency's technical qualifications and competence for conducting specific testing, and examination activities. Our accreditation is mandated under the New York State Executive Law. Last month, the Laboratory underwent a full ANAB accreditation assessment that consisted of seventeen (17) assessors performing a week long, on-site inspection to determine if the Laboratory satisfies approximately 400 individual requirements or standards. These requirements pertain to Laboratory operations – specifically Laboratory policies, procedures, documentation of casework, physical plant space, equipment and materials. I am happy to report that the NYPD Laboratory received a near perfect score on this evaluation. This is an unprecedented and extraordinary achievement that sets the benchmark for other forensic laboratories throughout the country.

The Laboratory provides a wide variety of services to the criminal justice system. These include controlled substance analysis, firearms examinations, latent print development, trace evidence analysis, gunshot residue (GSR) muzzle to target distance determinations, and questioned document examinations. While the Laboratory is charged with myriad responsibilities, I want to focus my testimony today on three areas: controlled substance analysis, firearms analysis, and trace evidence analysis.

As one of the largest forensic laboratories in the world, the Police Laboratory handles a significant volume of evidence – the most notable being controlled substance testing. The Laboratory's Controlled Substance Analysis Section receives 110,000 cases each year and analyzes approximately 34,000 of them. The Controlled Substance Analysis Section will analyze evidence to report the identification of one or more

controlled substances or the absence of controlled substances in a case. The most commonly tested controlled substances are cocaine and heroin, but the Laboratory will also perform analyses to identify other substances, such as fentanyl and fentanyl analogues.

In the wake of historic drops in gun crime in our city, I think it is important to discuss the testing of evidence related to firearm crimes. The NYPD takes a holistic forensic approach to reduce violent gun crimes. The forensic value of a firearm is more than an instrument that generates a high velocity projectile. A firearm is an item of evidence with potentially probative fingerprint evidence, DNA evidence, trace evidence as well as non-scientific information pertaining to "tracing" firearms via the serial number. The Laboratory's Firearm Analysis Section conducts operability examinations and microscopic analysis of firearms and firearms-related evidence. Operability testing is primarily performed to satisfy statutory requirements in the New York State Penal law. Microscopy comparisons are performed on fired bullets and discharged shell casings to establish a nexus or disassociate between firearms and fired bullets and discharged shell casings recovered from crime scenes. This is of tremendous value when the examination generates a nexus between two or more "unrelated crimes," thus providing investigative leads that would otherwise be unknown to investigators.

Firearms analysis will also include serial number restorations where applicable. Criminals sometimes attempt to render firearms untraceable by grinding or filing away the serial number. Personnel in the Firearm Analysis Section are able to restore the serial number through a variety of methods such as chemical etching, electrochemical etching, and ultrasonic cavitation. The serial number of a firearm can lead to critical intelligence for investigators by tracing the original sale of the firearm. In addition, personnel in the Laboratory will perform bullet-resistant garment tests, firearm trigger pull tests, firearm drop tests, and provide expert testimony in cases involving firearm prosecutions.

Trace evidence examinations are conducted by the Laboratory's Criminalistics Section. Trace examinations can provide a scientific link between the suspect and victim, or the suspect and the crime scene, or a victim and the crime scene. Trace Evidence can support or refute a suspect's or a witness's statements or produce a potential lead in an investigation. Trace evidence examinations can involve analyses of paint, fibers and textiles, glass, explosives and fire debris, and footwear impression examinations.

The investigatory and public benefits of such analyses are immeasurable. For example, the Department has previously testified before this Council about the challenges in investigating hit and run incidents because many take place on non-major highways and roads, at night, without street cameras, and with few, if any, witnesses. Laboratory analysis of motor vehicle paint, however, can lead to determining the color and the potential make and model of a vehicle from recovered samples. Crime scene paint samples can be compared to known paint samples from a suspect's vehicle, or any other known source.

Trace analysis can be conducted with explosive and fire debris evidence to identify explosive chemicals and to demonstrate that certain chemicals were used to construct an improvised explosive device (IED) or an incendiary device. Scientific analysis can also be performed to determine the presence, and absence, of substances that can accelerate the development of a fire. Testing such as this provides solid intelligence to our NYPD investigators and valuable information that can be used in subsequent prosecutions.

While I have provided a brief overview of some of the work performed by the Police Laboratory, I do want to discuss a recent initiative undertaken by the Department. Over the last few years, there has been a growing need for laboratory analysis of narcotics evidence and paraphernalia collected from fatal and non-fatal overdose cases. As part of the Mayor's HealingNYC Initiative, the Police Commissioner recently approved increased staffing at the Police Laboratory by more than 40% to support opioid-related investigations and combat overdoses. This has enabled the Laboratory to embark on a new goal to test all

drug evidence obtained from overdose cases. Evidence samples from these cases are often challenging, due to the presence of fentanyl or fentanyl analogues and other traditional controlled substances such as heroin, cocaine, ketamine and benzodiazepines. In one recent case, as many as 12 different controlled substances were mixed together in some of the recovered drugs. The forensic investigation into each compound in these mixtures is labor intensive and complex. These analyses, however, are essential in identifying controlled substance mixtures that will assist the Department in developing forensic intelligence on distribution sources based on geographical area, as well as sharing information with our partners at the OCME and the New York City Department of Health and Mental Hygiene to warn, educate and inform the public of these dangerous and toxic synthetic opioids. By increasing our staffing to process more cases, the information we can learn from the evidence is critical in our overarching effort to reduce overdose deaths in New York City.

Now, in shifting gears, the remainder of my testimony will focus on another topic of today's hearing, Intro. 1235, known as the "Right to Record Act." This bill seeks to codify a right to record police activities and to create a private right of action, including the right to obtain damages and other relief, in relation to interfering with that right.

The Department opposes this legislation. Individuals who believe either that they have been falsely arrested or have had their property wrongfully seized, can **currently** seek remedies in court.

Courts have consistently held that it is not unlawful to record police officers carrying out their duties. The Department firmly recognizes that individuals have a general right to lawfully record police activity and to criticize police activity, provided that an individual does not interfere or prevent an officer from performing an official function. This lawful activity extends to the recording of police activity and applies to individuals in both public places, such as streets, sidewalks, and parks, *and* private property such as a building, lobby, workplace, or an individual's own property, provided that the individual has a legal right to be present at that location. Moreover, an individual's right to engage in this activity is regularly reinforced at the Police Academy, during in-service training, and through Legal Bureau Bulletins and other Departmental guidance. Notably, since 2015, the NYPD has conducted 65 such trainings that covered this topic.

The Department does not believe that passage of this bill would add anything to an individual's current ability to engage in this lawful conduct. It would instead create an unnecessary avenue for additional litigation against police officers, the Police Department, and the City as a whole.

Thank you for the opportunity to speak with you today, and I am pleased to answer any questions you may have.

New York City Council

Testimony by Chief Medical Examiner Dr. Barbara Sampson

Oversight Hearing: Examining Forensic Science Practices

Good afternoon. I want to thank the chairs of the committees that are holding today's hearing, Councilmember Corey Johnson and Councilmember Vanessa Gibson. I also want to thank the members of the Committee on Health and the Committee on Public Safety for the opportunity to testify. We are proud to set the highest standards for independent science and to share our expertise with other jurisdictions in the neutral service of justice, without favor to prosecution or to defense, with independence and without any other outside influence.
I am Dr. Barbara Sampson, Chief Medical Examiner of the City of New York.

My office has two mission critical roles: to protect the public's health and to practice forensic science in the service of justice. You have heard me repeat over the last four years that my goal is to establish the model of an ideal medical examiner's office: independent, unbiased, immune from undue influence and as accurate as humanly possible. Far from being mere words the requirements I list are at the core of why we exist. The integrity of the forensic science we perform rests upon our independence, both actual and perceived.

In 2007 at the opening ceremony of our DNA laboratory, my predecessor,Dr. Hirsch reminded NYC about that truth. His words continue to resonate with all who value science, as well as justice. He said,

"The motto of this DNA building attempts to capture the impartiality and independence of science. It is inscribed on the wall of our lobby: **Science Serving Justice**. Unambiguous and direct: science serving justice. It does not say science serving the police; it does not say science serving the district attorney; and it does not say science serving the defense. Right down the middle of the road it simply says, science serving justice."

One hundred years ago, the idea of an independent medical examiner was conceived to repair a system of elected coroners that was thought by all to be corrupt and partisan. The medical examiner serves a vital check-and-balance role in the criminal justice system, and our findings *must be* independent of influence from any and all competing interests including those of private entities, government agencies, political parties and the general public. We demonstrate our independence at a practical level by adhering to a rigorous philosophy of meeting with both prosecution and defense upon request to discuss our findings.

As the chief medical examiner of all New Yorkers I took an oath to serve the best interests of our citizens, and I will continue to meet that obligation by protecting and nurturing the independence of this office so that we may always serve justice without bias.

OCME processes all biological evidence for the City that requires DNA or toxicological testing through three forensic laborates; the forensic biology, forensic toxicology, and molecular genetics labs. We are distinct and separate from the forensic laboratories operated under the auspices of the NYPD. The NYPD laboratories process all non-biological evidence including firearms, illicit drugs, latent fingerprints, and trace evidence.

The New York City Office of Chief Medical Examiner operates the largest and most advanced public DNA laboratory in North America. Our Department of Forensic Biology is a national leader in DNA technology and research, and our forensic DNA laboratory is fully accredited, as mandated under the New York State Executive Law. Our accreditation is granted by ANAB, a National Accreditation Board of the American National Standards Institute and the American Society for Quality, under the specific scope of ISO (International Organization of Standardization) 17025 standards. In addition, the Department operates under the FBI's Quality Assurance Standards for Forensic DNA Testing Laboratories. Just this past October, the Department of Forensic Biology underwent an external audit that consisted of 13 FBI QAS auditors and one (1) ANAB Assessor performing an on-site assessment to determine if the DNA lab satisfies the standards under which it is accredited. I am happy to report that the DNA

laboratory received only one non-conformance out of over 600 standards that they were audited against.

Among the cutting-edge work ongoing in our Forensic Biology department is its processing of environmentally challenging and degraded skeletal remains utilizing optimized bone extraction techniques. We are continuing to work on the unidentified remains of the 9/11 terrorist attacks. This August, we scientifically identified remains from the one thousand, six hundred forty first person from the attack on September 11, 2001. The identification of this victim, whose name was withheld at the family's request, was performed by our laboratory using new technologies developed in-house and launched in 2017. We have also re-associated many remains to previously identified victims this year. We are continuing our work on the identification of all the 2,753 victims of the disaster.

The Department of Forensic Biology also prosesses biological samples for criminal matters, and has experienced a record increase in its case submissions, all while maintaining an excellent turn-around time of 4-6 weeks for cases associated with crimes against persons. In calendar year 2016, the laboratory experienced a significant 43% increase in cases received over the previous year. 2017 is projected to have a 30% increase over the record numbers of 2016. The majority of these increases are due to the processing DNA samples associated with gun crimes.

In 2016, our Department of Forensic Biology grew by nearly $1.8 million to hire 21 new criminalists and evidence property control specialists to test evidence from all guns seized from a person by the NYPD. In the adopted 2018 plan, we are expanding by an additional $4.5million for an additional 53 staff, of whom 34 are forensic biologists, to address these case submission increases. In both years, we were able to recruit, onboard and are training these new staff members.

Our forensic biology laboratory provides services that are critical both to victims and law enforcement, and to wrongly convicted defendants. For example, just a few years ago, OCME's

lab was able to perform DNA analysis that was vital to solving a vicious assault and rape that had occurred in 1998. OCME developed a DNA profile from the sexual assault kit and uploaded it to the CODIS DNA database. In 2013, that profile "hit" to a defendant whose DNA was entered in the database as a result of a federal money laundering conviction. That defendant was subsequently convicted of the 1998 rape, and in June of this year he was sentenced to 20 years in prison.

As I mentioned, DNA analysis can also be crucial to exonerating wrongly convicted defendants. For example, in 2011, a 1985 conviction was reviewed in Brooklyn. Subsequent DNA tests were performed on the cigarette butts and the marijuana roach that had been found in the car used to abduct the victim. The convicted defendant's DNA was not found on those items; rather, the DNA testing revealed DNA material that "hit" to "an identified man with a criminal record". In 2013, the Brooklyn DA's office re-opened the case and moved for the conviction to be vacated, leading to the exoneration of that defendant.

I will now turn to our Forensic Toxicology Laboratory, which is responsible for testing biological samples for both illicit and therapeutic drugs. Over the past 18 months, the lab has eliminated a backlog of more than 800 cases and has drastically reduced turnaround times for completion of casework from an average of 120 days to less than 20 days, a world-class turn-around time. Over 98% of all cases are now completed within 30 days or less, twice as fast as the national standard.

In 2017, the toxicology laboratory achieved both New York State and the American Board of Forensic Toxicology (ABFT) accreditation and continues to expand both the scope of its testing, through research collaborations, and its investment in staff training. Development of new testing methodologies using state-of-the-art instrumentation purchased in 2016 has further expanded the testing capability of the Laboratory.

Further, in September 2017, with support from both the NYC District Attorneys' Offices and NYPD, the OCME Forensic Toxicology Laboratory was approved to test all drunk-driving case specimens collected in New York City, and has nonetheless continued to maintain turnaround times of less than 20 days.

Our toxicology laboratory is on the leading edge of combating the City's opioid epidemic. As part of investments made through HealingNYC, in November – last month, the Laboratory introduced a method capable of screening for 30 different synthetic opioids, an essential tool to meet the challenge of the opioid epidemic – fueled by illicit fentanyl and affecting not only the City of New York but the entire nation. OCME is sharing its findings with our partner agencies in real time at an uprecedented level, helping inform decisions made by DOHMH and law enforcement.

Finally, through genetic testing our preeminent Molecular Genetics Laboratory significantly enhances the ability of the agency in its direct support of OCME's mandate to investigate sudden, unexpected, and unexplained deaths in apparently healthy New Yorkers. Advances in molecular medicine have increased the ability to identify diseases at the molecular level that escape discovery during autopsy, microscopic examination, and toxicology testing. Currently the laboratory performs molecular analysis of 95 Cardiomyopathy genes, thrombophilia molecular analysis, and sickle cell disease molecular analysis.

In May 2017 the Molecular Genetics Laboratory received its third consecutive finding of zero deficiencies during its biennial, unannounced on-site inspection by the College of American Pathologists. Since 2016, we have been providing professional genetic counseling services to deliver genetic education, counseling, and support to the families of decedents who tested positive by our laboratory. Finally, two articles from this laboratory on molecular diagnostics in idiopathic pulmonary embolism and sudden unexplained death have been accepted for publication in high impact peer-reviewed journals highlighting the role that OCME has in advancing science in the United States.

The people who dedicate their lives to forensic science at OCME not only serve criminal justice; they can also have a profound impact on the lives of everyday Americans across the country. In 2015 a young woman suffered a sudden cardiac death in our jurisdiction. We diagnosed a genetic condition as the cause. A while later, the decedent's sister was hospitalized in another state with a suspected cardiac condition. Her physicians wanted to discharge her home, but her mother pleaded with the doctors to let her stay because OCME had previously found a genetic cause of her sister's death. They agreed. That evening the hospitalized sister had a cardiac arrhythmia/arrest and was able to be resuscitated because the she was still in the hospital. She likely would have died otherwise.

I will end by saying there is no better illustration of the OCME than the Latin inscription on our wall, which translates loosely as - *this is the place where the dead help the living.*

I am happy to answer your questions.

nycds
Fighting for your rights, one person at a time

Stanislao A. Germán, Executive Director
Carolyn P. Wilson, Director

12/13/2017 CITY COUNCIL HEARING

TESTIMONY OF NEW YORK COUNTY DEFENDER SERVICES

New York City must rethink the way its NYPD Crime Lab and the OCME operate. Both entities claim to be functioning entirely in the realm of dispassionate scientific inquiry but the reality is far more troubling. The reality is an overriding lack of transparency and partisan secrecy. This leads to arrogance and sloppiness, which in turn creates wholesale injustice. New York City should lead the way for the nation in implementing meaningful reforms that will ensure the true independence and reliability of these vital operations.

Recent events at OCME are illustrative of the problem. For years the office conducted its DNA mixture testing under an entirely unwarranted cloak of secrecy. Unfortunately, lack of transparency is often a breeding ground for laziness and abuse. Here, the OCME used that unchallengeable platform to foster a reputation for unsurpassed expertise. This gave them the arrogance to introduce two highly troublesome techniques that would ultimately greatly reduce the reliability of their DNA testing and shatter their illusion of expertise.

The two tools were "high sensitivity testing" and FST, the Forensic Statistical Tool. These techniques were used for eleven years in thousands of cases without significant external scrutiny and in an environment primed for abuse. Only the skillful persistence of the defense bar ultimately revealed how scientifically unsound these practices actually were. A hugely important development but one that is surely of minor consolation to the many, mostly indigent people of color, convicted on the basis of dangerously unreliable evidence.

A similar reckoning would be highly unsurprising in the context of the NYPD Crime Lab, given what we've learned about the inherent unreliability of so-called forensic science. Last year's PCAST report established conclusively that the pattern matching that gets called forensic science is essentially subjective and partisan evidence building. And at least the OCME pretends to independence. The crime lab, on the contrary, makes no such claims, openly employing primarily police officers in the place of unaffiliated scientists. This despite the obvious and growing recognition that the best way to prevent toxic errors is by creating a forensic lab that is truly independent from law enforcement and prosecutorial agencies

New York must act now, as every day the danger of wrongful convictions based on pseudo-science grows unjustifiably. True independence and impeccable reliability are achievable. The only thing lacking is the will and that is inexcusable.

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Justice Committee

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Testimony

New York City Council Health and Public Safety Joint Hearing
December 14, 2017

A Local Law to amend the administrative code of the city of New York, in relation to respecting the right to record police activities

Proposed Int. No. 1235

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The Justice Committee is a grassroots organization dedicated to ending police violence in New York City. Some of our programming is aimed at spreading the practice of monitoring and documenting police activity as safely and effectively as possible in order to deter police abuse, a practice we call "Cop Watch." The practice of Cop Watch is a constitutionally protected right.

As part of our Cop Watch Program – which we have operated since 2007 – we organize and support Cop Watch teams around the city that conduct regular patrols in neighborhoods that are heavily policed. We also train New Yorkers, particularly those who are directly impacted by abusive policing, to monitor and document the police in their daily lives.

Throughout our years of doing this work the NYPD's practice of interfering with attempts to legally document their activity has been rampant and unchecked. Officers frequently escalate situations as they aggressively and unlawfully attempt to interfere with Cop Watching through actions including the following:

- Verbal harassment, and threats of violence or arrest;
- Physical violence, including grabbing and shoving people, as well as brutally beating individuals who are exercising their constitutional right to record and are not interfering with police activity;
- Using their bodies to try to block teams or individuals from filming;
- Blocking and hiding their badge numbers;
- Making false claims that documenting police activity is illegal;
- Ordering those documenting to move and falsely claiming they are blocking pedestrian traffic;
- Shining police lights at cellphones and cameras used to document;
- Unlawfully confiscating recording equipment;
- Slapping phones and recording equipment out of the hands of those who might be filming, sometimes throwing them to the ground and breaking the equipment; and
- Unjustly issuing tickets and making arrests when there has been no wrong-doing by people filming or witnessing an incident as retaliation and as a threat to try to prevent those who cop watch from testifying or sharing footage on behalf of those abused by police.

A few concrete examples include:

In March 2012, as the request of Council Member Jumaane Williams, the Justice Committee and Malcolm X Grassroots Movement organized Cop Watch teams to monitor police repression of the protests following the NYPD killing of Kimani Gray. During these protests, three members of our teams were illegally arrested for documenting police abuse of the young protesters in East Flatbush. Two of those arrested were also brutalized. None were convicted of any crime or violation.

More recent examples from the past few years:
The NYPD unlawfully arrested one of our members while he was recording in the subway station, falsely making the preposterous claim that the light on his cellphone violated recording laws. Again, there was no conviction in this case.

The great majority of JC members, members of other Cop Watch teams and organization we work with and other allies who Cop Watch have been bullied and threatened with arrest while exercising their constitutional right to record and/or film police activity and misconduct.

NYPD officers have demanded ID from our members while they were recording and then escalated incidents, threatening our members with arrest if they asked questions or declined to produce identification in situations where the law was that they were free to leave.

While our Jackson Heights Cop Watch team was documenting a street stop one of the officers involved attempted to convince the community member they were stopping to tell us to stop filming by saying, "If you tell them to leave this ticket will go away." The community member did not tell us to leave. In talking to him after the stop was over, we learned he did not understand anything the officers were saying to him, including why he was being stopped, because the officers could not speak Spanish. After the stop was over the officers involved got in their vehicle, drove a block up the street and staged a fake stop in order to attract the attention of our team. We ran up the street and heard an officer yell, "get up against the wall", only to discover that they were staging a fake stop and had no one detained. As soon as we approached, they jumped in their vehicle laughing and drove away. We filed a CCRB complaint regarding this incident and never heard a response.

A police officer in the passenger's side of an NYPD vehicle maintained his flashlight at our members' camera to interfere with recording of a traffic stop while another NYPD officer in the driver's seat kept his middle finger up against his forehead as two of our members recorded. The shining of lights at recording equipment is extremely common and something every Cop Watch team we work with has experienced.

While one of our members were documenting a traffic stop NYPD officers demanded everyone disperse from the block. When our member asserted their right to continue to record an NYPD officer stood two inches from their face and yelled, "you have no rights."

In our years of experience, none of the offending officers have been held accountable, which allows and encourages the behavior to continue.

We commend Council Member Jumaane Williams for introducing Intro 1235, which will establish a private right of action for individuals whose constitutional right to document police activity is violated by the NYPD. We also want to stress that, in order for this NYPD practice to stop, there must be significant discipline and accountability for officers who engage in this behavior. Civil suits, which do not result in discipline or financial loss for officers or the NYPD, do not equal accountability.

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Testimony of the New York Civil Liberties Union Before City Council Public Safety Committee Regarding the *Right to Record Act*

December 14, 2017

The New York Civil Liberties Union ("NYCLU") respectfully submits the following testimony in support of Intro. 1235, the Right to Record Act. We also offer comments in support Intro. 541-C, a key component of the Right to Know Act, and in opposition to Intro. 182-D, both of which are before the Council as this legislative session comes to a close.

The NYCLU, the New York state affiliate of the American Civil Liberties Union, is a not-for-profit, non-partisan organization with eight offices across the state, and over 160,000 members and supporters statewide. The NYCLU's mission is to defend and promote the fundamental principles, rights and constitutional values embodied in the Bill of Rights of the U.S. Constitution and the Constitution of the State of New York, including the rights to monitor and document police activity and to be free from discriminatory and abusive tactics in law enforcement. The Right to Record Act will codify and strengthen these protections in New York City.

The First Amendment to the U.S. Constitution protects a person's right to record the police in public. This is among the most direct and participatory forms of public oversight, and it can serve as a necessary check against official misconduct. In recent years, bystander-recorded footage of the police killings of Eric Garner, Walter Scott, Alton Sterling, and Philando Castile focused national attention on the systemic targeting of communities of color by law enforcement and, at least in the case of Mr. Scott, played a key role in holding an officer accountable. As smartphones have become more and more a default feature of everyday life, there have never been more opportunities for the public to quickly and easily document police activities.

Recognizing the power of video to tell an often unseen story about the impact of discriminatory policing, the NYCLU developed "Stop and Frisk Watch" at the height of then Mayor Bloomberg's hyper-aggressive stop-and-frisk regime. This mobile app empowered New Yorkers to turn their phones into tools to document abusive police stops and expose the New York Police Department ("NYPD") practice for what it was: unconstitutional racial profiling.

The app also allowed us a look into NYPD officers' aggressive tactics to stop and prevent New Yorkers from filming them, something we have known and experienced for many years. We heard countless stories of officers interfering with cameras, knocking them out of people's hands, shining lights into the lens, threatening photographers, or deliberately blocking the shot. Indeed, our own executive director, Donna Lieberman, was threatened with arrest for attempting to photograph the activities of school safety officers on public property. Against such overt intimidation and aggression, every day New Yorkers have little hope of safely filming or photographing police.

With the current surge in protest activity across the city and state as New Yorkers continue taking to the streets to resist threats from Washington, the NYCLU regularly trains volunteers on how to put their First Amendment rights into action by documenting and recording police activities during protests and demonstrations. Yet we constantly have to remind people that, although they have the right to record, they may be at risk by exercising it. The ability to document police activity—and to do so without intimidation or fear of unjustified arrest—is a critical means of exposing misconduct, creating independent and objective records of police encounters, protecting the ability to assemble and protest, and empowering the public to directly participate in the work of holding government accountable.

While the Constitution already protects the public's rights to monitor and document police activity, we know the reality that rights are not always respected in practice. The City Council must ensure that our local laws reflect the importance of these fundamental principles. The Right to Record Act will declare, unambiguously, that this right exists in local law and make it easier for New Yorkers to seek redress for violations.

Unlawful NYPD Interference with Civilian Recording is a Persistent Problem

Long before the development of smartphones, the NYCLU fought to safeguard New Yorkers' right to document NYPD activity. In 1973, we filed a class action lawsuit, *Black v. Codd*, on behalf of a group of journalists and citizens who had been arrested for filming or photographing officers. The resulting consent decree in 1977 led to changes in the NYPD Patrol Guide confirming that people observing or documenting police activity shall not be arrested unless an officer has probable cause to believe that the person engaged in obstructing governmental administration by actually interfering with the officer's work.[1] The consent decree and Patrol Guide provisions further explain that a person's speech alone, requests for or notation of an officer's identity, taking of photographs, or remaining in the vicinity of an encounter cannot constitute probable cause, absent a risk to safety or some other violation of law.[2]

[1] *Black v. Codd*, 73 Civ. 5283 (JMC) (S.D.N.Y. June 2, 1977); NYPD Patrol Guide § 208-03.
[2] *Id.*

Despite these provisions, the right to record police activities has not been respected by NYPD officers. Journalists attempting to document police activities have frequently found themselves under arrest for doing nothing more than attempting to report on matters of public importance. In November 2011, several news and advocacy organizations sent a letter to the NYPD describing numerous incidents in which officers interfered with, intimidated, assaulted, and detained individuals attempting to document demonstrations related to Occupy Wall Street.[3] In August 2012, the National Press Photographer's Association similarly informed the Department of an incident in which officers intimidated, assaulted, and arrested a photographer who was documenting an arrest in public.[4] Arrests of journalists have continued to occur at protests and demonstrations, including in the wake of the 2016 election.[5] In the current climate where journalists are routinely subject to attack by a White House intent on discrediting a free press, safeguarding the ability of journalists to do their jobs without unlawful police interference is vital.

Journalists are not alone in having been targeted for attempting to bring attention to important issues. In December 2012, at the close of a year in which nearly 533,000 New Yorkers were stopped by the NYPD, the NYCLU filed a lawsuit on behalf of a woman who, while causing no actual interference with police activity, attempted to film a stop-and-frisk encounter. Instead of respecting her rights to do so, the officers shoved her, arrested her, and unlawfully detained her in a jail cell for 90 minutes, telling her, "This is what happens when you get involved."[6] The message to members of the public who wanted to join the conversation about police reform and accountability was clear: exercise your rights at your own risk.

NYPD leaders have also demonstrated a dismissive attitude toward New Yorkers' fundamental rights. Former NYPD Commissioner Bill Bratton notably cast members of the public who filmed NYPD activities as contributing to an "epidemic," suggesting in May 2016 that civilians engaging in constitutionally protected activity bore responsibility for the escalation of law enforcement encounters.[7] In the wake of these comments, the NYCLU and others

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[3] Letter to NYPD Office of the Deputy Commissioner of Public Information, November 21, 2011, available at: http://blogs.nppa.org/advocacy/files/2011/11/DCPI-Letter-Signed-11-21-11.pdf.

[4] Letter to NYPD Office of the Deputy Commissioner of Public Information, August 6, 2012, available at: http://blogs.nppa.org/advocacy/files/2012/08/NYPD-Letter-08-06-121.pdf.

[5] Jason Silverstein, *How I Got Arrested while Recording New York City's First Protest Against President-Elect Trump*, N.Y. Daily News, Nov. 10, 2016, available at: http://www.nydailynews.com/new-york/manhattan/arrested-recording-nyc-trump-protest-article-1.2867893; Sarah Kaufman, *65 Arrested at NYC Trump Protest, Including Group of Journalists*, Patch, Nov. 10, 2016, available at: https://patch.com/new-york/midtown-nyc/65-arrested-nyc-trump-protest-police.

[6] *Charles v. City of New York*, No. 12-CV-6180 (SLT)(SMG) (E.D.N.Y. Feb. 8, 2017).

[7] Jason Silverstein, *How I Got Arrested while Recording New York City's First Protest Against President-Elect Trump*, N.Y. Daily News, Nov. 10, 2016, available at: http://www.nydailynews.com/new-york/manhattan/arrested-recording-nyc-trump-protest-article-1.2867893; Sarah Kaufman, *65 Arrested at NYC Trump Protest, Including Group of Journalists*, Patch, Nov. 10, 2016, available at: https://patch.com/new-york/midtown-nyc/65-arrested-nyc-trump-protest-police.

expressed concern about the disconnect between official policies on paper and statements from Department leadership that undercut those policies' effectiveness.[8]

Without a mandate to systematically collect and report data on these incidents, it is difficult to know the full extent to which New Yorkers' rights are being violated. In June 2017, the Civilian Complaint Review Board ("CCRB") issued a report examining complaints of police interference with civilian recordings from January 1, 2014, through December 31, 2016. Of 257 such complaints during this period, the CCRB substantiated nearly one-third.[9] The CCRB warned that the Department needed to do more to address this behavior by officers as members of the public record police activities with ever greater frequency.[10]

The CCRB concluded its report by noting that its analysis was necessarily limited by its inability to investigate incidents of interference that went unreported.[11] Although we lack reliable quantifiable data in this area, we are well aware of widespread unlawful NYPD interference with the recording of police activities, through requests we receive for legal assistance and through our relationships with community partners who engage in organized cop-watching. For these reasons, the NYCLU enthusiastically supports the Right to Record Act's detailed reporting requirements, which will bring a powerful measure of transparency to NYPD practices and, crucially, uncover any racial disparities in such practices.

The Right to Record Act Complements the Existing Right to Record Police Activities Under the First Amendment

While neither the U.S. Supreme Court nor the Court of Appeals for the Second Circuit have directly addressed the issue of a person's right to record police activity, a growing consensus of circuit courts throughout the country have found this right to be protected under the First Amendment.[12] In the absence of binding precedent in New York, federal district courts in the Southern and Eastern Districts have trended toward recognizing such a right in recent cases.[13] Other judges in the Southern District, however, have held that defendant police officers were entitled to qualified immunity from suit in these cases, reasoning that the right had not been

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[8] John Marzulli, *Top Cop Bill Bratton's Rant on People Using Smartphones to Record Police Contradicts NYPD Memo*, N.Y. Daily News, May 26, 2016, available at: http://www.nydailynews.com/new-york/bill-bratton-rant-smartphone-contradicts-nypd-memo-article-1.2651609.

[9] Civilian Complaint Review Board, Worth a Thousand Words: Examining Officer Interference with Civilian Recordings of Police, 2017, at 1-2, available at: http://www1.nyc.gov/assets/ccrb/downloads/pdf/20172806_report_recordinginterference.pdf [hereinafter CCRB].

[10] *Id.* at 2.

[11] *Id.* at 34.

[12] *See Fields v. City of Philadelphia,* 862 F.3d 353 (3rd Cir. 2017); *Turner v. Driver*, 848 F.3d 678 (5th Cir. 2017); *ACLU v. Alvarez*, 679 F.3d 583 (7th Cir. 2012); *Glik v. Cunniffee*, 655 F.3d 78 (1st Cir. 2011); *Smith v. City of Cumming*, 212 F.3d 1332 (11th Cir. 2000); *Fordyce v. City of Seattle*, 55 F.3d 436 (9th Cir. 1995).

[13] *See Charles v. City of New York*, No. 12-CV-6180 (SLT)(SMG) (E.D.N.Y. Feb. 8, 2017); *Higginbotham v. City of New York*, 105 F. Supp. 3d 369 (S.D.N.Y 2015).

clearly established in this circuit, but without actually addressing the merits of whether the right exists.[14] Passing the Right to Record Act will send a clear message that New York City recognizes and affirms the existence and importance of this right.

The right to record police activities is clearly established under the First Amendment. The NYPD is aware of this, at least according to Department documents on the topic. On August 6, 2014, the NYPD issued a FINEST Message to all commands reminding officers that members of the public may legally record police interactions and that interference with recording by the officer "violates the First Amendment."[15] In April 2016, the Department's Legal Bureau issued a detailed legal bulletin, clearly stating that "the First Amendment provides citizens the right to observe and record police officers carrying out their duties" and that the public has "the right to monitor and criticize the police."[16]

Yet there is still value in the Council acting on this issue. This legislation removes any potential doubt as to the existence and protection of that right here in New York City. It communicates loudly that we are a city that values both the First Amendment and our residents' and visitors' rights to hold police accountable. New Yorkers should not have to wait for a perfect legal case to reach the Second Circuit when our elected officials have the ability to take action now. To the extent this bill's provisions are already in force when such a case presents itself, it would help that court better understand the established nature of the right at issue, and better position that court to provide the full measure of accountability to address officer misconduct.

The City Council has not shied away from incorporating clearly established constitutional rights into local law in other contexts. In 1994, the Council passed legislation—later strengthened in 2009—prohibiting interference with access to reproductive healthcare facilities, while noting that this right was already protected by state and federal law.[17] Like the Right to Record Act, the legislation included a private right of action, creating a local mechanism to enforce an existing right. Similarly, in 2013, the Council passed Local Law 71 as part of the Community Safety Act, which included a ban on bias-based profiling by law enforcement along with a private right of action.[18] In upholding that law against a preemption challenge, the First Department described the law as intended to "give effect to the right to 'equal protection of the laws' found in the Fourteenth Amendment and its New York Counterpart."[19]

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[14] *See Soto v. City of New York,* No. 13 CV 8474-LTS-JLC (S.D.N.Y. Mar. 6, 2017); *Basinski v. City of New York,* 192 F. Supp. 3d 360 (S.D.N.Y. 2016); *Mesa v. City of New York*, 09 Civ. 10464 (JPO) (S.D.N.Y.) Jan. 3, 2013).
[15] CCRB Report at 39.
[16] *Id.* at 40.
[17] N.Y.C. Admin. Code § 8-801; Local Law 3/1994; Local Law 24/2009.
[18] N.Y.C. Admin. Code § 14-151; Local Law 71/2003.
[19] *Patrolmen's Benev. Ass'n of City of New York, Inc. v. City of New York*, 142 A.D.3d 53, 61, (1st Dep't 2016), *appeal dismissed,* 28 N.Y.3d 978, 62 N.E.3d 564 (2016).

Both of these instances demonstrate the Council's ability and prior willingness to codify and build upon existing constitutional protections, and in doing so, to make them more readily accessible to and enforceable by New Yorkers here at home. The Council must take similar action now to codify and enhance local enforcement options to safeguard the right to record police activities.

Pass Community-Backed Intro. 541-C and Reject Intro. 182-D

Before this Council's term ends, members of this committee and of the Council as a whole will be asked to vote on two bills that have collectively been referred to as the Right to Know Act. Unfortunately, only one of these bills still deserves to carry that name and to be passed into law.

The NYCLU fully supports Intro. 541-C. This bill will require the NYPD to develop a policy to inform people of their constitutional rights regarding searches that are not supported by probable cause. It will ensure that the Department has mechanisms in place to document proof of a person's knowing and voluntary consent to such searches. We urge the Council to pass this important bill to improve the quality of policing in New York City and to enhance trust and accountability in police-community interactions.

The NYCLU does not support Intro. 182-D. Along with our community partners, the NYCLU had long supported earlier versions of this bill, which would have required NYPD officers to identify themselves at the start of non-emergency law enforcement encounters, provide an explanation as to why that encounter was taking place, and offer the person they were interacting with a business card at the end of any encounter not resulting in an arrest or summons. This common-sense proposal was a direct response to the lived experiences of New Yorkers of color who were subject to repeated, unlawful abuse and harassment by the police and who were routinely denied the most basic information needed to hold officer accountable: the names of the officers who mistreated them.

Prior versions of this bill recognized that, no matter the context, interactions with law enforcement are inherently frightening and intimidating, particularly for communities who have endured the most aggressive and discriminatory policing tactics for decades. Even something as simple as a person asking for an officer's name can feel too daunting a request to make, given the stark power imbalances inherent in these encounters. Mandating that an officer provide this basic information upfront was seen as a practical way to remove this source of tension by deescalating interactions, put into practice the NYPD's motto of "courtesy, professionalism, and respect," and to demonstrate a legislative commitment to community policing that is actually based in the person-to-person building of police-community relationships.

The current version of this bill, however, no longer fulfills that purpose. Intro. 182-D has carved out the most common interactions that take place between NYPD officers and New Yorkers. While prior versions of the bill required officers to identify themselves during any non-emergency encounter involving investigative questioning, this latest version only requires officer identification when a person is "suspected of criminal activity." But officers don't need to suspect people of criminal activity to approach them, disrupt their daily routines, question them, or harass them. New York courts have held that officers can approach people for investigative purposes, tell them to stop, ask them to produce identification, question them about where they're going or items in their possession —without ever having enough real evidence or even suspicion to legally investigate them.

These types of encounters are the least transparent and the hardest to keep track of. There is no systematic accounting for investigatory encounters that do not rise to the level of reasonable suspicion stops, so it is impossible to know the full extent to which New Yorkers are subjected to these low-level encounters. What we do know—and what our community partners have in abundance—are the countless examples of New Yorkers who have been profiled, harassed, and intimidated by police, even when they were never accused of or suspected of criminal wrongdoing. And what we do know is that officer misconduct does not depend on whether the person police interact with is suspected of criminal activity or not. It depends on how the officer acts during that encounter. Because of the lack of any meaningful transparency in these situations, these are the types of interactions that are most susceptible to abuse and most in need of legislative intervention. By excluding them from coverage, Intro. 182-D allows officers to continue to hide behind anonymity and to exempt themselves from accountability for misconduct.

In addition, New Yorkers who identify as women are far more likely to experience these lowest level encounters, meaning that the bulk of interactions between officers and women will be exempt from this version of the law. In our current cultural climate, where each day brings new allegations of sexual misconduct by public officials, we cannot afford to ignore the experiences of New Yorkers who identify as women. The City Council must stand up for all New Yorkers by ensuring the police are held to the highest standard of professionalism in all encounters.

By any reasonable standard, the Right to Know Act should never have been viewed as a "controversial" proposal. It is not controversial for New Yorkers to know the names of officers who stop them. It is not controversial to require officers to state their names during traffic stops. It is not controversial to let people know the most basic reason why an officer has used the authority we have entrusted in them to stop and forcibly detain a person in their community, outside her home, or even inside the hallways of his own apartment building. What is controversial is elected officials cutting deals behind closed doors and cutting the very

communities behind legislative proposals out of the process. What is controversial is not being responsive to the New Yorkers who are most directly impacted by police misconduct and who will most directly feel the consequences of bad legislation becoming bad law.

This Council has just days to deliver on the promise its members were elected on four years ago: to reform discriminatory and abusive police practices. Passing Intro. 541-C will be one step toward the fulfillment of that promise, and we urge the Council to do so without delay. Passing Intro. 182-D, however, would be a signal that the Council does not take seriously the daily, lived experiences of countless New Yorkers who are denied any chance for meaningful accountability when they suffer abuse by law enforcement. The NYCLU urges the Council to stand with New Yorkers by passing the community-supported Intro. 541-C and by rejecting Intro. 182-D.

Conclusion

We thank the Council for the opportunity to offer testimony today. We look forward to continuing to work with the Council to ensure that all New Yorkers are treated with dignity and respect in their interactions with law enforcement personnel.

TESTIMONY

The Council of the City of New York
Committee on Public Safety

A Local Law to amend the administrative code of the city of New York, in relation to respecting the right to record police activities

Proposed Int. No. 1235

The Legal Aid Society
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December 14, 2017

Good afternoon. I am Joshua Carrin, a staff attorney at The Legal Aid Society testifying on behalf of the Special Litigation Unit in the Criminal Practice, a specialized unit dedicated to addressing systemic problems created by the criminal justice system. We thank this Committee for the opportunity to provide testimony on Proposed Int. No. 1235.

ORGANIZATIONAL INFORMATION

Since 1876, The Legal Aid Society has provided free legal services to New York City residents who are unable to afford private counsel. Annually, through our criminal, civil and juvenile offices in all five boroughs, our staff handles about 300,000 cases for low income families and individuals. By contract with the City, the Society serves as the primary defender of indigent people prosecuted in the State court system. In this capacity, and through our role as counsel in *Ruben An v. City of New York*,[1] a civil rights action challenging the constitutionality of the New York City Police Department's ("NYPD") widespread practice and custom of interfering with and deterring individuals recording NYPD officers performing their official duties in public, the Society is in a unique position to testify about the importance of the right to record in New York City.

SUPPORT FOR INT. NO. 1235

We support the amendments to the Administrative Code of the City of New York and the New York City Charter that will give New Yorkers a legal remedy for violation of their right to record police activity. The enactment of this statute constitutes an essential measure toward promoting and protecting the democratic values manifest in the act of civilians observing and recording the police, including civic engagement, access to information about government

[1] Currently pending in the United States District Court for the Southern District Court of New York, 16 Civ. 05381 (LGS).

officials and their public activities, the ability to petition for a redress of grievances, and the expression of free speech and dissent.

Recommended Revision

As a preliminary matter, The Legal Aid Society respectfully recommends the following revision be made prior to enactment:

As currently proposed, the second sentence of Section 10-902, Right to record police activities, reads as follows:

> Nothing in this chapter shall be construed to permit a person to engage in actions that physically interfere with an official and lawful police function, or *to prevent the seizure of any property or instruments used in a recording of police activities otherwise authorized by law,* or to prohibit any officer from enforcing any other provision of law.
>
> (Emphasis added.)

The bolded clause suggests that police officers are not prohibited from seizing a cellphone or recording device when it has been used to record *lawful* police activities ("police activities otherwise authorized by law"); or, rather, only *prohibits* police from seizing a recording device when it is used to record *unlawful* police activity. Such a mandate clearly contradicts the legislative intent. We respectfully recommend the sentence be rewritten to include the following (insert set off in italics):

> Nothing in this chapter shall be construed to permit a person to engage in actions that physically interfere with an official and lawful police function, or to prevent the seizure of any property or instruments used in a recording of police activities *where the seizure is* otherwise authorized by law, or to prohibit any officer from enforcing any other provision of law.
>
> (Emphasis added.)

The proposed revision provides that police officers are not prohibited from seizing a cellphone or recording device as long as that seizure is otherwise authorized by law.

Why The Statute Is Necessary

The enactment of legal remedy for violations of the right to lawfully record police activity is vital protection for New Yorkers who lawfully record police encounters. The widespread problem of officers interfering with civilian recording is prevalent and thus far, existing legal remedies have proven inconsistent, and thus, ineffective, as will be discussed below in greater detail.

In order for the right to record to be meaningful, New Yorkers need to know that its exercise is protected; so do the police. Thus, the statute must be enacted to emphatically demonstrate that the City is unambiguously committed to protecting New Yorkers' right to lawfully record police activity.

Importance Of The Right To Record

The importance of civilian-generated videos of police activity was acknowledged by New York City's own Civilian Complaint Review Board ("CCRB"), which released a report[2] in June 2017 detailing the problem of police interference with, and underscoring the critical importance of, civilian recording of police activity:

> Recordings of police conduct are critical investigative tools that also have broad social import. In recent years, stories of police misconduct have, at times, dominated the news both locally and throughout the country. These stories have sparked a dynamic national dialogue about police accountability . . . . However, many of the tragedies underlying these news stories may have never come to light had they not been recorded by civilians. These video recordings, while often painful to watch, facilitate discussions and debates over the substance and scope of police action, which are matters of public concern. Ensuring civilians' ability to record police activity in contexts that do not impede officers' performance of their duties is essential to ensuring police accountability.[3]

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[2] CCRB, *Worth a Thousand Words: Examining Officer Interference with Civilian Recordings of Police*, June 2017, available at http://www1.nyc.gov/assets/ccrb/downloads/pdf/20172806_report_recordinginterference.pdf.
[3] *Id.* at 2.

The CCRB itself has found that its substantiation rate goes up dramatically when video evidence exists and shortens how much time it takes the CCRB to investigate a complaint.[4] Yet despite the conclusiveness of video evidence in resolving disputes about an encounter and the speed with which an investigation assisted by a video can close, officers have specifically interfered with civilian recordings by physically interfering, whether by blocking the recorder or throwing the phone, by threatening people, either with retaliatory summons or arrest, and by actually arresting people when they refuse to stop recording.

Body Cameras Are No Substitute For Civilian Recording

Police-worn body cameras have received a great deal of attention and support from law- and policy-makers in recent years, though the jury remains very much out as to whether they will ultimately prove to deter police misconduct.[5] Purported benefits to law enforcement notwithstanding, the overemphasis on police-worn body cameras as accountability tools tends to obscure the importance of civilian-generated recordings, and trivialize the attendant democratic values encompassed in the act of civilians observing and recording their police. Though a more thorough discussion of the merits of body cameras is outside the scope of this testimony, some of the implications of their use relative to civilian recording underscore the importance of civilian recording[6] and warrant mentioning here.

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[4] Press Release, CCRB, *New Analysis: Video Evidence Has Substantial Role in Determining Outcomes of Police Misconduct* (May 9, 2017), available at https://www1.nyc.gov/assets/ccrb/downloads/pdf/about_pdf/news/press-releases/2017/BWC%20Analysis%20Release_FINAL.pdf.

[5] Amanda Ripley and Timothy Williams, *Body Cameras Have Little Effect on Police Behavior, Study Says*, N.Y. Times, Oct. 20, 2017, available at https://www.nytimes.com/2017/10/20/us/police-body-camera-study.html. "The 18-month study of more than 2,000 police officers in Washington found that officers equipped with cameras used force and prompted civilian complaints at about the same rate as those who did not have them. . . . . Each officer was tracked for seven months, with the researchers recording use-of-force incidents, civilian complaints, charging decisions by prosecutors, and other outcomes to see if the cameras changed behavior. On every metric, the effects were too small to be statistically significant." *Id.*

[6] *See generally* Jocelyn Simonson, *Beyond Body Cameras: Defending a Robust Right to Record the Police*, 104 Geo. L.J. 1559 (August 2016).

With body cameras, control over the recording device and access to its footage shifts from civilians to the police. The result is that those who are intended to be held accountable exercise ultimate power to manipulate the technology—to turn on or off the camera, edit or mishandle the footage, or distribute it to the public—and thus, control the narrative surrounding their conduct.[7] Second, the nature of body camera footage itself implicates objectivity concerns: filmed from the perspective of the officer, it tends to "cause the viewer to sympathize with the officer's actions more than they would with a video taken from a neutral angle or from the perspective of the person engaging with the police officer."[8] Moreover, footage shot from an officer's body can only tell part of the story; it will not capture what happened outside the camera's scope or caused the filmed events to occur. Finally, as body cameras are directed at civilians, privacy and surveillance concerns, access to footage, the method and duration of its storage, and, ultimately, its use by the state are at stake.[9]

On the other hand, when civilians record the police, they decide when the camera is turned on, they record footage from their own perspective, and they control the release of that footage to the public or the authorities. As recently stated by the Third Circuit, "[b]ystander videos provide different perspectives than police and dashboard cameras, portraying circumstances and surroundings that police videos often do not capture. Civilian video also fills the gaps created when police choose not to record video or withhold their footage from the public."[10] Whereas when civilians exercise control over the footage, "it has the unique ability to empower traditionally powerless individuals to document and expose police abuses within their

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[7] *See, e.g.*, Nick Iannelli, *Baltimore County Police Criticized for Withholding Body Cam Footage*, WTOP, April 28, 2017, available at https://wtop.com/baltimore/2017/04/baltimore-co-police-criticized-for-withholding-body-cam-footage/.

[8] Simonson at 1566.

[9] *See generally, e.g.*, Ethan Thomas, *The Privacy Case for Body Cameras: The Need for a Privacy-Centric Approach to Body Camera Policymaking*, 50 Colum. J.L. & Soc. Probs. 191 (Winter 2017); *Chapter Four Considering Police Body Cameras*, 128 Harv. L. Rev. 1794 (April 2015).

[10] *Fields v. City of Philadelphia*, 862 F.3d 353, 359 (3rd Cir. 2017).

communities."[11] Civilians become the ones ensuring police are held accountable. And in the very act of observing and recording police activity, civilians participate in the public life of their communities.

Therefore the roll-out of NYPD-wide body cameras does not substitute the need for strong protections for civilians recording police.

The Problem Of Officer Interference With Civilian Recording

There is overwhelming evidence demonstrating that the NYPD has engaged in a widespread practice of interfering with New Yorkers' right to observe and record the police. The amended complaint filed by The Legal Aid Society in *Ruben An v. City of New York* details 46 allegations in civil complaints, 19 news articles, and 311 CCRB complaints from 2014 to 2016. Even greater cause for concern is that the problem of officer interference appears to be getting worse: the recently released CCRB Semi-Annual Report for January-June 2017 indicates that, compared to the same six-month period for 2016, civilian complaints of officer interference with recording increased more than 400%.[12]

In 2014, the NYPD issued a "Finest Message" in which it has acknowledged the right of civilians to lawfully record officer activity and directed officers not to interfere with the exercise of that right. At the time the FINEST Message was issued, the NYPD already had a persistent pattern of arresting civilians for recording police officers performing their official duties in public. The amended complaint in *An v. City of New York* includes 41 lawsuits and news articles containing allegations of officer interference from 2004 to 2014 alone, which is undoubtedly only a fraction of the actual number of such incidents during this period. Moreover, these

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[11] *Considering Police Body Cameras,* at 1816.
[12] CCRB Semi-Annual Report 2017, available at https://www1.nyc.gov/assets/ccrb/downloads/pdf/policy_pdf/annual_bi-annual/20171206_semi-annual.pdf.

incidents occurred well after the City and NYPD entered into the 1977 consent decree in *Black v. Codd*,[13] in which the NYPD stipulated that a civilian may remain in the vicinity of an arrest or detention of another civilian and take photographs without subjecting themselves to arrest.

Far more troubling is the wholesale failure on the part of the NYPD *since* it issued the FINEST Message in 2014 to take any corrective action to make sure that its contents would actually be effectuated. This is in large part because of the lack of legal remedy for people whose right to record has been interfered with but have not been also falsely arrested.

Conclusion

This law would make it more likely that an available legal remedy will actually deter future violations of the right to record.

[13] No. 73 Civ. 5283, 1 – 2 (S.D.N.Y. June 1, 1977).

TESTIMONY OF THE LEGAL AID SOCIETY

The New York City Council
Committee on Technology

December 14, 2017

New York, New York

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Introduction

Thank you Chairperson Johnson, Chairperson Gibson, and the Committees on Public Safety and on Health, for the opportunity to testify concerning forensic lab oversight in New York City. The Legal Aid Society believes this matter is of high public concern and is vital to the fair administration of justice.

Since 1876, The Legal Aid Society has been committed to providing quality legal representation to low-income New Yorkers. We are dedicated to ensuring that no New Yorker is denied access to justice because of poverty. The Criminal Defense Practice of The Legal Aid Society ("The Society") is the largest defender organization in New York City, representing a very substantial proportion of the persons charged with crimes in New York City.

Year after year we learn that innocent people have spent decades in jail based on faulty hair comparisons, bite mark analyses, and arson investigations—what history has now shown to be junk science. And yet forensic science is now an indispensable and ever-present part of the criminal justice system. Juries and judges increasingly rely on the testimony of forensic scientists to sort the guilty from the innocent. The forensic scientist wields an incredible amount of power over the outcome of criminal cases. We have testified several times in the last few years about the lack of transparency and the defensive and secretive culture that we have encountered, particularly at the Office of the Chief Medical Examiner's

Forensic Biology Department (OCME). The Council, to its credit, took a significant step toward creating accountability at the OCME through the passage of Local Law 85 in 2013.

Our more recent experiences, however, demonstrate that far more oversight is needed from the Council to create meaningful accountability and transparency in the New York City's forensic labs. We join our colleague public defenders in their comments on the insufficient state of disclosures and discovery from the OCME and the NYPD Forensic Lab to the defense bar. Our focus today concerns a troubling lack of forthrightness and honesty regarding two of its most controversial DNA testing and interpretation methodologies. We are very concerned about the consequences of the OCME's deceptions in these matters: innocent people may have been wrongly convicted, and people guilty of serious crimes may have gone unpunished. These concerns are also the subject of a recent complaint we filed with the New York state Office of the Inspector General. It is clear to us that the OCME is not capable of policing itself. Stronger oversight mechanisms are needed to ensure our labs remain accountable to the public.

The problems with the OCME's flawed methodologies are exacerbated by its decision to maintain a "rogue" individual DNA database: one that exists outside of the scope of Exec. Law 995, without any outside regulation, and that potentially contains the genetic information of thousands of innocent New Yorkers without

any lawful authority. The fact that the OCME felt empowered to create an extra-legal database shows that the lab operates as an island unto itself: it's leaders do not hold themselves accountable to or answerable to the citizens of this City whose tax dollars fund their work.

The Council Should Demand Greater Transparency And Accountability from The OCME

The Forensic Statistical Tool

In September, The DNA Unit of The Legal Aid Society filed a Coverdell complaint with the New York state Office of the Inspector General regarding several instances of dishonesty by the OCME regarding the use and validation of two of its most controversial DNA testing methodologies: an algorithm-based interpretation software called the Forensic Statistical Tool (FST) and a technique called Low Copy Number testing (LCN). We have noted with concern the increased the increased use of closed-source, proprietary software based on complex algorithms in DNA interpretation.[1]

FST is a 'probabilistic genotyping program.' It is designed to interpret complex DNA mixtures that would otherwise be uninterpretable. In practice, an OCME analyst would put into a report or testify as to FST results supporting the

[1] Coverdell complaint is attached to our comments, along with the OCME's response and our reply. Exhibits are available upon request.

inclusion of a suspect in a DNA mixture. However, the analysts issuing the reports or testifying on the witness stand had no idea how the FST calculations were actually performed. There was no way to verify the soundness of FST's conclusions.

The defense bar repeatedly sought the FST source code in order to consult with an expert regarding how the FST performs its mysterious calculations. In state court, we lost every time to the city prosecutors and OCME who vociferously opposed our efforts to obtain this code. The finer details on how FST operated remained in the dark.

Last year, Judge Valerie Caproni ordered the OCME to turn over their source code to the Federal Defenders of New York. The OCME has used FST on cases since 2011. The Federal Defenders were the first organization in over five years to get its hands on FST's instructions. They hired an expert named Nathaniel Adams from Forensic Bioinformatics to review the source code.

Adams found that FST was performing calculations differently than OCME described in court, differently from what OCME described to the New York State Commission on Forensic Science and differently from what OCME described in their two scientific journal publications. We believe these differences bias the program in favor of the prosecution. However, at this point Adams was prevented by a court order from revealing the specifics of what he saw in the code.

According to the Recommendations of the International Society for Forensic Genetics, all affected parties should be notified of quality assurance issues. The rationale behind this is the recognition that "during the time a given piece of software is in use, new limitations or programming faults almost inevitably will be disclosed. The impact of such faults should be investigated by the providers or developers and disclosed together with the fix. However, it is important that knowledge of any newly arisen problems is shared transparently with end users and other stakeholders in the judicial process. Corrective actions must be triggered as needed...This requires, as a minimum, a link between the providers and developers on the one hand, and end users and interested third parties on the other....[t]his link could be drawn, for example, by a website where critical information is made available..." *Id.* Clearly this did not occur when OCME discovered the negative likelihood ratio and instituted its "fix" in without notifying anyone: not prosecutors, not defense counsel, not the Forensic Science Commission or its DNA Subcommittee even though those bodies were tasked with reviewing and approving the method for casework, and not the City Council.

At this point, FST had been used on thousands of cases. People plead guilty based on FST results. People lost at trial based on FST results. People went to prison because of FST. We renewed our fight in state court to obtain the source code to FST. We needed to know how bad the problem was. OCME and the New

York City prosecutors continued to fight against us in court. However, OCME employees admitted that there was an error in the FST code, albeit a different one than described by Adams, and that the FST code had been changed.

After we filed our complaint with the Inspector General, The New York Times and even international press agencies reported on the story.[2] It was not until the press became involved that OCME agreed to allow FST, a product made with tax payer money, to become transparent by releasing its source code. The code has now been released pursuant to a court order granting a motion filed by the news organization ProPublica.

As of early 2017, FST was being phased out and replaced with a commercial program to interpret DNA mixtures called STRmix. Unfortunately, STRmix is also closed source although it does allow defense experts to review the code under numerous restrictions. STRMix itself had two verified coding errors that resulted in miscalculations.[3] The problem with closed source is not limited to searching for errors. It has to do with subjectivity. Different DNA mixture interpretation software programs are getting different answers in the same case. As one of the

[2] https://mobile.nytimes.com/2017/09/04/nyregion/dna-analysis-evidence-new-york-disputed-techniques.html?referer=https://www.google.com/

[3] R. v. Pfennig, SASC 171, 62-63 (Sup. Ct. S. Australia, 2016) https://johnbuckleton.files.wordpress.com/2016/08/r-v-pfennig-judgement-11-nov-2016.pdf

STRmix designers stated, these programs "contain elements of subjectivity programmed into them."[4]

One of the few scientific studies performed to compare different DNA interpretation software programs found startling results.[5] The study used three different probabilistic genotyping programs to analyze five crime scene DNA samples. For one sample, two of the three programs calculated inconclusive likelihood ratios of 1.20 and 1.29. The third program, however, reported an inclusionary statistic of 109 trillion. For a second set of samples, two programs again reported exclusionary likelihood ratios in the hundreds – arguably in an inconclusive range. The third program, however, reported an inclusionary likelihood ratio in the hundred millions. For a third item, all three programs reported inclusionary likelihood ratios: 900 million, 1 billion or 5 hundred quintillion. The greatest likelihood ratio was a trillion times larger than the smallest likelihood ratio.

One of STRmix's first cases in the United States involved a homicide in upstate New York. The prosecution sent a DNA mixture to be analyzed using a program called TrueAllele. TrueAllele reported that there was no statistical support for including the suspect. The prosecutor in that case then requested the sample be reanalyzed by STRmix and, depending on the settings, got an inclusion.

[4] https://johnbuckleton.files.wordpress.com/2016/09/dna-evidence-in-ny-v-oral-hillary-i2.pdf
[5] Paolo Garofano, *et al., An alternative application of the consensus method to DNA typing interpretation for Low Template-DNA mixtures*, Forensic Science International: Genetics Supplement Series 5 (2015) 422-424.

Ultimately, the accused had the benefit of a defense team well versed in DNA issues. Fortunately, the STRmix results were precluded—an unlikely outcome for many presumptively innocent individuals faced with problematic forensic science. The court precluded them because the lab which tested the evidence in the case had never validated STRMix. A forensic method cannot be used unless it is validated by the lab using it. Yet OCME, never went back and did a new validation on FST even though they changed its algorithms. The FST used in casework is not the FST that was validated by OCME.

Leading scientists have raised the alarm about these probabilistic genotyping programs. Two researchers at the National Institute of Standards and Technology recently published a paper arguing that the use of probabilistic genotyping programs in the interpretation of complex DNA mixtures "risks allowing personal preference to creep into expert testimony and potentially distorts evidence for a jury."[6] In fact, NIST will be conducting a study where they send mixtures to labs across the country to assess the reliability of the methods they use.[7] This will include probabilistic genotyping programs.

In 2016, a report published by the President's Council of Advisors on Science and Technology concluded that the forensic science community had yet to

[6] https://www.nist.gov/news-events/news/2017/10/nist-experts-urge-cautiob-use -courtroom-evidence-presentation-method

[7] *NIST to Assess the Reliability of Forensic Methods for Analyzing DNA Mixtures*, October 3, 2017 press release, available at https://www.nist.gov/news-events/news/2017/10/nist-assess-reliability-forensic-methods-analyzing-dna-mixtures.

establish the scientific validity of these probabilistic genotyping methods or the reliability of the software. They noted in particular that results differed depending on the type of software being used.[8]

And yet, this software has already been used in thousands of cases in New York City and will be used in every DNA case in the future at the OCME. The only way for this city to ensure that questionable forensic science stay out of our courts is to require all city agencies to use open source forensic software. This should be a procurement requirement. Science must be open to scrutiny. If is not, the city will be welcoming more wrongful convictions within the five boroughs.

The OCME should also be required to re-examine all of its previous FST cases with the full cooperation of the defense bar. We ask the City Council to require the OCME notify defense counsel in all cases that were analyzed with FST prior to the finding of the error. In addition, an independent agency or body should conduct a full root-cause analysis and a full validation of the newer code, the results of which should be made public.

LCN Testing

Another example of troubling dishonesty identified in our complaint to the Inspector General concerns the OCME's use of a testing methodology called Low Copy Number. LCN testing is the analysis of very small amounts of DNA:

[8] https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf

quantities that would otherwise be deemed insufficient for testing. The OCME was the only lab in the country using their LCN method. The FBI's CODIS database (NDIS), for example, does not accept DNA profiles in casework which were derived from LCN testing because of the increased potential for error in LCN testing. The OCME LCN was also the subject of numerous admissibility challenges by The Legal Aid Society and other defense agencies, including our successful challenge in Brooklyn in 2013[9].

Our recent complaint identified false statements made by a high –ranking OCME employee to members of the Commission of Forensic Science about the validation of the Low Copy Number (LCN) testing methodology. These statements were made to the Commission during its hearing on October 24, 2014 where members were exercising their duty of oversight of the OCME's DNA testing methodologies pursuant to Exec. Law §995-b. Commission members were concerned that LCN testing was being used in casework in instances that did not meet the criteria for which it had been validated and approved by the Commission. Specifically, in the case of *U.S. v. Morgan*[10], the OCME reported a positive identification in a mixed, degraded sample that contained only 14 picograms of total DNA with at least three contributors. Yet the OCME had not completed *any* validation experiments with LCN on three person mixtures containing less than 25

[9] *People v. Collins*, 49 Misc. 3d 595, 613 (Sup. Ct. Kings Co. 2015) (Dwyer, J.).
[10] 53 F.Supp.3d 732 (SDNY 2015).

picograms of total DNA. In short, the OCME exceeded the limits of the study they used to develop LCN and to test its reliability, all in violation of the guidelines of the forensic science community.

The OCME's response to the Commission inquiry, given by the Deputy Director of Forensic Biology, Eugene Lien, was fundamentally misleading. At the October 2014 meeting, Commissioners made an effort to determine if the OCME's LCN testing could accurately provide results under what are fairly extreme parameters: a mixed sample with only a few cells worth of DNA. When directly asked by Commissioner Barry Scheck about the existence of a particular validation study that confirm the reliability of the LCN technique under these extreme conditions, Mr. Lien replied affirmatively and unequivocally that the study had been performed. When asked to produce the study to the Commission, Mr. Lien hesitated and then went on to assure the Commission that the study in question had been previously reviewed by the DNA Subcommittee.

Mr. Lien and other OCME officials were later deposed in a wrongful termination lawsuit for former Commission member and OCME employee Dr. Marina Stajic, who claims, in part, that she was terminated due to her unfavorable Commission vote with respect to LCN testing, and in particular, her vote to pursue the issues raised by the *Morgan* matter.

During his deposition, Mr. Lien was asked under oath about his response to Mr. Scheck's question regarding OCME validation of LCN testing for mixtures under 25 picograms. When presented with the 11 volumes of internal validation conducted by the OCME on LCN testing, Mr. Lien was unable to identify any study that met the criteria of Mr. Scheck's question.[11] Mr. Lien prevaricated about LCN being validated "as a whole." But Mr. Lien was not able to point to a study conducted by the OCME that met the criteria of Mr. Scheck's straight forward question. Not only did Mr. Lien give false statements to the Commission, no one at the OCME attempted to correct or clarify his answers at any point after the meeting.

This incident demonstrates that the OCME has little respect for the Commission's oversight authority. OCME officials can give misleading statements to Commission members with impunity. This speaks to the necessity of additional and more meaningful oversight over the OCME's work. The OCME in the past has had a culture of secrecy and a lack of transparency that lead to the bad science in the case Serrita Mitchell, the criminalist who was allowed to botch rape kits for 8 years before finally being fired. This body addressed those concerns by enacting Local Law 85 in 2013. The current transparency issues at the lab raise additional concerns that warrant further action by the Council. The

[11] at pp.93-103 of Lien transcript, attached. Full transcript available upon request.

public deserves better from this City agency, and all parties in the criminal justice system need to know that they can rely on the testimony of OCME scientists to be always be truthful, accurate, and fully transparent. This can only occur if the lab is truly accountable to an agency willing to objectively scrutinize its work.

OCME's Local DNA Database

Another long-standing concern of The Legal Aid Society, is the OCME's maintenance of its own DNA "suspect" database known as Linkage. The OCME's policy is to enter individual DNA profiles generated from buccal swab samples it receives during the course of investigations into its own unregulated database where they can be kept indefinitely, regardless of whether or not the individual has been convicted of a crime. These profiles can be searched against any and every crimestain sample the OCME receives.

The OCME maintenance of its linkage database is in direct contravention of Executive Law §995 and a threat to the genetic privacy of all New Yorkers. People who were never arrested, but who voluntarily gave DNA samples to assist the police in an investigation, for example, can have their DNA profiles saved for all eternity by the OCME. People who are acquitted of crimes or whose cases are dismissed, even juveniles can go in the Linkage system forever. The people of the State of New York, through their elected representatives, have decided that the state can only keep the genetic information of those who have been convicted of

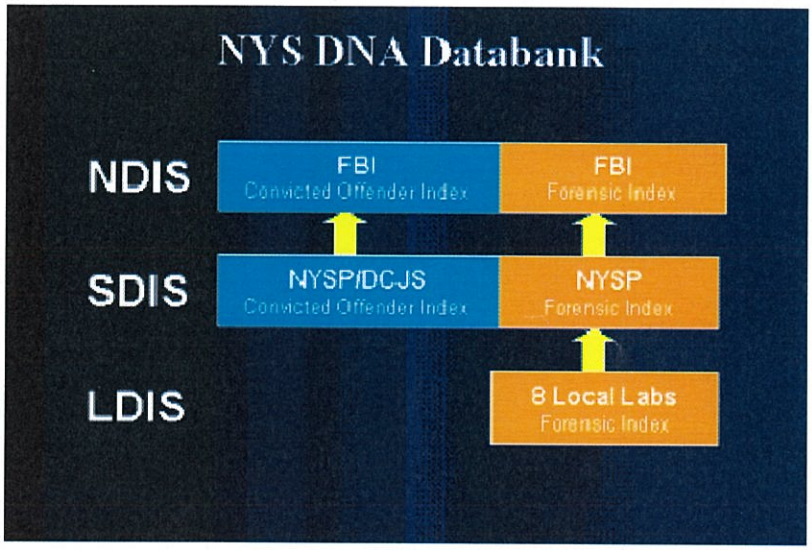
crimes. And yet, the OCME has decided it is not accountable to the citizens of this state and has taken it upon itself to create its own rules for when and how to violate the genetic privacy of individuals.

The New York Legislature clearly did not anticipate that local DNA databases of known profiles would be maintained. A plain reading of Executive Law § 995, the legislative history of the law, the rules of and regulations of the State of New York laws, and the current information from the New York State Division of Criminal Justice Services (hereinafter "DCJS") makes clear that no such local DNA database was contemplated.

We know the New York State Legislature did not contemplate a local DNA database, because if it had it would have set forth rules to regulate that database as well. On DCJS's website they discuss all the databases that are anticipated by the legislature: "In New York State, DCJS has administrative oversight of the DNA databank. The New York State Police Forensic Investigation Center maintains the State DNA Index System (SDIS). There are eight Local laboratories participating in CODIS and they are each referred to as a Local DNA Index System (LDIS) lab."[12] DCJS also states "[a]ll local laboratories maintain a Forensic Index, which is comprised of those DNA profiles; those profiles are routinely compared with each other in order to identify and link crimes that may have the same

[12] See About the Office of Forensic Services, The New York State DNA Databank (emphasis in original).

perpetrator."[13] The structure for how information is expected to be stored is depicted below, which is a schematic from the New York State Division of Criminal Justice Service's website:



http://www.criminaljustice.ny.gov/forensic/dnabrochure.htm

Notably, the location for where the OCME's "Linkage" database would be depicted is blank because the Legislature had no intention, and indeed did not authorize the OCME to maintain a database of unconvicted individuals.

As the OCME's "Linkage" database is not contemplated and not authorized by the Legislature, it is not subject to any rules or regulations and it provides the people within it with no safeguards. It is a truly stunning position for a City agency to take that although there is a law regulating DNA Databases in New York State, those laws do not apply to them.

[13] Id.

The OCME's maintenance of Linkage is a further indication of the lab's lack of accountability to the public. We ask the Council to require the OCME to eliminate this extra-legal database and to restore the genetic privacy of potentially thousands of New Yorkers.

Conclusion

We are grateful to the Council for spotlighting these issues of oversight in our City's forensic laboratories. We look forward to working with the Council to implement our recommendations and to ensuring truly transparent, reliable, and accountable forensic science makes it into our courtrooms.

EXHIBIT A

THE LEGAL AID SOCIETY

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September 1, 2017

Honorable Catherine Leahy-Scott
New York State Inspector General
61 Broadway, Suite 2100
New York, New York 10006

Dear Inspector General Leahy-Scott,

Several instances of serious malfeasance by the New York City Office of the Chief Medical Examiner (OCME) have come to our attention and warrant further investigation by your office.

As New York providers of representation to indigent people charged with crimes, the Legal Aid Society and the Federal Defenders of New York believe the OCME has engaged in negligent conduct that undermines the integrity of its forensic DNA testing and analysis. Our clients have been convicted based upon the OCME's unreliable and now-abandoned "Low Copy Number" (LCN) DNA testing methods. The OCME produced unsound statistical evidence with its malfunctioning Forensic Statistical Tool (the FST) software in many other cases. For years, the OCME has kept known problems with both of these methods secret from the public, from the courts, and from the New York Commission on Forensic Science.

We draw your attention to three instances of alarming misconduct. First, from at least 2010, the OCME identified significant malfunction in the FST, their proprietary, in-house software the lab uses to analyze DNA samples. The number of cases affected by this malfunction is unknown because the OCME only disclosed the malfunction in July of this year. The OCME exacerbated the problem by choosing not to properly validate the revised software. Second, in direct violation of basic scientific principles, the OCME manipulated data during their validation of the LCN methodology. Again, it is not known how many people the OCME's data manipulation impacted. Third, the OCME made false statements to the Commission on Forensic Sciences and others about its testing methodologies.

Pursuant to Executive Law sections 995(3) and 995-b, the Commission of Forensic Science is the sole regulatory authority charged with approving the methodologies used by the OCME for DNA testing. The Commission's ability to evaluate these methods relies on an honest and forthright exchange between the Commission and lab employees about the nature and limitations of the testing methods before them for review. The consequences of dishonest work

by the OCME are severe: innocent people may be wrongly convicted, and people guilty of serious crimes may go free.

These matters are of high public concern and should be the subject of an investigation by your office. It is critical to the fair and efficient administration of justice that all stakeholders have an opportunity to re-examine these LCN and FST cases in light of what your investigation will reveal.

Summary of OCME Violations

To begin, OCME officials recently admitted via affidavits in ongoing criminal litigation that the source code in their in-house likelihood ratio program, the Forensic Statistical Tool (FST), originally contained errors and was taken offline and replaced with new code. This process took place without any notification to the New York Commission on Forensic Science, the defense bar or prosecutors, or to the scientific journal that published two papers on the FST. No validation for the new code has ever been provided, nor has any information about the new code's risk of creating false positive associations. The number of cases affected by the errors in the discarded code are unknown.

Furthermore, officials at the OCME also engaged in selective use and reporting of data during their experiments to validate the FST before it came online for use in casework. In essence, when the validation data did not conform to theoretical expectations, they changed it—the very opposite of the scientific method. The OCME's selective use or "flattening" of data was also not reported to the Commission of Forensic Science who approved its use and was also omitted from the OCME's published paper on the FST.

Finally, in a separate instance, OCME employees made false statements to members of the Commission of Forensic Science about the validation of the Low Copy Number (LCN) testing methodology. These statements were made to the Commission during its hearing on October 24, 2014 where members were exercising their duty of oversight of the OCME's DNA testing methodologies pursuant to Exec. Law §995-b. Commission members were concerned that LCN testing was being used in casework in instances that did not meet the criteria for which it had been validated and approved by the Commission. Specifically, in the case of *U.S. v. Morgan*[1], the OCME reported a positive identification in a mixed, degraded sample that contained only 14 picograms of total DNA with at least three contributors. Yet the OCME had not completed *any* validation experiments with LCN on three person mixtures containing less than 25 picograms of total DNA. In short, the OCME exceeded the limits of the study they used to develop LCN and to test its reliability, all in violation of the guidelines of the forensic science community. The OCME's response to the Commission inquiry, given by the Deputy Director of Forensic Biology, Eugene Lien, was fundamentally misleading.

The OCME's deceptions with respect to critical matters of concern to the agency charged with its oversight warrants further investigation by the Inspector General's Office.

[1] 53 F.Supp.3d 732 (SDNY 2015).

What is the FST?

The FST is a software that was developed in-house by the OCME to analyze complex DNA mixtures and assign a "likelihood ratio" of inclusion or exclusion to a given comparison sample. No other forensic lab in the world used the FST, and this program has now been replaced with new software called STRMix. The use of programs like the FST to analyze complex mixtures is novel and controversial within the field of forensic DNA analysis. In the report produced last year by the President's Council of Advisor's on Science and Technology (PCAST) entitled "Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature Comparison Methods," the use of likelihood ratio software to analyze complex mixtures was mentioned as a promising new technology, with the caveat that it still requires

> careful scrutiny to determine (1) whether the methods are scientifically valid, including defining the limitations on their reliability (that is, the circumstances in which they may yield unreliable results) and **(2) whether the software correctly implements the methods. This is particularly important because the programs employ different mathematical algorithms and can yield different results for the same mixture profile.**[2] [emphasis added]

Problems with the FST Source Code Discovered in *U.S. v. Johnson*

Because the methodology of using likelihood ratios to statistically analyze complex mixtures requires millions of mathematical calculations, computer software is required to do these calculations accurately and within a reasonable amount of time. The OCME developed their own software for the FST. The OCME declared a proprietary interest in the source code for this software and never disclosed the code to the public. Judge Valerie Caproni issued a subpoena for the source code in *U.S. v. Kevin Johnson*[3]. The code was provided to the defense under a protective order. This was the first time a defense expert had ever had an opportunity to review the FST source code in any criminal case.

The findings were startling. The defense expert found that the application of the FST software includes functions that do not reflect, and are even counter to, the methodology as described by the OCME.

As the defense in *Johnson* argued in its motion to preclude the evidence, "...the program completes unexpected functions about which the validation study is silent and the results of which are never reported to the subject of testing."[4] What's worse, it came to light during the review that the FST "...performs LR [likelihood ratio] calculations subject to a formula that has **never been reported, and which favors the prosecutor's hypothesis."**[5] [emphasis added]

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[2] PCAST Report, p.79 (emphasis added). Available at https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf

[3] 15 Cr-00565-VEC (SDNY)

[4] Revised Memorandum of Law in Support of Motion to Exclude the DNA Evidence Generated By the OCME's Forensic Statistical Tool (FST), p.42. Available on PACER, and upon request.

[5] *Id.*

Specifically:

> The embedded code jettisons data for entire loci[6] when the frequency for individuals is considered to be unacceptably high. A high frequency allele[7] would push a LR closer to 1. As FST is supposed to calculate the potential frequencies for every possible genetic combination at each locus, eliminating a locus entirely where data includes a high frequency allele is likely to favor the government.[8]

This powerful feature of the FST was never submitted to peer review: It was not included in the OCME's publication on the FST. It was not part of its validation, nor was it submitted to the DNA subcommittee or the Commission on Forensic Science who approved the FST.

OCME's Response to the *Johnson* Findings Reveals Additional Wrongdoing

Attorneys with the Legal Aid Society drew the court's attention to the findings regarding the FST source code in a case pending in New York County Supreme Court, *People v. Johnnie Jackson*[9]. In response, the District Attorney submitted an affidavit by Eugene Lien, the Deputy Director of the OCME, wherein Lien does not dispute the defense findings in *Johnson* and instead makes additional damning admissions. [Lien affidavit attached]

According to Eugene Lien's affidavit, the FST is performing calculations differently from when its validation studies were performed. Interestingly, he does not specify what the actual differences are, how the "modification" was implemented or what quality assurance measures were taken. More importantly, however, there was seemingly no validation study performed to establish the appropriateness of these changes. The FST performed a different calculation when the validation studies were performed. The OCME indicated they conducted a performance check to "confirm it was generating reliable results following the modification," [Lien affidavit, ¶7] but the FST, in its current iteration, has never been fully validated for use in casework.

Essentially, the source code that the OCME provided to the defense in the federal case, *Johnson*, is a different iteration than the one originally in use when the FST was approved by the Commission and submitted to a scientific journal for peer review. According to Lien, after the FST was put into use in casework, the OCME discovered a critical error and "the FST program was taken offline and portions of the software were re-coded to cap the total per-locus allele frequency." [Lien affidavit, ¶6]. Mr. Lien, again, describes no quality assurance measures taken, no validation studies performed and no further remedial measures taken to ensure this was the appropriate resolution. Instead, as the defense in *Johnson* revealed, entire loci were disregarded

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[6] "Loci" is the plural of "locus". In genetics, it refers to a position on a chromosome.
[7] An "allele" is a variant form of a gene found at the same place on a chromosome. DNA profiles are created by determining the variation in alleles at different loci.
[8] *Id.*
[9] Ind. Nos 1644/2016, 727/2017 (N.Y. Sup. Ct. 2017)

if the math didn't work, and this change in the analysis was not reported to the DNA Subcommittee.

The unreported and unapproved changes made to the FST behind the back of the Commission on Forensic Science and its DNA Subcommittee in this case is in direct violation of this governance structure and Exec. Law §995(3). While the lab must take measures to ensure the accuracy and reliability of its results, in New York, it also is answerable to the Commission and DNA Subcommittee for approval of any such measures. For the OCME to employ a different calculation on DNA mixtures, it would need to seek and gain approval from the DNA subcommittee, then the Commission on Forensic Science. The statutorily required safety check to determine whether a newly implemented technique works properly within a particular laboratory was bypassed.

The OCME bypassed these required procedures because they took it upon themselves to self-regulate and "fix" this obvious inaccuracy in the FST's results. Upon discovery, the OCME made a "fix" to the obvious error. As far as we know, they did not revisit their validation studies to see how or why this error was not discovered before going online with casework. They did not revalidate their results with the "fix" to ensure reliable results. They did not revalidate the entire program to determine whether this "fix" would have unexpected consequences for the calculations that were effected. They did not take any quality assurance measures or perform a root cause analysis to fully understand the problem and whether it signaled a deeper flaw in the code. And they did not report to the Commission, the Subcommittee, ASCLD/LAB, the public, or any defense attorney (so far as we know) that there was a major error in their calculations that they were going back to address. Instead they recoded the program, such that entire swaths of data would be ignored (possibly exculpatory data), and they justified this by redefining the "fix" as not affecting the methodology.

The OCME cannot say how many false positive associations the "fix" created. In other words, the OCME cannot say how many people will be falsely associated with crime scene DNA mixtures. This is because the OCME does not know. The lab chose not to subject the "fix" to validation or false positive testing. The "fix" changed the way the FST processes data, making the program report different results from the same data than it previously had. As Lien explains, the "fix" was to "ensure that negative likelihood ratios would not be the end result." [Lien Affidativit at ¶ 6]. This unreported change renders previous false positive testing irrelevant.

Obviously, falsely positives are of paramount concern to the Commission, the courts, and the public. False positive testing is a critical component of validation, and the Commission considered the OCME's false positive data before approving the FST for use in casework. Without reporting the "fix" to anyone, the OCME employed the FST in countless cases. The number of cases where the FST falsely favored inclusion is currently unknown. Only a comprehensive review of every case in which the OCME reported a positive likelihood ratio can determine the scope of harm has already been done.

The "Flattening" of Data in the FST Validation

The OCME's lack of transparency with the Commission and the public regarding the validity of the FST is not limited to problems with the source code. The OCME was withholding critical information from the Commission and the public even during the original experimental validation of the FST. During validation, the OCME tailored the data in their studies to generate their desired result, again not disclosing this fact to the Commission or in their published paper on the FST.

One of the known problems with complex mixture analysis is the phenomenon of allelic drop-out. Simply put, due to the nature of real-world case samples (small amounts of DNA, degradation of samples) sometimes alleles from contributors don't appear in the observed data: they drop-out. All DNA likelihood ratio software programs must contain an estimate of the rate of this phenomenon in order to produce an accurate result. The rate of drop-out for the FST program was determined through a validation study at the OCME.

During the *Frye* hearing in *People v. Collins/Peaks*[10], Dr. Adele Mitchell, a deputy director at the OCME and one of the creators of the FST, provided testimony about the validation of the FST and specifically the determination of the rate of allelic drop-out. She revealed that when the observed drop-out rates in her experiments were higher than she assumed they would be, she simply lowered the observed drop-out rates to make it more consistent with her assumption that drop-out rate decreased with the size of a DNA sample. In other words, when the actual data did not behave as the OCME expected, the OCME flattened out or fixed the aberration to fit their expectations. This fact was disclosed publicly for the first time during cross-examination at the *Frye* hearing. It was omitted from the only two papers published by the OCME on the FST in a scientific journal, and not disclosed to the Commission which approved the use of the FST.[11]

The OCME's lack of transparency with regard to their validation was not limited to the FST, but also occurred with their highly controversial (and now also obsolete) Low Copy Number testing validation.

What is LCN Testing?

Low Copy Number (LCN) testing (or what the OCME refers to as "high sensitivity" testing) refers to the testing and analysis of very small amounts of DNA, often involving special techniques to increase the sensitivity of the test. LCN results are characterized by stochastic, or random, effects, which radically affect their interpretation. The use of LCN testing in forensic casework is controversial and many leaders in the field of forensics believe it is unreliable.

Until January of this year, the OCME was the *only* public forensic laboratory in the United States employing LCN typing methodologies for use in court in a criminal case. When it moved to a new testing kit in January 2017, the OCME abandoned the LCN methodology and

[10] 49 Misc.3d 595 (Sup.Ct. Kings Co. Sup Ct. 2015). Partial transcript attached. Full transcript available upon request.

[11] Excerpt of *Collins* transcript attached. Full transcript available upon request.

determined that the lower threshold for suitability for DNA testing is 37.5 picograms with that new kit.

The Legal Aid Society has challenged the validation and reliability of the LCN and FST methods from the inception of their use. LCN and FST were in-house methodologies developed by OCME scientists. OCME leadership viewed its LCN and FST procedures as a prestigious, pioneering effort. From 2006 through 2016 OCME was the only public laboratory in the United States that utilized LCN testing in criminal cases. There were a series of *Frye* hearings held that eventually culminated in the *Collins-Peaks* case in front of Judge Mark Dwyer in Brooklyn (Judge Dwyer now sits in Manhattan, where, for years, he was the widely respected Chief of Appeals at the New York County District Attorney's office). Judge Dwyer ruled, after an extensive testimony and briefings, that both LCN and FST were not generally accepted as reliable by the relevant scientific communities. As part of the argument in *Collins-Peaks*, and in prior *Frye* hearings, district attorneys throughout the city, OCME lawyers, and OCME scientists claimed that approval by the DNA Subcommittee of the New York Forensic Science Commission and the full Commission[12] of LCN and FST constituted proof, by itself, that the methodologies were generally accepted as reliable. Similar arguments were made in federal court at a fiercely litigated *Daubert* hearing and a trial, *U.S. v. Morgan*, 53 F. Supp. 3d 732 (S.D.N.Y. 2014), aff'd, 675 F.App'x 53, 55 (2nd Cir 2017) and more recently in *U.S. v. Johnson*, 15 cr 565 (VEC).

The OCME developed its own LCN methodology which included changes in some of the testing steps and the interpretation of the results. Some of the most well-regarded forensic scientists in the world testified at an admissibility hearing in *People v. Collins* that the OCME's methodology is unreliable.[13]

One such change occurs in one step of the testing process called PCR (Polymerase Chain Reaction.) PCR is a process which makes millions of copies of a particular sequence of DNA so that it can be detected and analyzed—in short, a molecular Xerox machine. OCME used kits manufactured by Applied Biosystems, Inc., which is one of the leading manufacturers of machinery in the industry. Applied Biosystems has validated the parameters of the use of their product at 28 cycles of PCR amplification. But the OCME used the kit at 31 cycles. Thus, OCME used the kit *outside of the range for which it was intended by the manufacturer.* With each cycle, the DNA is copied exponentially. This is significant because pieces of DNA not

[12] By statute, the full Commission is bound by the recommendations of the DNA Subcommittee. The full Commission can, however, defer approval and ask the Subcommittee to reconsider its recommendation.

[13] The seven scientists who testified for the defense reviewed either or both of the LCN and FST validation studies: Dr. Bruce Budowle (former senior FBI scientist and chair of Scientific Working Group for DNA Analysis Methods, "SWGDAM"), Dr. Ranajit Chakraborty (former member of the New York DNA Subcommittee and scientist who helped develop core markers for the national convicted offender database, "CODIS"), Dr. Heather Coyle (associate professor at the University of New Haven and formerly a lead criminalist at the Connecticut State Laboratory), Dr. Eli Shapiro (former Assistant Director of training and head of the mitochondrial unit at the OCME); Dr. Rori Rohlfs (currently assistant professor at San Francisco State University and former post-doc at University of California, Berkeley), Dr. Noah Rosenberg (professor of population genetics at Stanford University), and Dr. Angela van Daal (formerly professor at Bond University, Australia; helped implement PCR DNA testing in Australia as Assistant Chief scientist at Australian forensic lab). Drs. Budowle, Chakraborty, van Daal, and Coyle all reviewed parts of the LCN validation studies and concluded that OCME's LCN method is not reliable and not generally accepted.

associated with the crime scene sample, e.g., contamination and background trace amounts of DNA that have been left long before any defendant or witness potentially touched an item become amplified with this increased sensitivity, thus appearing probative when they are not.

OCME's LCN methodology of testing very small amounts of DNA generated profiles that may have been incomplete due to missing alleles which are contaminated with alleles from donors not connected to the evidence, and contain other artifacts that look like real pieces of DNA (alleles) but are not. The following are the well-known products of LCN typing and were described in 2001 in a seminal paper by one of the world's leading forensic scientists, Dr. Bruce Budowle. Dr. Budowle, then a senior scientist at the FBI Laboratory Division took the position that LCN typing should not be used in criminal cases for presentation in court and later testified to this in *Collins*.[14] These effects are categorized as:

- Contamination/Drop-In. Drop-in is contamination. Drop-in occurs when the testing detects pieces of DNA that are not part of the crime scene sample but become part of the test results. This is greatly exacerbated with increased PCR cycles which increase the sensitivity of the test, therefore picking up contaminants.[15]
- Increase in Peak Height Imbalance. With LCN testing, peak height imbalance is increased, which can result in variations of the heights of peaks (alleles) belonging to one contributor and lead to the misrepresentation of the evidence.[16] For example, the heights of peaks are used in trying to separate out an individual's profile. In a mixture, where there are peaks, or alleles from more than one person, an analyst will look for similarity in the height of the peaks in trying to determine whether they came from the same individual.
- Increase in Allele Drop-Out. With LCN DNA testing, there is an increased chance of allelic 'drop-out.' Drop-out, which is an extreme form of peak height imbalance, occurs when a piece of DNA is not detected by the testing because the quantity of the DNA being tested is so small. Thus, pieces of DNA that belong to the DNA profile of a contributor to a sample are literally missing. [17]
- Increase in Stutter Artifacts. LCN (31-cycle) PCR testing often causes an increase in the height of stutter artifacts. "Stutter" is the name for the product of a "mistake" in the PCR process: that is, when the DNA strand being copied during PCR slips and bulges, and therefore appears to be a DNA peak on a printed electropherogram to be interpreted by an analyst. Stutter is an artifact, not a real piece of DNA, although it looks like a piece of DNA (a peak on a electropherogram). Stutter is a well-known phenomenon even in conventional DNA testing and is usually recognized in routine testing because it is only a certain percentage of height of the real piece of DNA next to it. Stutter phenomena, however, are problematic with LCN testing because the height of stutter increases proportionally to a true allele (real piece of DNA) and is therefore more difficult to

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[14] *See* Bruce Budowle, Deborah Hobson, Jill Smerick, et. al., *Low Copy Number: Consideration and Caution*, FBI Lab Division 2001, www.promega.com/~/media/files/resources/conference%20proceedings/ishi%2012/oral%20presentations/budowle.pdf.

[15] *See* Budowle and Hobson, et. al., "Low Copy Number…", *supra; see also* John M. Butler, ADVANCED TOPICS IN FORENSIC DNA TYPING: METHODOLOGY, p. 324-26 (2011).

[16] *Id.*

[17] *Id.*

identify as an artifact as opposed to a real allele. This increased challenge complicates interpretation of an electropherogram, making results less reliable.[18]

These stochastic effects complicate the interpretation of the testing results that appear on the electropherogram and increase the chance of error. Stochastic effects are especially problematic with DNA mixtures, which are already challenging to interpret.

LCN testing methods have been, and continue to be, the subject of vigorous debate and disagreement within the forensic DNA scientific community, precisely because of the potential for unreliable, irreproducible and skewed results. As one text put it, "it is fair to say that LCN typing is the subject of great dispute among some of the leading lights of the forensic community."[19]

Given that LCN testing involves using lower initial sample sizes than standard DNA testing, making it extremely controversial, the OCME conducted studies to determine under what circumstances they could use LCN to make accurate identifications. In *U.S. v. Morgan*, the OCME reported a positive identification on a touched sample with only 14 picograms of total DNA. The sample was composed of *at least* three contributors, with some loci indicating the possibility of five or more total individual contributors to the sample. The sample was also degraded, meaning its condition was not optimal for analysis.

At issue in the trial was whether or not the OCME could accurately make an identification with such a small sample size and with so many contributors. The OCME had conducted no validation studies that could confirm the accuracy of LCN testing under circumstances akin to those in the *Morgan* case. The OCME's validation studies included no mixed samples of more than two individuals with less than 25 picograms of total DNA. Furthermore, the mixed samples from the OCME studies did not duplicate actual casework in that they came from pristine buccal swab samples, not samples that mimicked the degraded sample in the *Morgan* case or that are more commonly found in actual forensic investigations.

October 2014 Commission on Forensic Science Meeting

In response to concerns raised by the *Morgan* case, specifically that the OCME was going beyond its experimental limits in applying the LCN method to casework, Commission member Barry Scheck asked Deputy Director of Forensic Biology for the OCME Eugene Lien the following question during an official meeting of the Commission of Forensic Science on October 24, 2014:

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[18] *Id.*

[19] FAIGMAN, DAVID, JEREMY BLUMENTHAL, EDWARD CHENG, JENNIFER MNOOKIN, ET.AL., MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY (Thomson 2011-2012); Natasha Gilbert, "Science in Court: DNA's Identity Crisis," *Nature*, Vol.464, p.347-348 (2010) (discussing the "highly charged debate in the scientific and law-enforcement communities about low-copy number analysis"); JOHN BUTLER, ADVANCED TOPICS IN FORENSIC DNA TYPING: METHODOLOGY, p. 318 Elsevier (2011) ("The debate of how to handle LT-DNA samples reached a boiling point at two large international scientific conference in the fall of 2009.").

Scheck: Do you have an internal validation study demonstrating that you can get correct answers on samples replicating casework at 25 picograms or less with mixtures of more than two people?

Lien: Yes, we do.[20]

Mr. Lien is unequivocal in his response and the Commission and the public were left with the impression that a study such as the one Mr. Scheck describes does, in fact, exist.

Marina Stajic case

Mr. Lien and other OCME officials were recently deposed in a wrongful termination lawsuit for former Commission member and OCME employee Dr. Marina Stajic, who claims, in part, that she was terminated due to her unfavorable Commission vote with respect to LCN testing, and in particular, her vote to pursue the issues raised by the *Morgan* matter.

Members of the full Commission on Forensic Science consistently expressed concern with the development of the LCN method. Two of those Commissioners, Barry Scheck and Peter Neufeld, were Co-Directors of the Innocence Project and were very familiar with the requirements for validating new DNA methodologies from having litigated the leading cases in the early development of forensic DNA evidence in the 1990s.[21]

When a Subcommittee recommendation approving limited use of the LCN method came before the full Commission, Peter Neufeld and other Commissioners asked Dr. Prinz, then Director of the Forensic Biology Laboratory, what were the lowest levels of DNA that OCME had validated internally it could get correct answers using the LCN method, and Dr. Prinz said 25 picograms. The suggestion was made that the laboratory do proficiency testing at the 25 picogram level to make sure lab personnel could get correct answers and DCJS Commissioner Chauncey Parker sent Dr. Prinz a letter making that suggestion.

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[20] p. 93 of Lien deposition transcript

[21] Neufeld and Scheck litigated *People v. Castro*, 144 Misc.2d 956 (Sup.Ct. Bx Co. 1989), a landmark DNA case that resulted in both prosecution and defense experts agreeing that blood on the watch of the defendant could not be reliably associated with the victim but could reliably exclude the defendant ass the source. In the middle of the Frye hearing experts from both sides not only reached agreement but called upon the National Academy of Science to issue a report on the new forensic DNA technology. The National Research Council (NRC) issued reports on forensic DNA technology in response. Scheck served as a Commissioner on the National Institute of Justice Commission on the Future of DNA Technology. Neufeld recently served as a Commissioner on the National Commission on Forensic Science. Scheck currently serves on the Legal Resources Committee of the Organization of Scientific Areas Committees (OSAC) organized by the National Institute of Standards and Technology (NIST). Both Neufeld and Scheck served on the Forensic Science Commission since its inception, more than twenty years each, until resigning in 2016. Out of the 359 post-conviction DNA exonerations in the United States since 1989, 47% have resulted in the identification of the person who really committed the crime. The Innocence Project and other organizations within the Innocence Network routinely prove their clients are innocent not just by excluding them from probative biological evidence but by identifying, often through CODIS hits. These cases frequently involve old, degraded samples that have mixtures and small amounts of DNA.

The validation of LCN next arose before the full Commission in 2014 in connection with the *Morgan* case. As discussed above, the OCME claimed it could include Mr. Morgan as a contributor to a three person mixture of only 14 picograms of DNA – material constituting less than three cells' worth of DNA.[22]

Prior to the *Morgan* litigation, Eugene Lien confirmed to the Commission that the OCME had done an internal validation on samples replicating casework involving mixture of more than two people at below 25 picograms. No such internal validation study has ever been disclosed, and in *Morgan*, OCME DNA analyst O'Connor testified there had been no such internal validation study conducted. Commissioners took note of the contradiction between Lien's representations and O'Connor's testimony, but further efforts to verify Lien's account were not successful. Only Marina Stajic's federal employment suit, alleging that she was dismissed for supporting further investigation of this issue, revealed that no such study ever existed.

During his deposition, Mr. Lien was asked under oath about his response to Mr. Scheck's question regarding OCME validation of LCN testing for mixtures under 25 picograms. When presented with the 11 volumes of internal validation conducted by the OCME on LCN testing, Mr. Lien was unable to identify any study that met the criteria of Mr. Scheck's question.[23] Mr. Lien prevaricated about LCN being validated "as a whole." But Mr. Lien was not able to point to a study conducted by the OCME that met the criteria of Mr. Scheck's straight forward question, even though Mr. Lien had answered unequivocally and affirmatively at the Commission meeting.

Of the samples that were tested that contained less than 25 picograms of DNA, none of them were mixtures. All of them were single-source profiles. Dr. Angel Van Daal, a DNA expert and international pioneer in the introduction of PCR DNA testing in court, analyzed all of the OCME's internal validation tests for the Stajic case. (Report attached) she reported that there is no single study meeting Mr. Scheck's criteria of, 1) a mixture of more than two people, 2) under 25 picograms, and 3) replicating casework. Mixture studies were done on two-person samples from pristine buccal swabs. They were not done on the three or more person degraded mixtures commonly found in casework. Further, in samples with contributions of DNA under 20 picograms, the samples were deemed not suitable for comparison, indicating that there are lower limits to LCN testing. [Van Daal report attached]

Concerns

The Commission of Forensic Science is the sole regulatory authority charged with approving the methodologies used by the OCME for DNA testing. The Commission's ability to evaluate these methods relies on an honest and forthright exchange between the Commission and lab employees about the nature and limitations of the testing methods before them for review.

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[22] Dr. Ranajit Chakraborty, a former member of the DNA Subcommittee and an early architect of the FBI's DNA program testified in both *Morgan* and *Collins*. Dr. Chakraborty was not just critical of LCN in his testimony in both cases, but he made important observations about the limitations of the DNA Subcommittee resources and its capability to make the kind of detailed and comprehensive analysis necessary to evaluate the validation of new DNA methodologies.

[23] at pp.93-103 of Lien transcript, attached. Full transcript available upon request.

On their own, each of these instances of unscrupulousness is troubling. When reviewed together, we are concerned about a pattern of obfuscation by the OCME with the Commission and the public.

The OCME has just completed validation for a new likelihood ratio program: STRMix. STRMix will be used to analyze nearly every DNA case in the future at the OCME. The use of this new methodology is subject to Commission review as well. It is vitally important to ensure that the Commission is able to fully and accurately assess the reliability and limitations of this new software.

We believe these matters are of grave concern and should be the subject of an investigation by your office. The Commission's ability to evaluate these methodologies relies on the transparency and honesty of the OCME. Courts in New York City and all over the country where the OCME provides results see the Commission's approval as a signal of the reliability of new testing methods and use it when evaluating admissibility. The OCME' s forthrightness with the Commission on Forensic Science is therefore of high public concern.

We urge you to investigate these matters under your Coverdell authority and look forward to your swift and thorough review.

Sincerely,

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EXHIBIT B

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October 18, 2017

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Re: Allegations by Legal Aid Society/Federal Defenders of New York to the Honorable Catherine Leahy-Scott, NYS Inspector General (September 1, 2017)

Dear Mr. Gestring:

The New York City Office of Chief Medical Examiner (OCME) appreciates this opportunity to respond to the above-captioned allegations of the Legal Aid Society and Federal Defenders of New York (LAS/FD) submitted to the NYS Inspector General, dated September 1, 2017 (the LAS/FD Allegations). As directed in your letter of September 20, 2017, to Timothy Kupferschmid, Chief of Laboratories for OCME, we are submitting our response to the email address noted above for review by the New York State Commission on Forensic Science (the Commission); please let us know if you would like additional electronic or hard copies of this response or any of the referenced exhibits forwarded to any other location.

Contrary to the erroneous and exaggerated assertions in the LAS/FD Allegations, OCME's Department of Forensic Biology has not engaged in "serious malfeasance" or "negligent conduct," nor has it relied on "unsound statistical evidence" in the validation or implementation of its Low Copy Number (LCN) DNA testing analysis or of its Forensic Statistical Tool (FST). Rather, as detailed below, both of these tools were carefully developed and validated, and both were approved by the Commission after review and approval by the panel of experts who sit on the Commission's DNA Subcommittee. Indeed, LCN was essentially approved twice, the second time following the referral of specific concerns raised by certain Commissioners to the Subcommittee. Additionally, as also discussed below, both tools have also been approved, or simply admitted, in more than 45 criminal proceedings, in both state and federal courts, as well as specifically requested on occasion by members of the criminal defense bar.

As elaborated below, LAS/FD misstate facts and grossly inflate the issues that they claim constitute "alarming misconduct" by OCME. Contrary to their assertions, for example, FST did not experience a "significant malfunction"; rather, a minor modification was made to prevent an artifact from causing obviously incorrect answers (negative likelihood ratios, which cannot exist in the statistical context of the program). Nor did OCME ever manipulate data or make false statements to the Commission or to anyone else about its testing methodologies. Rather, critical differences in language have been ignored, at minimum, leading to false accusations and unwarranted personal attacks.

In fact, OCME has always been entirely forthcoming with the Commission as it has with its other accrediting bodies. OCME made multiple presentations to explain its then new technologies, answered all questions asked of it, and made its complete validation studies available to the DNA Subcommittee as often as requested. Additionally, those studies were made available to defense counsel starting in at least 2012 in the context of criminal matters.

Apparently, having lost their battle against the science in nearly all courts of law and before this Commission, LAS/FD have disingenuously dressed up their flawed scientific arguments as a new assertion of "malfeasance," in a weak attempt to create jurisdiction for the NYS Inspector General to review what amounts to a question of science and scientific protocols. Now that the LAS/FD Allegations have been referred to the Commission, these fallacious arguments should finally be laid to rest.

A. FST, Duly Approved by the Commission, Remains Scientifically Valid

1. OCME's Forensic Statistical Tool is Effective and Generally Accepted in the Scientific Community

OCME developed its FST software to enable the calculation of likelihood ratios (LRs) for samples involving two- and three-person mixtures where parts or all of the contributors are non-deducible. Although no other tool was available in the United States to conduct such an analysis at the time FST was developed, FST's methodology is neither "novel" nor "controversial." FST itself was based on a product called LoComatioN used by the Forensic Science Service in the United Kingdom; moreover, another probabilistic genotyping tool that has been widely used, True Allele, had been approved at the time FST was introduced into casework. Further reflecting that the FST's methodology is not "novel", it has been accepted by nearly all courts that have addressed the issue. *See* Exhibit A, List of State Court Decisions Admitting FST in Criminal Cases.

In seeking to demonstrate the purported novelty of FST, LAS/FD rely on the recent report of the President's Council of Advisors on Science and Technology (PCAST), "Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature Comparison Methods" (the "PCAST Report"). That reliance, however, is unavailing, as PCAST is widely criticized by scientists as politically motivated and scientifically unsound, and its report is generally discredited. Many shortcomings of the PCAST Report, including its failure to reflect the view of the forensic science community, are evident in the lengthy open letter of Dr. Bruce Budowle, an

expert who frequently testifies on behalf of criminal defendants. *See* Exhibit B, Letter of Bruce Budowle, "To whom it may concern," (June 17, 2017). Dr. Budowle not only notes the absence from the PCAST Report of any data or other indication that PCAST reviewed or tested any probabilistic genotyping programs, but he lists multiple other inadequacies as well. As he wrote:

> When the President's Council of Advisors on Science and Technology (PCAST) Report first was published in 2016, it was obvious that the report was not particularly helpful from a scientific perspective as it was myopic, full of error, and did not provide data to support its contentions. A more significant concern regarding the failings of the PCAST Report was that it claimed its focus was on science, but obviously was dedicated substantially to policy. Initially I considered writing a critique about the failings of the PCAST Report to assist the community. But the problems with this report were so obvious that I did not think it would be necessary to devote time to such an effort. Indeed my prediction was correct in that the report would be (and has been) rejected by the scientific community as well as overwhelmingly by the courts.

Id.; see also Exhibit C, Open Letter of John Buckleton (May 26, 2017), also available at https://johnbuckleton.wordpress.com/pcast/ ("insufficient research was undertaken by the committee. The conclusions of the committee are incorrect and need to be revisited.")[1]

As discussed further below, FST has been approved by the relevant scientific accrediting bodies, notably the Commission and the DNA Subcommittee. FST was also reviewed by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB), now ANAB, and the overwhelming majority of courts that have considered its validity and admissibility have accepted it. Further, although OCME has recently replaced this tool with more advanced software developed since FST came online, OCME continues to stand by the validity of its FST analysis. OCME's decision to upgrade to a commercially available software called STRMix reflects advances in DNA forensic science and the enhancement of the Federal Bureau of Investigations (FBI) National DNA Index System, not any loss of or reduction in our confidence of the FST program.

FST uses a standard analytical procedure grounded in PCR-STR DNA testing and Bayesian statistics to calculate LRs. One of its critical components is the ability to incorporate

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[1] *See also, e.g.:*
- Morrison, Geoffrey Stewart, et al., "Letter to the Editor: A comment on the PCAST report: Skip the 'match;/'non-match' stage", *Forensic Science International* 272 (2017) at e7;
- American Society of Crime Lab Directors: pceinc.org/wp-content/uploads/2016/10/20160930-Statement-on-PCAST-Report-ASCLD.pdf
- Association of Firearm and Tool Mark Examiners: afte.org/uploads/documents/AFTE-PCAST-Response.pdf
- Bureau of Alcohol, Tobacco, Firearms and Explosives: www.theiai.org/president/20160921_ATF_PCAST_Response.pdf
- Federal Bureau of Investigation: www.fbi.gov/file-repository/fbi-pcast-response.pdf
- International Association for Identification: www.theiai.org/president/IAI_PCAST_Response.pdf
- National District Attorneys Association: www.ciclt.net/ul/ndaajustice/PCAST/NDAA%20PCAST%20Response%20FINAL.pdf

allelic drop-out and drop-in, by assigning a weight to a comparison between an evidence profile and a reference profile when one or more of the reference profile alleles are not detected in the mixture or when additional alleles were detected.

FST can be used when a DNA analyst compares a reference profile with the profile or profiles contained in what has previously been determined to be either a two- or three-person mixture from a forensic sample.[2] Before FST is used to calculate an LR for the comparison to the sample, the analyst must first manually determine if the reference sample is included as a possible contributor to the mixture. *See* Exhibit E, OCME, *Forensic Biology Protocols for Forensic STR Analysis*, STR Results Interpretation (7/11/2016); Forensic Statistical Tool (FST) (6/20/2016). That LR considers the probability of two separate hypotheses being true. Hypothesis A is the probability that the mixture contains the suspect's DNA. Hypothesis B considers the probability that the suspect is not a contributor to the mixture. Statistical tools like FST which calculate LRs are intended only to determine the *likelihood* of a particular outcome; they are not and never were aimed at determining with 100% certainty whether an individual is actually a contributor to a forensic sample. FST refines its estimate by taking into account several important factors including the drop-in/drop-out rates, and the possibility that the alleles in the sample could have been provided from another individual in the population based on estimated allele and genotypic frequencies. *See* Exhibit F, Adele A. Mitchell, *et al.*, "Validation of a DNA Mixture Statistics Tool Incorporating Allelic Drop-Out and Drop-In," *Forensic Science International* (2012).

Based on the extensive validation studies performed on FST, as well as the tool's reliance on well-established and accepted scientific and statistical methods, PCR-STR DNA testing and Bayesian statistics, the program was approved for casework by the DNA Subcommittee and the Commission, and has been upheld as reliable in more than 32 state courts. *See* Exhibit G, Letter from Jack Ballantyne to Sean Byrne (Oct. 29, 2010); Exhibit H, Letter from Sean M. Byrne to Mechthild Prinz (Dec. 16, 2011)[3]; Exhibit A, *supra*.[4] Additionally, the National Forensic Science Technology Center reviewed FST as part of an external audit.

2. The FST Computer Source Code is Reliable and Functions as Intended

Having essentially failed to prevent OCME's use of FST in court, *see supra* n.4, defense counsel began to challenge the computer code that runs the FST tool. The first such challenge came in the matter of *United States v. Johnson*, 15 Cr. 565 (VEC) (SDNY 2015). Federal

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[2] FST is not validated for use in casework where the number of contributors to the mixture is determined to be greater than three. *See* Exhibit D, OCME FST Validation Study Executive Summary, p. 5.

[3] Although this letter is dated December 16, 2011, the Commission acknowledged in its letter that FST was approved at the meeting held on December 7, 2010.

[4] Only one judge has precluded FST. *See, e.g., People v. Jaquan Collins*, 49 Misc.3d 595 (NY Sup Ct Kings Cty 2015) (Dwyer, J.). Since then, no other court in New York State has followed that decision. Indeed, various other courts have expressly declined to follow it, even questioning the objectivity of the critics called to testify in *Collins*. *See People v. Donsha Carter*, Ind. No. 2573/2014 (NY Sup Ct. Queens Cty, Jan. 12, 2016) ("Given what this court perceives to be a possible lack of objectivity guiding the testimony of several of the defense experts in *Collins*, this court is satisfied that *FST is generally accepted in the relevant scientific community*" (emphasis added)).

Defenders were granted access to the source code in that criminal matter, subject to a protective order.[5] Federal Defenders hired Nathaniel Adams, then a graduate student with a Bachelor's Degree in Computer Science from Wright University, to evaluate and review the code. Although Mr. Adams' report asserts that the code contains fatal flaws, in fact the only concerns that he raises are essentially cosmetic and stylistic in nature. *See* Exhibit J, Affidavit of Naeem Ullah, *People v. Jackson* (NY Sup Ct NY Cty), Ind. 727/2017 July 11, 2017). For example, Adams objects to the style and form of the coders' comments to the code, and to the names of certain variables, neither of which affects the operation of the code in any way. *See id.* ¶¶ 12, 13.

In fact, the effectiveness of the computer code is demonstrated by the fact that it generates the results that are expected based on the known inputs in the validation studies. *See id.* ¶¶ 12-15. Accordingly, the attack on the computer code must fail. Indeed, as described in more detail below, Adams' criticisms are irrelevant, and it is demonstrably false that "the application of the FST software includes functions that do not reflect, and are even counter to, the methodology as described by OCME." *See* LAS/FD Allegations at 3.

3. OCME's Modification of FST Was Limited and Appropriate

a. The Minor Modification of FST Did Not Have a Consequential Effect on Analytical Results

FST went online for casework in April 2011, following its approval for use by the Commission. Shortly thereafter, also in April 2011, some functions were updated by the programmers and a small, unrelated change was inadvertently made, causing OCME to take FST off-line. This change affected the way numbers were being sorted within two particular template ranges (6.25-12.5 picograms and 50-100 picograms), and the calculation of negative likelihood ratios. At that time, the total per-locus allele frequency was also capped at .97 to prevent the possibility of a negative likelihood ratio. The possibility of a negative likelihood ratio if the value of the allele frequency is not capped below 1 relates to the use of the minimum allele frequency as recommended by the NRCII report. In this circumstance, very rare alleles are given a frequency value as if they had been seen five times in the reference database of profiles".[6] Because these circumstances are so rare, if this allele is present and it is given the minimum allele frequency, it is possible that the overall allele frequency at that location could add to a total greater than 1, which could result in a negative LR. By capping the frequency at .97, any locus where the sum of the allele frequencies total 0.97 or above will be given an LR=1, thereby rendering that location inconclusive with no weight being assigned to either an inclusion or an exclusion.

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[5] Recently, the news outlet ProPublica filed a motion in federal court before Judge Valerie Caproni, requesting that the protective order be lifted so that the code could be further reviewed. OCME took no position with respect to their motion to intervene and did not oppose lifting that protective order.

[6] *See* National Research Council (1996) *DNA technology in forensic science.* National Academy Press, Washington, DC (1996); *The evaluation of forensic DNA evidence.* National Academy Press, Washington, DC; Butler, John, *Fundamentals of Forensic DNA Typing* (1st Edition).

Contrary to the claim made by LAS/FD that this change always benefits the government's hypothesis, by invoking this cap and giving that locus an LR value of 1, either side can "benefit" depending on the alleles present in the mixture and in the reference sample. If the alleles of the reference sample are not seen in the mixture, then capping the locus could slightly benefit the prosecution. If the alleles of the reference sample are seen in the mixture, this could slightly benefit the defense. Regardless, this capping is done based on the alleles present in the mixture and in essence has nothing to do with the alleles of the reference sample.

Following this cap to the per locus total allele frequency, a complete performance check was conducted on that portion of the FST. That performance check consisted of 14,976 comparisons: 1,246 non-contributor comparisons, otherwise known as false positives, and two contributor comparisons for each of 12 samples. *See* Exhibit K, Quality Control Test of Forensic Statistical Tool (FST) Version 2.0 (June 30, 2011). Based on the performance check, all but two of the samples came up with identical LRs with the 0.97 total allele frequency cap. *See* Exhibit L, OCME FST Validation Study, Volume 24. The two samples that yielded slightly different LRs showed a difference between an LR of 0.34 using the pre-capped frequencies, and 0.42 with the frequency cap of 0.97. Similarly, with the second sample, the overall LR was 3.38×10^4 prior to the 0.97 cap, while the overall LR with the 0.97 modification was 3.82×10^4. Because those differences are within an acceptable range of variation, in that they do not change the qualitative conclusion, FST was determined to be suitable for use in forensic casework as of June 27, 2011. *See* Exhibits K, L.

Tellingly, in July 2017 – not quite two months before co-authoring the September 1, 2017 LAS/FD Allegations asserting purported "malfeasance" with regard to FST – the Legal Aid Society specifically *requested* that OCME perform FST DNA analysis in a particular case in which they were defense counsel. *See* Exhibit I, Letter from Jennifer Ritter, Legal Aid Society, to J. Lucas Herman, OCME (July 11, 2017), and related email exchange. Apparently, the Legal Aid Society considers FST reliable when they believe that it will render results that are favorable to their client.

Multiple courts have also noticed this phenomenon; as one court wrote, "Justice Ralph Fabrizio recently pointed out that 'attorneys from the Legal Aid Society's DNA Unit have called criminalists from the OCME specifically to testify for the defense about likelihood ratios favorable to other defendants.' Thus, it appears to this Court that a *Frye* hearing is also unnecessary under the circumstances as even The Legal Aid Society appears to have accepted that it has reached the necessary degree of acceptance in the relevant scientific community, when the results are favorable to their clients."[7] Further, despite several attempts to convince the courts that this allele frequency cap renders FST unreliable, five courts in the last three months have found their arguments unpersuasive. *See id.*, specifically *People v. Donovan Owens*, Ind. No. 2400/2015 (NY Sup Ct. Bronx Cty, July 6, 2017); *People v. Donald James and Tiffany Washington*, Ind. No. 3336/2014 (NY Sup Ct., Bronx Cty, July 20, 2017); *People v. Donnell*

[7] *People v. Harvey Brown*, Ind. No. 58/2012 at pg. 4-5, (NY Sup. Ct., Kings Cty, June 4, 2015), *citing People v. Wendell Belle*, 47 Misc.3d 1218 (NY Sup. Ct. Bronx Cty 2015).

Young, Ind. No. 7968/2016 (NY Sup Ct. Kings Cty, August 17, 2017); *People v. Demetrius Blackwell*, Ind. 1081/2015 (NY Sup Ct., Queens Cty, September 25, 2017); *People v. Melquan Thawney*, Ind. No. 8183/2015 (NY Sup Ct., Kings Cty, October 17, 2017).

b. OCME's Extensive Performance Checks Following the Modification of FST Fully Satisfied All Applicable Guidelines and Support the Modification

Contrary to LAS/FD's assertions, neither a full revalidation nor resubmission to the DNA Subcommittee and the Commission was required for this upgrade/modification to the program, which did not affect FST's methodology. Rather, OCME conducted an extensive performance check that fully satisfied all applicable requirements of the Scientific Working Group on DNA Analysis Methods (SWGDAM) for the validations of both DNA Analysis Methods in general and Probabilistic Genotyping Systems in particular. *See* Scientific Working Group on DNA Analysis Methods, "Validation Guidelines for DNA Analysis Methods" (Approved 12/05/2016), available at https://docs.wixstatic.com/ugd/4344b0_50e2749756a242528e6285a5bb478f4c.pdf; Scientific Working Group on DNA Analysis Methods, "Guidelines for the Validation of Probabilistic Genotyping Systems" (Final Approved 06/15/2015), available at https://docs.wixstatic.com/ugd/4344b0_22776006b67c4a32a5ffc04fe3b56515.pdf.[8]

As is clear from the discussion above, the source code that was implemented following the modification was hardly, as LAS/FD assert, "a different iteration than the one originally in use when the FST was approved by the Commission and submitted to a scientific journal for peer review". LAS/FD Allegations at 4. The modification made did not meet SWGDAM's definition of a "material modification," which is "an alteration of an existing analytical procedure that may have a consequential effect(s) on analytical results; for example, a decrease in reaction volume of an amplification test kit that is already in use by the laboratory or a change in injection time for a genetic analyzer." Scientific Working Group on DNA Analysis Methods, "Validation Guidelines for DNA Analysis Methods" (Approved 12/05/2016) at 12, available at https://docs.wixstatic.com/ugd/4344b0_50e2749756a242528e6285a5bb478f4c.pdf. Rather, the modification was in the nature of a minor correction to address an incongruity that does not impact the results of the statistical analysis. *See* Exhibit K, Quality Control Test of Forensic Statistical Tool (FST).

The SWGDAM Guidelines are explicit that "[m]odification to the system such as a hardware or software upgrade that does not impact interpretation or analysis of the typing results of the statistical analysis shall require a *performance check* prior to implementation." SWGDAM, "Guidelines for the Validation of Probabilistic Genotyping Systems" ¶ 5.1 (emphasis added). Further, "[d]ata used during the initial validation may be re-evaluated as a

[8] OCME notes here that Executive Law §995(3), which LAS/FD cite in support of their argument, LAS/FD Allegations at 1, is irrelevant. That provision is merely a definitional section that defines "DNA testing methodology" as "methods and procedures used to extract and analyze DNA material, as well as the methods, procedures, assumptions, and studies used to draw statistical inferences from the test results." It neither prescribes nor addresses validation standards.

performance check or for subsequent validation assessment. The laboratory must determine the number and type of samples required to establish acceptable performance in consideration of the software modification." *Id.* ¶ 5.3; *see also* Scientific Working Group on DNA Analysis Methods, "Validation Guidelines for DNA Analysis Methods" § 7.2 ("A software upgrade that would not impact interpretation, the analytical process, or sizing algorithms shall require a performance check.") Again, looking at the results of the performance check, the overall conclusion would not have changed (*i.e.*, 0.34 and 0.42 are still "limited support for the defense hypothesis" and $3.38x10^4$ and $3.82x10^4$ are both "strong support for the prosecution hypothesis"). Therefore, this software change did not impact interpretation and certainly did not impact the analytical process. Clearly, revalidation was not required. *See id.* ¶ 5.2; *see also People v. Johnnie Jackson*, Ind. 727/2017, Affidavit of Eugene Lien (July 17, 2017), LAS/FD Allegations, Exhibit A ("Lien Aff.") ¶¶ 7-8.[9]

4. OCME's Calculation of Drop-In and Drop-Out Rates is Scientifically Valid

LAS/FD's spurious assertion that the data was "flattened" in the FST Validation, LAS/FD Allegations at 6, appears to reflect discomfort with the unavoidable existence of a degree of uncertainty inherent in the calculations underlying DNA analysis. Forensic scientists make best efforts to reduce uncertainty to the greatest extent possible, and the OCME Forensic Biology Department is always conservative in its estimates. Allelic drop-in and drop-out are stochastic phenomena that are observed in DNA analysis, and accordingly must be accounted for.

Thus, the drop-out rates were estimated empirically during the FST validation by looking at a range of samples, both single source and mixtures, where the profiles of the contributors was known and counting the number of times that an allele dropped out. These observations were then conservatively lowered by one standard deviation to estimate the rates. The drop-out rates are used in FST for several template amounts (i.e. 25 picograms, 50 picograms, 75 picograms, 100 picograms, 150 picograms, 250 picograms, and 500 picograms) and then interpolated for values between these amounts. A general trend of lower drop-out rates for higher template amounts (and vice versa) was observed. Using this general trend, rates of drop-out based on the amount of DNA that was amplified were estimated. For example, if it was observed during the validation that a template amount had a lower drop-out than a higher template amount (for example, 25 picograms showing a lower drop-out rate than 50 picograms), the lower rate was used for both values (*i.e.*, the 25 picogram rate is used). This choice was made because underestimating the drop-out rate is generally more conservative for a true non-contributor. As a

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[9] Mr. Lien, the Technical Leader of the OCME Department of Forensic Biology, stated affirmatively that:

> [T]he Department of Forensic Biology conducted a performance check of FST to confirm it was generating reliable results following the modification. Based on the results of that performance check, FST was put back online for use in casework on or about July 1, 2011.
>
> Because this modification did not affect the methodology of the program, it did not require submission to the Commission on Forensic Science or the DNA Subcommittee. Further, the validation supports the version of FST supplied under court order.

Lien Aff ¶¶ 7-8.

result, the estimate errs on the side of a lower LR for a non-contributor even though it may also affect the LR for a true contributor.

Nor, as LAS/FD suggest, was there a lack of transparency on OCME's part. The validation summaries (executive summary and each individual volume summary) and the full validation studies were made available to the DNA subcommittee on two separate occasions, for as long as they wished to review the documents.

B. LCN is Effective and Reliable

1. OCME's LCN DNA Analysis Was Properly Developed and Validated, and Was Approved Twice by the DNA Subcommittee and the Commission

LAS/FD misstate the facts underlying the DNA Subcommittee's and the Commission's approval of OCME's LCN DNA testing.

OCME used its LCN DNA testing on samples that were amplified with less than 100 picograms of DNA. LCN DNA samples underwent triplicate amplifications whereas high copy number (HCN) DNA samples only had a single amplification in most cases. Samples with a DNA quantitation greater than 100 picograms are amplified for 28 cycles, where samples with less than 100 picograms are amplified for 31 cycles. This technique underwent extensive validation studies, which reflected the presence of enhanced stochastic effects. As a result, OCME developed stringent lab protocols for LCN DNA testing that not only take into account the stochastic effects, but also compensate for them by calling for the most conservative interpretation. *See* Exhibit M, OCME LCN Validation Summary.

Once the validation studies were completed, they were presented to the DNA Subcommittee for its approval of the use of LCN DNA testing in forensic casework. At the September 9, 2005 Subcommittee meeting, Dr. Mechthild Prinz, then Director of the OCME Forensic Biology Department, provided a presentation on OCME's validation of the 31 cycle assay, including modifications that had been made to testing procedure using the Identifiler amplification kit,[10] additional experiments that had been performed using LCN STR Typing, the facility and logistics of how LCN would be conducted in the lab, and issues that arise with high sensitivity testing (drop-in/drop-out, peak imbalance, mixture recognition, and mixture interpretation). *See* Exhibit N, DNA Subcommittee Minutes (May 17, 2005). Following that discussion and presentation, then subcommittee chair Dr. Ballantyne moved that the DNA Subcommittee submit a binding recommendation to the Commission to approve OCME's use of LCN DNA testing, noting that the DNA Subcommittee had found that the methodology "has merit, that the appropriate validation studies have been completed, and that the assay should be approved for use in the lab. The motion was seconded by Dr. Werrett and passed by a majority vote." *Id.* at 4. *See* Exhibit O, Letter from John Ballantyne to Chauncey Parker (Oct. 6, 2005)

[10] The testing procedure using the Identifiler amplification kit was given an additional 3 cycles, higher voltage/ injection times on the capillary instrument, and enhanced interpretation procedures.

(making a binding recommendation that the Commission approve OCME's use of LCN DNA testing technique in forensic casework).

On December 6, 2005, the Commission on Forensic Science held a public meeting at which Dr. Prinz gave a presentation in support of OCME's request that the CFS approve the implementation of LCN DNA testing by OCME. *See* Exhibit P, Commission on Forensic Science, Meeting Minutes (Dec. 6, 2005).

LAS/FD cite no documentation for their assertion that, at the December 6, 2005 Commission meeting, "Peter Neufeld and other Commissioners asked Dr. Prinz, then Director of the Forensic Biology Laboratory, what were the lowest levels of DNA that OCME had validated internally it could get correct answers using the LCN method, and Dr. Prinz said 25 picograms", LAS/FD Allegations at 10 – presumably because there is no record of any such exchange. Rather, as reflected in the official Meeting Minutes from that date, after Mr. Neufeld expressed his concern about a minimum detection level of 20 picograms for proficiency testing – not even the 25 picograms claimed by LAS/FD – other members of the Commission "noted that proficiency tests are *not* generally manufactured at minimum threshold values as threshold is determined through test validation studies and the use of controls during the analysis process." *See* Exhibit P, *supra*, at 3 (emphasis added). Then, "[a]fter discussion, it was agreed that the minimum threshold proficiency testing issue would be referred to the DNA Subcommittee for further review and recommendation." *Id.*

Subsequently, Mr. Neufeld's motion to condition approval of OCME's use of LCN DNA testing on the lab's development of "an in-house proficiency testing program that tests at the 20 picogram threshold" *failed* by a vote of seven to three. The motion for *unconditional* approval of OCME's use of LCN DNA testing *passed* by a vote of seven to three. The Commission agreed to refer Mr. Neufeld's issues to the DNA Subcommittee for review. *Id.* at 3-4.

Accordingly, on December 14, 2005, the Chair of the Commission, Chauncey Parker, wrote to Dr. Ballantyne to inquire about "the feasibility and appropriateness for the periodic administration of an in-house proficiency challenge that simulates routine case work, designed to monitor performance at or around the validated minimum template amount (20 picograms)." *See* Exhibit Q, Letter from Chauncey G. Parker, Chair to John Ballantyne, Ph.D. (Dec. 14, 2005). Chair Parker further asked "that the Subcommittee provide observations or recommendations for the Commission." *Id.*

When Dr. Ballantyne responded on behalf of the Subcommittee, ten months later, he simply conveyed the Subcommittee's approval of the OCME's own proficiency testing protocol of August 21, 2006, which he attached to his brief cover letter. *See* Exhibit R, Letter from John Ballantyne, Ph.D., to Chauncey G. Parker, Chair (Sept. 18, 2006). That protocol states that analysts will run proficiency samples at the optimal amount of DNA for LCN testing (100pg) and that the DNA typing kit will be monitored to verify its sensitivity down to 6.25 picograms, *see* OCME, Department of Forensic Biology, Proficiency Testing Program for LCN DNA Testing (Aug 21, 2006), attached to Exhibit R. Clearly, the Subcommittee did not find a lower

limit of 20 picograms necessary for LCN DNA testing; on the contrary, "[t]he Subcommittee's review found the procedures described in the attachment as reasonable and appropriate to assure reliable results with this method and voted unanimously to make this binding recommendation to the Commission on Forensic Science to approve these procedures." *Id.*

2. LCN Has Resoundingly Been Approved in State and Federal Court

Between 2006 and 2014, LCN was challenged in more than ten criminal cases. In each of those cases, it was found to be reliable and, therefore, admissible as evidence in criminal matters. *See* Exhibit S, List of Written State Court Decisions Admitting LCN in Criminal Cases. As a Kings County Supreme Court Justice recently noted in denying defendant a *Frye* hearing, "[r]ulings by other Judges finding a technique generally acceptable can obviate the need for a *Frye* hearing." *People v. Thawney*, Ind. No. 8183/2015 (NY Sup Ct Kings Cty, Oct. 17, 2017) at 8.[11]

a. State Courts Have Generally Followed the Approval of People v. Megnath

On February 8, 2010, in New York State Supreme Court, Queens County, Judge Robert Hanophy issued a widely followed decision upholding OCME's use of LCN DNA testing in casework. *See People v. Megnath*, 27 Misc.3d 405 (NY Supreme Ct Queens Cty 2010). At a hearing to determine whether the scientific method was generally accepted in the relevant scientific community, *see Frye v. United States*, 54 App. D.C. 46 (1923), Judge Hanophy took testimony from "five reputable [and credible] forensic scientists." Following that hearing, the Court held that "the LCN DNA testing method as it is performed by the OCME and is interpreted by OCME protocols, will consistently yield reliable results." *Megnath*, 27 Misc.3d 405 [2010]) at 411. The Court further found specifically that LCN is a reliable technique based on PCR-STR DNA testing that had already been recognized as the "gold standard" technique for DNA testing. *Id.* at 411. As the Court noted, LCN is "simply a more sensitive form of HCN DNA testing" that has been used to identify bodily remains, old bones and artifacts, and it has been used to determine birth defects during in vitro fertilization. *Id.* With regard to the greater likelihood of stochastic effects due to the more sensitive nature of LCN testing, the Court emphasized that,

> [s]ince forensic scientists have long been familiar with the scientific issues or phenomena that arise in both HCN [high copy number DNA testing] and LCN DNA testing, forensic scientists, including the OCME, have created interpretation protocols to account for these phenomena when they occur in both HCN and LCN testing. While [they may] occur more frequently in LCN DNA typing, the OCME has implemented interpretation protocols to compensate for these occurrences. The interpretation protocols that were developed by OCME to compensate for the scientific phenomena were formulated by the OCME based on their extensive validation studies regarding LCN DNA testing.

[11] Although the court in that case was addressing the acceptance of FST in the relevant scientific community, the same principle holds for any other scientific technique that has been so consistently approved by the courts.

Id. at 410.

The Court also noted specifically that LCN is not novel science or technology. "LCN DNA profiling as conducted by the OCME is not a novel scientific technique. DNA testing in the forensic community has been generally accepted as reliable for many years... The same analysis that is utilized in HCN DNA testing and which has been admitted nationally in our Courts for years, is basically the same type of DNA testing that is used when LCN DNA testing is performed by the OCME." *Id.* at 410.

This decision has proved highly influential: following *Megnath*, numerous New York State courts have accepted LCN DNA testing and ruled its results admissible in criminal matters, even denying requests for *Frye* hearings yet admitting the results of LCN DNA testing. *See* Exhibit S, List of State Court Decisions Admitting LCN in Criminal Cases; *see also supra* n.4.

b. The Southern District of New York Approved LCN in United States v. Morgan

LAS/FD claim that, "[i]n *U.S. v. Morgan*, the OCME reported a positive identification on a touched sample with only 14 picograms of total DNA. The sample was composed of *at least* three contributors, with some loci indicating the possibility of five or more total individual contributors to the sample." LAS/FD Allegations at 9 (original emphasis). LAS/FD's source for that assertion is unclear, since the OCME report issued for the *Morgan* case indicates unambiguously that OCME tested two swabs from a firearm, one swab was from the "front strap/back strap/side grip grooves," and the other was from the "slide grip grooves/release area." *See* Exhibit T, *United States v. Morgan*, 12-cr-00223- (GHW), Direct Examination of Dr. Craig O'Connor at 602-35. Human DNA sufficient for PCR DNA testing was found on those samples using the LCN testing method. The results of that testing indicated a mixture of DNA from what was best described as at least two people, including at least one major male contributor, Male Donor A, on the swab from the front strap/back strap/side grip grooves. The resulting profile from that Male Donor A was based on an 8-locus result with a random match probability of 1 in 1.43 million people. The DNA detected from the slide grip grooves/release area was not suitable for comparison. Based on these actual facts, OCME experts determined this mixture to be from at least two contributors, rather than the three or more concluded by the defense, whose experts did not persuade the court. *Id.*

Differences of opinion do not render the LCN method unreliable; if anything, they go to the weight to be given the evidence and can provide argument for lawyers' summations that may cast reasonable doubt in the minds of the jury. In *Morgan*, not only was the Court unconvinced by defense counsel's arguments against the reliability of LCN, *see United States v. Morgan*, 53 F. Supp. 3d 732 (SDNY 2014); clearly, the jury was also not persuaded. The Second Circuit Court of Appeals affirmed this result, and the United States Supreme Court declined to review that decision. *Id.*, *aff'd*, 675 Fed.Appx. 53 (2d Cir.), *cert. denied*, — S.Ct. —, 2017 WL 2734816 (Mem).

The LAS/FD Allegations not only misstate the facts of *Morgan*, but they also falsely assert that "OCME had conducted no validation studies that confirm the accuracy of LCN testing under circumstances akin to those in the *Morgan* case." Much like their disingenuous presentation of OCME's reported results in *Morgan*, they also aim to mislead the Inspector General, and now the Commission and its Subcommittee, into believing that OCME has no validation studies to demonstrate LCN's reliability using a mixture of two people with a deduced Male Donor A. Taking the validation studies as a whole, especially Volumes 3 and 4 (sensitivity), Volume 8 (mock casework samples) and Volume 9 (mixture studies), the studies conclusively demonstrate that the results generated from LCN testing conducted on mixtures of two people, under circumstances akin to those in Morgan, produce reliable results.

C. OCME Updated its DNA Technology in Keeping with Advances in Forensic Science and More Stringent FBI Requirements

As of January 1, 2017, OCME's Department of Forensic Biology began to use the Promega Powerplex Fusion STR kit, which enables identification of alleles at up to 24 loci (including the Amelogenin locus and a Y-chromosomal STR locus). Prior to this date, the lab had used Identifiler, which allowed viewing of only 16 loci (including the Amelogenin locus). This upgrade from Identifiler, which was paired with Genemapper ID, LCN testing, and FST, was implemented to accommodate the increase in the number of core loci from 13 to 20, which the FBI now requires to upload profiles into the CODIS database. Because Fusion was not validated to run with the semi-continuous FST program, OCME could not use the two products together and chose to upgrade to the fully continuous probabilistic genotyping tool STRMix which had become available since the advent of FST. Being fully continuous, STRMix considers more information in the profile and performs statistical models to analyze the sample. This is akin to going from using a paper map to using Google maps to estimate the time it may take you to drive from Manhattan to Albany.

LAS/FD claim that "OCME abandoned the LCN methodology and determined that the lower threshold for suitability for DNA testing is 37.5 picograms with that new kit." While the 37.5 picogram threshold was validated for the Fusion kit, going any lower than that would require using increased amplification cycles and modified interpretation protocols similar to those developed for use with the Identifiler kit. In order to employ that technique with Fusion, it would need to be validated for use with Fusion. In order to validate LCN for use with Fusion, OCME would need to expend not only an extensive amount of time, but also resources in performing such a series of studies. To determine whether such expenditure was beneficial for the lab, a cost/benefit analysis was done and it was decided that the number of cases with lower quantities of DNA than 37.5 picograms that yielded results, is negligible compared to the cost of performing a validation for Fusion/LCN and, as such, the OCME Department of Forensic Biology decided not to proceed with the validation.

Contrary to the unfounded assertion in the LAS/FD Allegations that LCN was abandoned because of reliability concerns, that was simply not the case. OCME stands by the reliability of

LCN and its results, as it does by the reliability of FST; our reasons for no longer using it were based on a balancing of lab resources versus the needs of our customers, and the data suggests that validation of this technique is simply not cost effective at this time.

D. Eugene Lien Answered the Commission Truthfully and Accurately on October 24, 2014

The LAS/FD Allegations seek to perpetuate the false claim that Eugene Lien, Technical Leader of the Department of Forensic Biology at the OCME, lied to the Commission during questioning by then Commissioner Barry Scheck at a CFS meeting on October 24, 2014. *See* LAS/FD Allegations at 9-11. In fact, as Mr. Lien stated in a deposition in an unrelated employment lawsuit where this canard has also been advanced, and as should be patently clear to anyone reviewing the relevant documents, Mr. Lien spoke truthfully and accurately at that Commission meeting.

Mr. Scheck asked Mr. Lien exactly the following question:

> In particular [uh], in terms of all the letters [uh] that I passed on [um] and the different briefing from [uh] the case in the southern district of New York, and the opinions of experts, it should be evident that the, the "principal complaint we are making . . . has this laboratory [OCME] ever done a validation study on samples, mixtures, [um] as was presented by the case in the southern district of [uh] in that instance, it was, I think, 14 or 16 picograms, I can't recall which, [um] but below 25 picograms with a mixture of [uh] three people, when the only validation study that has ever been published [um], and it wasn't on samples replicating casework it was on buccal swabs [uh] initially, with 50 picograms with mixtures of two people.

See Exhibit U, Unofficial Transcript of Meeting, Commission on Forensic Science (Oct. 24, 2014) at 2-3.

Mr. Lien's response, "Yes, we do," was entirely accurate. As Mr. Lien clarified in his deposition in *Stajic v. City of New York, et al.*, 16-CV-1258 (GHW), "Scientific validation must be taken as a whole. The entire validation constitutes the proper interpretation methodology and the proper use of low copy number testing. It's not just that volume that we are talking about. It's the entire validation that I am relying upon to answer that question." *See* Deposition of Eugene Lien, *Stajic v. City*, at 98:7-14 (attached in part to LAS/FD Allegations as Exhibit D and separately provided to the Commission in full). As Mr. Lien goes on to elaborate, the relevant tests described in volume 9A of the validation study, in combination with other tests conducted during the validation studies, properly support OCME's testing of samples below 25 picograms with mixtures of more than two contributors.[12]

[12] This interpretation is also supported by the expert report submitted by Dr. Craig O'Connor on behalf of OCME in *Stajic v. City*, Exhibit V, Expert Report of Dr. Craig O'Connor, *Stajic v. City of New York et al.*, as well as by Dr. O'Connor's deposition in the same litigation.

Comparison of the specific phrasing of Mr. Scheck's question with the colloquy during cross-examination of Dr. Craig O'Connor during the trial in *United States v. Morgan* instantly clarifies the differences between Mr. Scheck's question and the inquiry by defense counsel in *Morgan*, Rita Glavin, as well as the differences between Mr. Lien's response to Mr. Scheck and Dr. O'Connor's answers to Ms. Glavin's questions.

> Q. Okay. So Volume 9A, your mixture study, the lowest amount of mixture that you tested was 25 picograms, is that correct, for the mixture?
>
> A. That's correct.
>
> . . .
>
> Q. Now going to mixture study 9A, the mixtures that were studied, the maximum number of contributors, were two, is that correct?
>
> A. Yes, for 9A there were sets of mixtures with two contributors.
>
> . . .
>
> Q. OCME did not do mixture studies for LCN DNA testing where there were more than two contributors, isn't that correct?
>
> A. That's correct.
>
> Q. And you did not do these mixture studies where it goes below 25 picograms, is that correct?
>
> A. For mixtures, correct.

Exhibit T, Transcript, *United States v. Morgan*, Nov. 7, 2014 (659:21-660:16).

Unlike defense counsel in *Morgan*, Mr. Scheck did not ask Mr. Lien whether any *particular* component of the LCN mixture validation studies consisted of a mixture sample smaller than 25 picograms with more than two contributors. He asked whether OCME had conducted a validation study that validated its use of LCN DNA analysis on mixture samples smaller than 25 picograms with more than two contributors. Consistent with the SWGDAM guidelines, OCME had conducted the necessary validations to support its analysis of such samples, and that use was specifically approved – twice – by the DNA Subcommittee and by the Commission itself. *See* Exhibits N, O, P, Q, R.

This Commission now has an opportunity to put to rest, once and for all, the false assertion that Mr. Lien either misspoke – or, as has been more perniciously asserted by both the Legal Aid Society and Federal Defenders in its submission, and by plaintiff in *Stajic v. City of New York*, that Mr. Lien lied – in responding to Mr. Scheck's question at the October 24, 2014 Commission meeting. The debunking of this fabricated claim significantly undermines the unfounded assertion that the OCME committed any malfeasance.

Contrary to LAS/FD's assertion, and as demonstrated above – and approved by this Commission – Dr. Stajic's lawsuit did not "reveal" that OCME lacks sufficient validation for its

use of LCN on mixture samples below 25 picograms with more than two contributors. This assertion does not become truer by dint of repetition; thus, LAS/FD's citation to Dr. Stajic's false assertion hardly provides support for that same false assertion here.

Conclusion

Thank you for your consideration of this refutation of the untrue and misleading allegations submitted by the Legal Aid Society and Federal Defenders. Please do not hesitate to let us know if you have questions or need additional information or materials.

Respectfully submitted,

Florence Hutner
General Counsel
Office of Chief Medical Examiner

EXHIBIT C

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December 7, 2017

Honorable Catherine Leahy-Scott
New York State Inspector General
61 Broadway, Suite 2100
New York, New York 10006

Dear Inspector General,

We are in receipt of the OCME's October 18th response to our complaint to the Office of the Inspector General. The OCME's response does not successfully refute any of the basic premises of our complaints. It only reaffirms more global concerns with the lab's methodology. Further, the response exemplifies the troubling, adversarial stance in which the OCME appears to long have been stuck. A defensive culture that fears transparency, criticism, and losing in court more than playing by the rules and correcting its own mistakes has no place in forensic science, especially not at New York's public lab.

Throughout the OCME's response, the agency attempts to deflect from the major issues raised in our complaint by re-litigating the admissibility of the FST and LCN testing, attacking PCAST, and questioning the motives of our organizations. Primarily focused on avoiding the key questions and attacking the messenger, the lab's answer fails to clarify, explain, or justify any of the questionable conduct we identify.

Our essential concerns can be summarized as follows: (1) the OCME identified significant malfunction in the FST early on and did not disclose them to any of the relevant stakeholders. The OCME exacerbated the problem by choosing not to properly validate the revised software. (2) The OCME manipulated data during their validation of the LCN methodology. (3) The OCME made false statements to the Commission on Forensic Science and others about LCN testing.

Below, we briefly contextualize the OCME's arguments to show they avoid the substance of our complaint. We also provide additional information that has recently come to light. We welcome an independent and thorough investigation by the Inspector General on the factual merits of our claims.

OCME's Modification of FST was not "Limited" or "Minor" and the OCME's Explanation Why FST Generated Errors as Soon as It Was Applied to Casework Demonstrates that the Underlying Methodology was Flawed

The OCME claims its overhaul of FST was minor and "did not affect FST's methodology." *See* OCME Response at 7. Therefore, OCME maintains, a performance check sufficed in lieu of a validation of the new program, the FST 2.0. Yet, the OCME's explanations thus far are incomplete and misleading.

The FST computes likelihood ratios for every one of the 15 genetic locations (*locus* singular, *loci* plural) and then combines them to produce the overall, reported likelihood ratio. The FST employs two formulae in its calculation that deal with allele frequencies (how often genetic markers are seen in the population): a minimum allele frequency calculation, [1] and the theta correction.[2] The OCME has offered inconsistent sworn accounts that one or both of these features to explain FST's malfunction.

In its October 18th response, the OCME claims only that the negative likelihood ratio was caused by the use of a minimum allele frequency for rare alleles which appear in casework but are not represented in the allele frequency tables. *See* OCME Response at 7. This explanation differs from an earlier account offered by Eugene Lien, Technical Leader at the Forensic Biology Division at the OCME: "[W]e discovered the frequency value that was coded into the program could potentially create a mathematical scenario where FST could calculate a negative likelihood ratio value due to the theta correction." [3]

The OCME's October 18th explanation also differs from the recent testimony of Dr. Adele Mitchell, who appeared at a *Daubert* hearing in *United States v. Dean Jones*.[4] Dr. Mitchell testified that the negative likelihood ratio malfunction resulted from the FST's use of the minimum allele frequency, and the theta correction, with loci with very *common* alleles: "[S]o those two things together, if there was a locus that had alleles that added up almost to a 100 percent, when those conservative adjustments are made, it could bump the frequency above 100 percent, which would be nonsensical in the calculation."[5]

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[1] The population databases from which these frequencies are derived are known not to contain all alleles. Those alleles which are not seen in the population database are assigned a minimum frequency. Assignment of minimum allele frequencies prevents what is a population undersampling problem from artificially inflating resulting statistics. It is a necessary and conservative solution that follows the recommendations of the National Research Council, The Evaluation of Forensic DNA Evidence, 1996 ("NRC II").

[2] Theta is a value which is factored into the mathematical formula FST uses to account for the effects of shared common ancestry (inbreeding) because "[g]enetic mixing of alleles is not completely random because parents often share some common ancestry." John Butler, Forensic DNA Typing: Interpretation at 260 (Elsevier 2015). The use of theta is generally accepted in the forensic science and population genetics fields. *See, e.g.,* National Research Council, The Evaluation of Forensic DNA Evidence, 1996 ("NRC II") at 30. The theta correction is applied to the entire sample (all loci), not just certain loci. It is important to not overstate the rarity of a combination of alleles at a marker; the use of theta helps prevent an overestimation of the rarity of a genetic profile.

[3] August 17, 2017 Affidavit, *People v. Malik Stroud*, Indict. 2493-2016 (Sup. Ct. Bronx Cty).

[4] SDNY, 1:15 cr 00153 (VSB)

[5] *Daubert* hearing, *United States v. Dean Jones*, 15-CR-153 (S.D.N.Y December 4, 2017) (Broderick, J.), testimony Nov. 6, 2017, p. 173, l.1-5.

These explanations only raise more questions. Does FST eliminate data because of how it accounts for rare genetic markers, or how it manages common ones? The OCME's accounts span the gamut. Notably, the lab altogether avoids a critical larger scientific question: how could eliminating potentially exculpatory data be an acceptable solution to FST's malfunction. It offers no support .97 as an appropriate threshold to eliminate data.[6] The arbitrary choice to create a new and serious defect—the elimination of potentially exculpatory data—in service of addressing another while concealing both from the public and every stakeholder the lab serves is plainly troubling.

Despite the OCME's efforts to characterize the problem as rare or minor, this is a fundamental *methodological* problem. FST is incapable of employing both minimum allele frequencies and the theta correction while also performing its core functions without generating a mathematically incongruous answer. This directly "*impact[s] interpretation or the analytical process.*" *See* FBI Quality Assurance Standards for Forensic DNA Testing Laboratories, Standard 8.7, effective 9/1/11 (emphasis added) (requiring labs to conduct a validation where a mixture interpretation software has undergone *"significant software changes that may impact interpretation or the analytical process"*).

An examination of the FST formula contained in its validation studies further suggests that the problem is rooted in how the FST accounts for the stochastic phenomenon common in mixtures known as allelic drop-out.[7] As we explained in our original complaint, drop-out occurs when an allele belonging to a true contributor to a mixture fails to be detected in the testing process because of sampling or copying error with low amounts of DNA. Drop-out is a characteristic of complex DNA mixtures, which frequently have at least one contributor in that low-template range. Accounting for the probability of drop-out, that is, for alleles not detected in the mixture was a major problem FST was designed to solve. The OCME spent significant resources in determining how to do this. Yet the OCME could not get its drop-out method to work with certain complex mixtures containing common alleles.

How FST factors in missing alleles

FST factors in the possibility of missing (dropped-out) alleles in its formula by using a construct known as "*w*". *W* represents an allele of a true contributor to the mixture but which has dropped out and is therefore unknown. The frequency of a missing allele "w" cannot be known since it is not seen. But the FST must assign some frequency to the missing allele *w*. To assign a frequency to the *w* allele, FST adds up the frequencies of all the alleles that are seen in the mixture. Then it subtracts the sum of those frequencies from 100% (1) to get the artificial frequency of the artificial *w* allele. Thus, the formula FST uses for "*w*" is *w* equals 1 minus the

[6] The .97 cap is scientifically baseless. It would be tempting to conclude that since theta is .03, the total allele frequency should be capped at .97 so that the sum of the two figures is 1, (Locus Cap = 1 - Theta), but this explanation was essentially refuted by Dr. Mitchell in testimony in the *Daubert* hearing in *US v. Dean Jones* when she was asked by the government whether this was so, *see* p. 173, l.21-25. In any event, that fix would be as scientifically baseless as the problem. .03 is not added to the sum of the allele frequencies in the FST formula.

[7] Attached Exhibit A is a detailed explanation of how the math works in the FST formula.

total allele frequency of the observed alleles in the evidence. For instance, if the combined allele frequencies of all of the alleles seen in the mixture is 80%, then *w* will be 20%.

The problem of the negative likelihood ratio appears to arise when the total allele frequency of the observed alleles in the mixture added up to more than 100%. The resulting value for "*w*" in those circumstances is negative: 1 minus more than 1 is a negative number. The total of the allele frequency of the observed alleles can total over 100% because of the use of the minimum allele frequency.

For instance, if the alleles in a mixture are: 6, 7, 8, 9, 10, 11 and 12:

Locus	Allele	Black	Caucasian	Hispanic	Asian
TPOX	6	0.044	0.021	0.020	0.016
	7	0.020	0.021	0.017	0.016
	8	0.324	0.624	0.440	0.513
	9	0.212	0.120	0.116	0.165
	10	0.104	0.037	0.056	0.032
	11	0.280	0.174	0.301	0.274
	12	0.020	0.037	0.063	0.016
	13	0.020	0.021	0.017	0.016

The frequencies in the red box total 1.034, that is over 100%.
Therefore, w = 1-1.034 = -.034.

Thus, when the combination of alleles is very common (and boosted by the use of the minimum allele frequency), *it forces the w to become negative*. *See* Exhibit A.

If there are an even number of possibilities of genetic combinations with a dropped out allele, no negative likelihood ratio results. This is because an even number of negative values are positive when multiplied together (i.e., -1 x -2 x -3 x -4 = 24). If an *odd* number of "*w*s" are used in the calculation, then, because of the particular way the theta correction is factored into the calculation, the overall result for that tested location will be negative and the problem will be detected.[8] In short, when there is an even number of genetic combinations using *w*, the theta correction will produce a positive value; when there is an odd number of genetic combinations using *w*, the theta correction will produce a negative value. The theta correction didn't create the problem, it caught it. *See* Exhibit A.

[8] It should be noted that if there are two loci with negative likelihood ratios, the two negative values will cancel each other out when they are combined to form the overall LR.

But this also means that negative values for *w*—a scientific impossibility—were being used in the calculation whenever there was a combination of alleles that exceeded 100%, but were only detected some of those times due to the way the theta correction works mathematically, *see* Exhibit A. Therefore, cases which did not ultimately result in a negative likelihood ratio *still* may have been calculated with what is essentially gibberish—a negative "*w*". The number of cases affected by the negative likelihood ratio problem is in all certainty far greater than the OCME claims.

This is clear from the attached letter by Dr. Eli Shapiro, former Deputy Director of Training and Mitochondrial DNA Technical Leader at the OCME. Dr. Shapiro concluded that the way FST discards data is not methodologically sound, harms defendants, and OCME failed to adequately test it before bringing it online for casework. His conclusion is based on an extensive, multi-year review of the FST validation studies and the performance check data that has been provided to him. Exhibit B.

In sum, OCME failed to get the FST formula to work properly. While it is generally accepted that drop-out must be accounted for, the FST could not do so for mixtures containing common alleles without either causing the formula to mathematically implode (FST 1.0), or discarding potentially exculpatory data (FST 2.0 onward). This fundamental problem is *methodological* in nature, and a new validation should have been conducted.

The OCME's Performance Check that Followed the Code Modification was Inadequate and Should Have Led to a Comprehensive Validation Study

The OCME only tested two samples during its performance check with allele frequencies above a .97 cap. In both samples, the likelihood ratio changed. And in both cases the change would have benefited the prosecutor's hypothesis. In one of the two samples (Item5_Study_3p_D295_ND_30p), the likelihood ratio increased for the true contributor after the modification but, more significantly, the likelihood ratio for a false positive contributor increased from 4.13 to 29.29: a higher likelihood ratio than the true contributor. Also, according to the verbal scale used by the OCME along with FST to report results, the false positive sample went from being classified as "weak support" for the prosecution's hypothesis to "strong support" for the prosecutor's hypothesis. (OCME performance check results table, Exhibit C attached)

The OCME's assertion of the sufficiency of its performance check which consisted of only two samples is simply not credible, especially given what we now know about the methodological failure underlying the initial error in the program.

Dr. Shapiro's attached letter and supporting data refute the OCME claim that the magnitude of the effects of the locus drop rule are small and insignificant. Exhibit B. For instance, Dr. Shapiro's analysis of the limited performance check data in his Figures 4 and 5 shows dropping one locus for the "item 5" sample could have substantial changes in an anti-conservative direction.

Further, the perfunctory and self-serving performance check failed to encompass *any* samples where more than one locus was dropped from the calculation. Yet, as Dr. Shapiro points out, more than one locus may be dropped in a casework sample. The effect of doing so on the likelihood ratio was not tested by the OCME.

Dr. Shapiro stresses that the false positive rate with this function in place is *different* than that established in the OCME validation and included in publications. Shapiro Ltr at 5. This means that the OCME reported an inaccurate false positive rate to courts, the Forensic Science Commission/DNA Subcommittee, and auditors.

Dr. Shapiro's letter makes clear that the OCME's attempts to minimize the significance of the error in the FST methodology and inflate the quality of their evaluation of its purported fix should be rejected by this agency.

The OCME's Response to the Lien Deposition Issue Only Emphasizes the Persistent Culture of Deflection and Obfuscation at the Lab.

One of the central allegations in our complaint centered on questionable answers Eugen Lien gave the Commission on Forensic Science (CFS) about the lab's validation practices. At a hearing on October 24, 2014 Mr. Lien claimed the OCME had conducted a specific validation study for LCN samples below 25 picograms with more than two contributors. It was later shown that this claim was false.

The OCME makes a crude attempt to take Mr. Scheck's statements out of context to make it appear that the question posed to Mr. Lien was vague. But the unofficial transcript shows then-Commissioner Barry Scheck directing a specific question about the study to Mr. Lien, to which Mr. Lien inexplicably attempts to avoid answering. He then responds. The OCME's response, however, inexplicably supplies an alternative question for Mr. Lien's answer. The lab pulls a quote from Mr. Sheck that appears nine pages earlier on page 2. It is entirely unreasonable to suggest that Mr. Lien's answer of "Yes, we do" was in direct response to those earlier remarks.

Here is the full exchange:

> Barry Scheck
> Tell me, do you have -what's the, alright we all know what we're talking about There's a guideline on internal validation studies that say you have to be able to demonstrate that a new assay is getting- has been validated on samples replicating casework. Your assay, is using low copy number testing, the way you, the OCME, and only the OCME-does this [uh] to my knowledge in the United States, much less, the world, right, do you have an internal validation study demonstrating that you can get [uh) correct answers on samples replicating casework [uh] al 25 picograms or less with mixtures of more than two people? Do you have that or not, [um] Mr. Lien?
>
> Eugene Lien

Is thi- [um] Is this a question I should answer, Commissioner Green?

Michael Green
If you understand the question...

Barry Scheck
Yeah, you have to answer it You have to answer it!

Marvin Schecter
Yeah, you have to answer it.

Michael Green
No, Barry, he's allowed to ask a question, he did, and I was try ng to answer him when you jumped in and started yelling. My response to your question Is, if you understand the question and you can answer it, then please do.

Barry Scheck
He said yes, and I...

Eugene Lien
Yes, we do.

Unofficial Transcript, Commission on Forensic Science (Oct. 24, 2014) at 10-11

The OCME's attempt to manipulate the transcript aside, we encourage the Inspector General to thoroughly review the full document as the full context of the discussion makes clear that Mr. Lien knew exactly what was being asked of him. In fact, immediately following Mr. Scheck's question, Mr. Scheck asked to see the validation study in question. There was substantial discussion in the Committee as to whether Mr. Scheck was entitled to see the study and, importantly, whether the DNA Subcommittee had already reviewed that particular validation study—the one that we now know does not exist.

Here is the exchange between Committee member Marvin Schechter and Mr. Lien:

Marvin Schechter
Did you review with them (the DNA Subcommittee) the internal validation study that's the, the subject of this motion?

Eugene Lien
We were at their disposal in terms of what they would like to see, and they were left to conclude.

Marvin Schechter
My question wasn't who was at whose disposal, my question simply was, with respect to this internal validation study, that is the essential aspect of Mr. Scheck's

motion, did you, or any of your colleagues, engage in a discussion with the members of the DNA Subcommittee with respect to the internal validation study. Or...

Eugene Lien
Yes.

Marvin Schechter
...You did. I'm sorry?

Eugene Lien
Yes

Id. at 21.

Not only did Mr. Lien unequivocally affirm to the Commission that the specific validation study existed, replicating casework existed, but when asked to produce the study, he falsely told the Commission that this non-existent document had already been reviewed by the DNA Subcommittee. This misrepresentation weakened Mr. Scheck's ultimately unsuccessful effort to have it produced to the Commission. Mr. Lien has never clarified these statements.

The OCME helpfully includes an excerpt from Dr. Craig O'Connor's testimony in *U.S. v. Morgan* (p. 15 of OCME response) which contains an honest answer to the question. Dr. O'Connor is clearly and unequivocally states that no studies with mixtures under 25 picograms were done when validating LCN. There is no explanation as to why Mr. Lien didn't answer Mr. Scheck's question the same way.

The OCME's attempts to imply that Mr. Lien did not fully understand the question or did not have a chance to elaborate are belied by a review of the transcript and reading his answer in the context of the full discussion. These questions did not arise in isolation. They occurred in the context of the *Morgan* case which was simultaneously being litigated in federal court and which led to extensive discussion within the Commission. It is unreasonable to conclude that Mr. Lien did not understand the question. The Commission was having a lengthy discussion about it that filled 8 pages of the transcript before Mr. Scheck posed his direct question to Mr. Lien.

Also, the October 24, 2014 discussion at the CFS was part of an ongoing dispute about the reliability of LCN testing with very small quantities that had been going on for years. As we stated our original complaint Barry Scheck and Peter Neufeld, Co-Directors of the Innocence Project, raised concerns about LCN testing at especially low levels when LCN first came before the Commission for approval.[9]

When the *Morgan* case arose, the debate within the Commission was renewed and it is evident that the Commission's response was influential in the *Daubert* decision in that case. Former Assistant United States Attorney, Rita Glavin and her colleague Michael Weinstein, were assigned the *Morgan* case as defense counsel and marshaled extra resources to litigate it at both a

[9] This information is based on our conversations with former Commission member Barry Scheck. We invite the Inspector General to speak to him with regard to this complaint.

Daubert hearing and at trial (they were not involved in the appeal). Among the well-respected DNA experts she retained was Dr. Ranajit Chakraborty, a former member of the DNA Subcommittee and an early architect of the FBI's DNA program. Dr. Chakraborty was not just critical of LCN in his testimony in the *Morgan* case, but he made important observations about the limitations of the DNA Subcommittee resources and its capability to make the kind of detailed and comprehensive analysis necessary to evaluate the validation of new DNA methodologies.

The Commission's approval of OCME's validation of LCN became a major issue at the *Daubert* hearing with OCME claiming that approval by the Subcommittee and the Commission constituted general acceptance in the scientific community. At a meeting before the *Morgan* trial, Commissioner Scheck first asked Eugene Lien whether OCME had done an internal validation on samples replicating casework involving mixture of more than two people at below 25 picograms. Lien said yes. Dr. Craig O'Connor testified there had been no such internal validation study and no such internal validation study was disclosed to Galvin and Weinstein in discovery. Subsequent to Dr. O'Connor's testimony Mr. Scheck pointed out at Commission proceedings the contradiction between Mr. Lien's representations and Dr. O'Connor's testimony. He asked that the DNA Subcommittee be asked to investigate whether the internal validation study have been done. The questions presented to the DNA Subcommittee by Brian Gestring, however, did not include a specific finding concerning whether OCME had done the internal validation study about which Mr. Scheck asked Mr. Lien.

Both Mr. Lien and the OCME now claim that the entire LCN validation study as a whole "properly support OCME's testing of samples below 25 picograms with mixtures of more than two mixtures." (OCME response at 14). This assertion is entirely without any support, and one contrary to the entire premise that a validation is supposed to establish the *limits* of the use of a methodology in casework. *See* FBI Quality Assurance Standards for Forensic DNA Testing Laboratories, Standard 8.7, effective 9/1/11 ("Developmental validation is the acquisition of test data and determination of conditions and limitations of a new or novel DNA methodology for use on forensic and/or casework reference samples.").

It is in this full context of the October 2014 meeting that Mr. Lien answered Mr. Scheck's question untruthfully, knowing that Mr. Scheck was referring to the *Morgan* case which had been the subject of discussion not only at that meeting but at previous Commission and DNA Subcommittee meetings as well as the subject of a very contentious *Daubert* hearing in federal court.

The Serious and Meritorious Issues Raised in the LAS/FD Complaint Are Not in Any Way Mitigated by the Popularity of LCN/FST Among Jurists, Nor Are They Diminished By The OCME's Spurious Attacks Against The Legal Aid Society

The bulk of the OCME's response is devoted to describing decisions admitting LCN or FST and attacking the motivations of the Legal Aid Society and PCAST. We will only respond to these points briefly as to not distract any further from the substantive claims we have made which stand unrefuted by the OCME.

First, this is not the forum to re-litigate the admissibility of FST. The Legal Aid Society and Federal Defenders' complaint concerned the OCME's failures to cooperate and be transparent with the agency charged with its oversight. The purpose of a Coverdell complaint is to move scientific questions away from the vagaries of litigation, the limitations of judicial inquiry on scientific questions and the scarcity of resources in resolving complex concerns. It is odd then that the OCME would ask this Coverdell review to yield to judicial pronouncements – almost all uninformed by expert testimony – as opposed to welcoming the Inspector General's independent review of their casework, validation studies, and reporting practices independently.

We note, also, that the OCME's argument about the popularity of LCN /FST with jurists is somewhat circular as many of those same jurists relied at least in part on the Commission on Forensic Science's approval of these methodologies when making their determinations about its reliability or general acceptance. This was the case in *Morgan* where the judge specifically sought guidance from the Commission on the very issues raised in our current complaint.

Nevertheless, the revelations about the source code errors in FST appear to have already had an impact on the courts. Judge Fabrizio, cited by the OCME in their response as skeptical of our concerns, recently ordered a *Frye* hearing on FST based specifically on the recent revelations about the source code and the OCME's lack of transparency with the Commission. See *People v. Shamoy Brown*, Ind. No. 0330/2016 (Fabrizio, J.) (Decision, dated November 9, 2017, granting *Frye* hearing as to FST Version 2.0) (Exhibit D, attached).

As to the PCAST report, a document written by some of the top scientific minds in the country and chaired by Eric Lander (lead author of the Human Genome Project), it is very troubling that the OCME has so easily dismissed their constructive criticisms instead of engaging in the scientific process and re-thinking their methodologies. Their position reflects the culture of politics over science in the lab.

Finally, there is the pedantic notion that if a defense lawyer has used one of these controversial methods to advance her client's interests, then others cannot challenge its use in any other case. This reflects the stubborn refusal of the OCME to understand the constitutionally mandated role of defense counsel, particularly as it relates to our absolute duties to our individual clients. This argument has been recycled again and again by state prosecutors and the OCME lab itself. Even if true, it does not address in any way our complaint which is rooted in data and documented facts, readily available to an objective observer. Worse still, like a silk glove covering a fist, there is a veiled threat: if you seek to use FST evidence at all, you may not lodge a complaint about its demonstrable flaws. That is not a fair standard. Judge Mark Dwyer perhaps said it best in *Collins/Peaks* when the prosecution raised the same issue there:

> I remember that I used to have a mortgage. I've always thought the mortgage deduction is wrong and should be abolished by Congress. But, while I had a mortgage and while Congress had the mortgage deduction out there, I took it religiously, despite my reservations about it. I consider the defense attorneys' obligations to individual clients is, at least, as significant as my obligation to reduce my taxes. And therefore, I do not blame the defense at all for, while the law is what it is, arguing different positions in different cases.

Oral Decision, *People v. Collins/Peaks* (Sup. Ct. Kings Co. Jan,5, 2015) (Exhibit E).

Conclusion

The OCME's response to our complaint raises far more questions than it answers about the specific issues we raised and the lack of transparency at the OCME. As we noted in our original letter, the consequences of the OCME's malfeasance may have an enormous impact on the fair administration of justice. We urge the Inspector General to conduct a comprehensive and independent investigation into these matters.

Sincerely,

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Christopher Flood
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cc: New York City Office of the Chief Medical Examiner
New York State Commission on Forensic Science
New York State Department of Criminal Justice Services

BROOKLYN DEFENDER SERVICES

TESTIMONY OF:

Guy Raimondi – Supervising Attorney, Criminal Defense Practice

BROOKLYN DEFENDER SERVICES

Written with Andrea Nieves, Senior Policy Attorney

Presented before

The New York City Council Committees on Health and Public Safety

Oversight Hearing – Examining Forensic Science Practices

in the NYPD Crime Lab and OCME

December 14, 2017

Introduction

My name is Guy Raimondi and I am a supervising attorney in the criminal defense practice for Brooklyn Defender Services. BDS provides multi-disciplinary and client-centered criminal, family, and immigration defense, as well as civil legal services, social work support and advocacy, in nearly 40,000 cases in Brooklyn every year. I thank the City Council Committee on Health and Public Safety and Chairs Corey Johnson and Vanessa Gibson for the opportunity to testify today about forensic science practices in the NYPD Crime Lab and the Office of the Chief Medical Examiner.

Brooklyn Defender Services joins with the comments presented today by our colleagues at the Legal Aid Society, Bronx Defenders, and the Innocence Project. They all raise crucial points about the importance of accuracy and reliability in forensic testing in criminal cases. They also offer diverse suggestions about how to improve forensic oversight in our city. We urge the Council to consider all of their recommendations. I will focus my

comments today on the importance of transparency in lab protocols and early disclosure of forensic evidence to defense teams and will provide specific recommendations for reform.

Recommendations

1. ***The City should require the NYPD to list all of their laboratory protocols on the internet to be available to the public, as they required the OCME to do in 2013.***

There has been a move towards more transparency in crime lab protocols in response to widespread scandals that have led to thousands of convictions being overturned across the country.[1] To be considered reliable, scientific study must be replicable. Scientists must be able to show how they arrived at their conclusions and those conclusions should be able to be replicated by others. Crime labs across the country have thus begun to post their protocols, validation studies, technical manuals and directives on their website. In 2013, the City Council passed legislation requiring OCME to post this information, which is now publicly available on their website.[2] Two examples from other states include the Indiana State Police Laboratory Division[3] and the North Carolina State Crime Lab.[4]

Unlike other jurisdictions, New York City's police crime lab does not post their laboratory protocols on their website. Notably, the NYPD crime lab does not even have a page on the NYPD website that the public can access to learn about the lab, much less access critical protocols, test methods, quality assurance manuals and other relevant information. This information is critical to the analysis and assessment of all forensic testing that will be used in criminal cases.

At a minimum, the Council should require the NYPD crime lab to maintain a website and post on the websites all of the critical information required of OCME. Local Law 86-2013 should serve as the Committee's model in drafting transparency legislation to apply to the NYPD crime lab.

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[1] "Scandals have plagued state crime labs in North Carolina, California, Virginia, Illinois, Maryland, West Virginia and Mississippi; the city crime labs in Houston, Cleveland, Chicago, Omaha, Oklahoma City, Washington and San Francisco; the county lab in Nassau County, New York; and even at the FBI and Army crime labs." Radley Balko, *Private Crime Labs Could Prevent Errors, Analyst Bias: Report*, HUFFINGTON POST, June 14, 2011, available at https://www.huffingtonpost.com/2011/06/14/the-case-for-private-crime-labs_n_876963.html.

[2] New York City Office of the Chief Medical Examiner website, available at http://www1.nyc.gov/site/ocme/services/technical-manuals.page (last viewed Dec. 13, 2017).

[3] Indiana State Police Laboratory Division website, available at https://www.in.gov/isp/labs/index.htm (last viewed Dec. 13, 2017).

[4] North Carolina Department of Justice – State Crime Lab website, available at http://www.ncdoj.gov/About-DOJ/Crime-Lab/ISO-Procedures.aspx (last viewed Dec. 13, 2017).

2. ***The City should require the NYPD and OCME to turn over all of the evidence that relates to testing in a criminal case early and automatically to defendants and their attorneys.***

The Need for Discovery Reform in New York State

In order for people charged with crimes to present a full and fair defense in their case, they need complete and quick disclosure of all of the evidence. This is particularly so in cases involving forensic evidence which "often [has] decisive power in the judicial system."[5]

Defense attorneys play a crucial role in holding police, forensic experts and prosecutors accountable and exposing systemic injustice. Yet we cannot fulfill our responsibilities in this role as a check on other court actors if we do not have access to the evidence.

Unlike most of the rest of the country, New York's criminal procedure laws do not require early disclosure of the case evidence to the defense. This lack of information is unfair and results in wrongful convictions.[6] It also has a pernicious effect on the process of plea bargaining. Without any information on the case, it is hard for people accused of crimes to trust their attorney during plea negotiations. It is hard for the defense attorney to assess the advisability of a plea offer without the police reports. Without the information defense attorneys need in order to defend our clients' innocence or negotiate the plea bargain we believe is fair and appropriate, we are unable to move the process forward. Instead the case ends up in a standstill for months.

This means that even forensic evidence, often the key evidence in the prosecution's case, may be withheld from the defendant for months. In our experience, while it is now routine in Brooklyn for final reports or analyses to be turned over, we still may have to litigate, obtain subpoenas or at least engage in a prolonged back and forth, to obtain other critical forensic evidence in the case.

The City Council can help to ensure that people accused of crimes in New York City have all of the evidence they need to defend themselves, especially in cases involving forensic evidence. *The Council should join with defenders and grassroots groups to call upon the State legislature and the Governor to pass comprehensive discovery reform in all criminal cases during the 2018 legislative session. Current discovery practices harm court-involved City residents and their families and are costly to taxpayers who must cover the costs of extended and unnecessary incarceration on Rikers due to discovery delays. The Council's leadership on this issue could go a long way in bringing about statewide reform.*

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[5] Itiel D. Dror, *Cognitive neuroscience in forensic science: Understanding and utilizing the human element*, 370 PHILOS. TRANS. R. SOC. LONDON B. BIOL. SCI. 1674 (2015).

[6] *See, e.g.*, Brandon L. Garrett, *Actual Innocence and Wrongful Convictions*, in REFORMING CRIMINAL JUSTICE, VOL 3: PRETRIAL AND TRIAL PROCESSES, pp. 193-210, available at http://academyforjustice.org/wp-content/uploads/2017/10/9_Reforming-Criminal-Justice_Vol_3_Actual-Innocence-and-Wrongful-Convictions.pdf.

Particular Areas of Concern

OCME – Electronic Raw Data

A defendant cannot effectively challenge DNA evidence without access to the electronic raw data because the data is subject to interpretation by both the software program which processes it and the analyst who constructs the DNA profile. Yet in our experience, OCME will only turn over this information in response to a court-ordered subpoena. Judges respond inconsistently to defense requests for a subpoena, leading to variability across judges and jurisdictions.

Justice demands that where DNA is at issue in the case, the defendant and his or her expert should have early and automatic access not only to the electronic raw data, but all of the underlying data related to the DNA in his or her case, including a complete record of all bench notes.

New York City, like the rest of the state, falls far behind the rest of this country in with respect to prompt and thorough disclosure of this critical evidence, and it is time for reform. *The City Council should require the OCME to provide this information to the District Attorney prosecuting the cases along with the analysis and all of the other necessary evidence early and automatically in the case.*

OCME – Results of Employee Proficiency Exams and Disciplinary Records

As the City well knows, a single analyst can do significant harm to the reputation of a crime lab if they engage in illegal, improper, incompetent or simply careless behavior.[7] It is critical that defense counsel have access to the results of employee proficiency exams and disciplinary records to ensure that there is neither a rogue employee nor a pattern and practice of oversight that may lead to inaccurate results. The OCME Department of Forensic Biology does publish on its website the department wide results of proficiency exams. However, defendants and their lawyers know nothing as to whether the proficiency exams are sufficiently challenging and whether the samples used reflect the complex mixtures seen in real world casework. A 2013 audit of the OCME Department of Forensic Biology by the New York State Office of the Inspector General disclosed that there exists a multi-level employee disciplinary scheme to deal with OCME criminalist malfeasance but the defense community knows little of the process and does not receive any documentation regarding prior mistakes made by the criminalist.[8] *The City Council should require the OCME to provide this information to both District Attorneys and to the defense.*

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[7] *See, e.g.*, Joseph Goldstein, *New York examines over 800 rape cases for possible mishandling of evidence*, N.Y. TIMES, Jan. 10, 2013, available at http://www.nytimes.com/2013/01/11/nyregion/new-york-reviewing-over-800-rape-cases-for-possible-mishandling-of-dna-evidence.html.

[8] State of New York, Office of the Inspector General, *Investigation into the New York City Office of Chief Medical Examiner: Department of Forensic Biology* (Dec. 2013), available at https://www.ig.ny.gov/sites/default/files/pdfs/OCMEFinalReport.pdf.

NYPD Crime Lab - Testing of Controlled Substances in Misdemeanor Cases

Lab testing of controlled substances in misdemeanor cases is of particular concern because of a Court of Appeals case that, in effect, leaves innocent people incarcerated at Rikers for months without the testing of the evidence in their cases. Criminal Procedure Law Section 170.70 mandates that an incarcerated defendant be held in jail no more than five days absent the converting of the misdemeanor complaint to an information. Prior to the decision in *People v. Kalin*, the prosecutor, in order to convert, was required to obtain a laboratory report demonstrating that the item recovered was, in fact, a controlled substance. However, under *Kalin*, prosecutors can satisfy both the conversion requirement and, consequently, their obligation under CPL 170.70, with an assertion by the recovering police officer that based upon their training and experience and familiarity with packaging they believe the item to be the particular controlled substance.[9] The testing by the police lab is then often pushed off months down the road, perhaps until right before trial. And upon testing, if it determined that the item is, in fact, not a controlled substance, the defendant charged with a misdemeanor can have spent a considerable amount of time incarcerated for something that was not a crime. The irony is that our clients charged with felony possession or sale of a controlled substance are actually provided with more protections against wrongful imprisonment. *Kalin* does not abrogate the prosecutor's obligation, pursuant to Criminal Procedure Law Section 180.80, to present a laboratory report to a grand jury within six days of the moment of an incarcerated defendant's arrest. Therefore, in felony cases where the defendant is incarcerated and where the prosecutor must obtain an indictment within six days, we see cases dismissed when the laboratory report comes back as no controlled substance. These safeguards do not exist for our misdemeanor clients. We have seen clients sit on Rikers Island for some period of time, or who have to return to court multiple times with a charge hanging over their head, who are later proven innocent of misdemeanor drug possession once the recovered item is tested. More commonly, even if a person asserts their innocence, they take a plea to get off Rikers before the lab report even comes back. *This is unconscionable, but by requiring the crime lab to test evidence quickly and turn over the evidence to the defense, we could avoid unnecessary incarceration and court proceedings.*

3. *The City should act to make the city's crime lab independent of the NYPD to avoid bias*

For decades, scholars have written of the "'inbred bias of crime laboratories affiliated with law enforcement agencies' – as have courts, legislators, prosecutors, investigators, and reporters."[10] 2009 represented a sea change. In that year, the National Academy of Sciences' Report, *Strengthening Forensic Science in the United States: A Path Forward*, challenged the law enforcement paradigm for forensic laboratories,

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[9] *People v. Kalin*, 2009 NY Slip Op 2446 (N.Y. 2009).

[10] Paul C. Giannelli, *Independent Crime Laboratories: The Problem of Motivational and Cognitive Bias* (2010), CASE WESTERN SCHOOL OF LAW FACULTY PUBLICATIONS, PAPER 603, available at https://learn.saylor.org/pluginfile.php/33515/mod_resource/content/3/BUS403-2.6.3-IndependentCrimeLaboratoriesTheProblemofMotivationalandCognitiveBias-pdf..pdf.

recommending that forensic service providers be administratively or financially independent of law enforcement-based parent agencies.[11]

Since then (and in reaction to ongoing scandals involving crime lab errors or misconduct), both Washington D.C. and Houston have created independent forensic agencies. Two other states, Virginia and Rhode Island, already had independent forensic labs.[12]

New York City should join with these other jurisdictions and make the city's crime lab independent of the NYPD. This would instill public trust in the crime lab, limit the role of motivational and cognitive bias in testing, and put New York at the forefront of reform. We need not wait for another scandal to serve as the impetus for reform: the Council should act now to make our crime lab independent of the NYPD.

Questions?

If you have any questions, please feel free to reach out to Guy Raimondi, Supervising Attorney, graimondi@bds.org, & Andrea Nieves, BDS Policy Team, 718-254-0700 ext. 387 or anieves@bds.org.

[11] National Research Council of the National Academies, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD (2009).
[12] Max M. Houck, *What does independence mean for a forensic laboratory?*, EVIDENCE TECHNOLOGY MAGAZINE, available at http://www.evidencemagazine.com/index.php?option=com_content&task=view&id=1385.

INNOCENCE PROJECT

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THE NEW YORK CITY COUNCIL
Joint Hearing of the Committee on Public Safety and Committee of Health on
T2017-6990:
Oversight - Examining Forensic Science Practices in the NYPD Crime Lab and OCME.

Testimony of
Sarah Chu
Sr. Forensic Policy Advocate
Innocence Project

December 14, 2017

Thank you, Chairperson Gibson, Chairperson Johnson, and members of the Committee on Public Safety and the Committee on Health, for holding this hearing to discuss the oversight of forensic science services in New York City. My name is Sarah Chu and I am the Senior Forensic Policy Advocate for the Innocence Project. Founded in 1992, the Innocence Project's mission is to free the staggering number of innocent people who remain incarcerated and to bring reform to the system responsible for their unjust imprisonment. Among the nation's 353 exonerations in which DNA played a central role in proving innocence, the misapplication of forensic science is the second largest contributing factor to wrongful convictions. For this reason, the Innocence Project has a compelling interest in the improvement of the scientific foundations of forensic techniques and the rigorous and uniform application of forensic science methods.

We've learned in our work freeing innocent people through postconviction litigation and pursuing evidence-driven policy changes to prevent wrongful convictions that **a just forensic science system is one that is grounded in valid and reliable scientific foundations, guided by rigorous standards, and practiced with transparency.** These three goals ensure the rigor of the scientific procedure, uniformity through reducing discrepancies in forensic science operations, and that when mistakes happen, there is a comprehensive system in place to manage them in an independent and transparent process. A forensic science system that embodies these elements promotes public safety by reliably identifying the actual person who committed the crime and preventing investigations from being misled with an inadvertent focus on an innocent person.

For today's hearing, I would like to focus on what New York City can do to ensure a transparent forensic science practice that is more reliable and accurate. Forensic science testing is a human endeavor. Despite the commitment and expertise of the women and men who provide forensic science services, it is expected that mistakes will occur. When mistakes

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happen, we've seen that criminal justice systems often respond with fear, investigate problems secretively, and either identify a single actor to take responsibility or insist that no wrongful convictions occurred. These types of insular responses actually create more pressure on the individuals in the system, halt constructive dialogue that may identify the underlying problem, and impede our ability to put measures in place to prevent the problem from happening again. When secrecy defines such inquiries, when errors are uncovered but not remediated, and when innocent people are ensnared in a system that maintains the status quo rather than uncovering the scope of error, we see a collapse of public trust. The People expect the government to openly identify, embrace, and fix the errors it makes and to restore justice to those who are affected. Anything less violates the public trust. Today's hearing follows a series of debates regarding the provision of forensic science services that remain unresolved and provide an opportunity for the City Council to ensure that steps are taken to preserve public confidence.

Presently, New York City does not have a designated entity or process that provides certain and adequate oversight over its forensic practice. For example, there is a pending complaint before the New York State Inspector General's Office (OIG) seeking an investigation of the OCME's use of specific forensic science techniques developed in-house on the grounds that they were insufficiently validated and are not reliable. Because public crime laboratories in New York State are recipients of a federal grant called the Paul Coverdell Forensic Science Improvement Grant Program,[1] they are required by its terms, as a precondition to receiving funding, to provide the following:

> A certification that a government entity exists and an appropriate process is in place to conduct independent external investigations into allegations of serious negligence or misconduct substantially affecting the integrity of the forensic results committed by employees or contractors of any forensic laboratory system, medical examiner's office, coroner's office, law enforcement storage facility, or medical facility in the State that will receive a portion of the grant amount.[2]

The New York State Commission on Forensic Science (the Commission) has designated the OIG as the independent external investigation entity.[3] The OIG has discretion whether to conduct this investigation. If it declines to investigate, the problem will likely go unaddressed as the Commission has not been responsive to these concerns. If these techniques were flawed, there

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[1] 42 U.S.C. § 3797j-3797o.
[2] 42 U.S.C. § 3797j-3797k. Note: Should Congress choose not to fund the Coverdell grant and should the Commission decline to engage in fulsome oversight of NYC forensic science service providers, there will be no other entity to which serious concerns can be raised.
[3] State of New York Office of the Inspector General, "Investigation in to the New York State Police Forensic Investigation Center," (December 2014), p. 3, available at https://ig.ny.gov/sites/default/files/pdfs/GrazierFinal12-12-14.pdf

may be individuals who were wrongfully convicted who will never learn about their potential for redress. Relying on the OIG as the primary system of public accountability raises concerns for two reasons:

1. **Oversight of NYC Forensic Science Services by the NYS Commission on Forensic Science has proven to be inadequate.** The New York State Commission on Forensic Science has a statutory obligation to provide oversight of forensic science service providers, including those in NYC.[4] However, in a 2011 report, the NYS Inspector General's Office, which serves that function for New York State, found that the Commission unsuccessfully monitored a failing laboratory, did not impose its own sanctions once the laboratory was placed on probation by its accrediting body, and did not take the minimal step of notifying local officials about the laboratory's problems.[5] According to the Inspector General, "Although the Forensic Commission possessed clear authority to promulgate requirements specifically tailored to promote uniformity, quality and excellence among forensic laboratories in New York State, it did not do so."[6] Consequently, "[t]hese compound failures enabled the FEB [Forensic Evidence Bureau] to operate as a substandard laboratory for far too long, and deprived the public of the right to have complete and unfettered confidence in forensic testing."[7]

   Subsequently, the City Council raised its own concerns about the management of OCME after reports that a laboratory technician mishandled evidence.[8] In the years since, the Commission has inexplicably voted against taking action on critical issues of public interest. After OCME refused to share an internal validation study with the Commission, a Commissioner asked for it to be disclosed to the Commission under protective order. The Commission voted against that motion.[9] In 2013, the Commission received an advisory from the forensic laboratory accrediting body[10] which cited an FBI audit of microscopic hair comparison cases in response to three exonerations in which

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[4] NY Exec L § 995.

[5] State of New York Office of the Inspector General, "Investigation in to the Nassau County Police Department Forensic Evidence Bureau," (November 2011), p. 147, available at https://ig.ny.gov/sites/default/files/pdfs/Investigation%20into%20the%20Nassau%20County%20Police%20Department%20Forensic%20Evidence%20Bureau.pdf.

[6] *Ibid.*

[7] *Ibid.*

[8] The City Council initiated hearings into the OCME issue over 2013. The Inspector General's Office published the report of its investigation in December 2013 which was initiated by the report of the laboratory technician and subsequently expanded the investigation subsequently when the Inspector General learned that the Deputy Director of the Department of Forensic Biology, Dr. Theresa Caragine, resigned from her position for allegedly failing to follow laboratory protocol. Dr. Caragine was one of the scientists who led the research in developing OCME's LCN DNA testing and FST methods. The investigation found that Dr. Caragine repeatedly intervened when she disagreed with a criminalist's conclusions, even when the criminalist's supervisor approved the findings. *See* State of New York Office of the Inspector General. (December 2013). *New York City Office of Chief Medical Examiner: Department of Forensic Biology*, available at https://www.ig.ny.gov/sites/default/files/pdfs/OCMEFinalReport.pdf.

[9] Meeting of the New York State Commission on Forensic Science, October 24, 2014.

[10] ASCLD/LAB, *Notification from the ASCLD/LAB Board of Directors to Interested Parties Concerning Potential Issues with Hair Comparison Testimony* (Apr. 21, 2013), available at http://www.ascld-lab.org/notification-from-the-ascldlab-board-of-directors-to-interested-parties-concerning-potential-issues-with-hair-comparison-testimony/ (last accessed February 7, 2017).

scientifically invalid testimony was given and encouraged laboratories to conduct their own review. The Commission debated taking action for two and a half years and on June 17, 2016, it voted against taking action despite the fact that hair comparison examiners in New York State – including examiners from NYC – have been trained by the FBI to conduct testing and give testimony. Today, a minimum of seven states or jurisdictions within the states of Texas, North Carolina, Massachusetts, Iowa, Missouri, California, and Virginia have initiated microscopic hair comparison reviews. **When the Commission does not take action, the City Council has an obligation to step in to assure justice for the People of New York City.**

2. **Lack of Responsiveness by OCME to Current System of Public Accountability.** In 2013, the New York City Council took the leading edge step in forensic science practice by passing Local Law 85 (Procedures for the office of chief medical examiner to conduct a root cause analysis)[11] and Local Law 86 (Transparency of the office of the chief medical examiner)[12] to improve public accountability at the OCME. We are deeply grateful to Councilmember Ferreras-Copeland for her leadership of the Women's Issues Committee which led the passage of these bills with the Health Committee, and to Councilmembers Koo, Mendez, Van Bramer, and Williams who were among the co-sponsors of these bills in 2013. These bills were well-written, but we've yet to see OCME's full implementation of their legislative intent.

   For example, in the instant dispute regarding the OCME's use of contested forensic techniques, and despite strong objections to its methodology raised at the Commission and in the courts, OCME has determined that the method does not merit a Local Law 85 root cause analysis review as "a deficiency in a system or procedure used by such office, that may have affected the accuracy of reported results of evidence examination or the accuracy of the reported results of analysis in one or more cases."[13] OCME has not shared its internal validation studies, although it was required to provide "documents relating to scientific procedures or protocols, quality assurance and quality control procedures or protocols"[14] voluntarily or posted them online according to Local Law 86.[15] **When City agencies do not take action, the City Council has an obligation to step in to assure justice for the People of New York City.**

The City Council must create a safety net that guarantees a system the public can access for accountability when there are concerns about the quality of the forensic science used in NYC because the current solutions are not adequate.

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[11] New York City Administrative Code, Title 17, Chapter 2, § 17-207.
[12] New York City Administrative Code, Title 17, Chapter 2, § 17-208.
[13] New York City Local Law 85, Section 1, Part (a)(5) – definition of "significant event,"(ii).
[14] New York City Local Law 86, Section 1, Part (c)(1).
[15] New York City Local Law 86, Section 1, Part (c)(1) and (d).

We believe the City Council has the jurisdiction to take action to assure justice for New Yorkers through appropriate and robust forensic oversight and suggest four simple steps:

1. **Add Complaint and Disclosure Provisions to RCA Bill.** In November 2017, a new edition of the accreditation standard by which OCME and NYPD are accredited was released. The 2017 version of ISO/IEC 17025 (ISO 17025:2017)[16] has expanded language on how to deal with complaints. Whereas the previous version of the standard only required that the laboratory have a process in place to address complaints,[17] the 2017 version defines complaints explicitly[18] and requires that laboratories have a meaningful and responsive process in place to handle them.[19] To help laboratories fulfill this standard and to improve public accountability, Local Law 85 should be amended to add a public accountability component to the RCA requirements. A public website and a procedure should be established to receive and publicly database each complaint submission and the resolution of each complaint should be posted as the laboratory processes them. Laboratory disclosures that are made to the Commission should also be posted in this section of the website. The Texas Forensic Science Commission has a public website where complaints may be submitted[20] and their disposition made public.[21] Such a website can also help the laboratory meet its requirements to document its nonconformities and the responses to them.[22]

2. **Add Specifics to the Transparency Bill.** To prevent any ambiguity, specific language regarding materials that should be posted online or turned over should be added to Local Law 86. Legal practitioners in the City should be consulted to create a list that is both broad in scope and detailed in specifics to ensure that all materials necessary to understand scientific evidence and its context in a case are made available either online or by request. At a minimum, these materials should include internal validation on

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[16] ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories,* Third edition 2017-11.

[17] **4.8 Complaints** The laboratory shall have a policy and procedure for the resolution of complaints received from customers or other parties. Records shall be maintained of all complaints and of the investigations and corrective actions taken by the laboratory. *See* ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories,* Third edition 2015-05-15.

[18] **3.2 complaint** expression of dissatisfaction by any person or organization to a *laboratory*, relating to the activities or results of that laboratory, where a response is expected. *See,* ISO 17025:2017.

[19] **7.9.2** A description of the handling process for complaints shall be available to any interested party on request. Upon receipt of a complaint, the laboratory shall confirm whether the complaint relates to laboratory activities that it is responsible for and, if so, shall deal with it. The laboratory shall be responsible for all decisions at all levels of the handling process for complaints. *See,* ISO 17025:2017.

[20] Texas Forensic Science Commission, *Submit Complaint/Disclosure*, available at http://www.fsc.texas.gov/submitcomplaint.

[21] Texas Forensic Science Commission, *Complaint Status/Disposition Reports*, available at http://www.fsc.texas.gov/cases.

[22] **8.7.3** The laboratory shall retain records as evidence of: a) the nature of the nonconformities, cause(s) and any

samples that replicate casework, raw data from forensic testing, bench notes, root cause analysis reports, and corrective action reports. The Houston Forensic Science Center has an exemplary e-Discovery website and policies that includes all of these materials.[23] This level of transparency is especially important when a forensic science provider and a stakeholder entity have a disagreement or when questions are raised about the development or application of a forensic method. Without transparency, it would be impossible to know whether a robust root cause analysis has been undertaken on an issue, and if it has, we would not know the value or rigor of the process without seeing the report. At the present time, we are at the mercy of the word of our forensic science service providers. Even if the highest quality science is taking place in the City, a system that is opaque will not satisfy the public and will prevent us from benefitting from the review and input of stakeholders with a diverse set of perspectives and expertise.

3. **Expand Bills to Include NYPD.** As a matter of good government, all forensic science services should be required to meet equal standards of transparency and accountability. For this reason, any requirements made of the OCME should also apply the NYPD Crime Laboratory. Additionally, there are many intellectual resources at the NYPD that are yet untapped. For example, NYPD Crime Laboratory Director Dr. Scott O'Neill has provided thoughtful discussions about non-conformities or mistakes that have taken place in the laboratory and offered innovative strategies for addressing them. An additional benefit of this expansion is that NYPD's root cause analysis reports and certainly both OCME and NYPD's laboratory materials could serve as educational and training tools for the forensic science community.

4. **Create a Defendant Notification Policy Task Force.** When errors, mistakes, negligence, or misconduct are identified which affect the integrity of the forensic product, there is an ethical obligation to notify every affected defendant. We have seen some jurisdictions which take an open approach to this process and many others that become opaque or sometimes impenetrable once problems are discovered. After conducting a root cause analysis according to the process described in Local Law 85, a forensic laboratory should notify all affected defendants. We have seen audits or reviews put up obstacles to evaluation. For example, although 32% of DNA exonerees either falsely confessed or pled guilty to a crime they didn't commit, some forensic reviews exclude individuals who pled guilty from receiving an evaluation in their case. In order to assure justice to all defendants, the City Council can develop a bill that creates an all-stakeholder task force assembled to establish a defendant notification policy that integrates the services of all institutional criminal justice stakeholders. The

[23] Houston Forensic Science Center, *Discovery Portal – Home*, available at https://

Texas Forensic Science Commission developed a statewide defendant notification policy in collaboration with stakeholders in 2013, which served it well as it later encountered large scale forensic science reviews (DNA Mixture Interpretation Review[24] and Hair Microscopy[25]). This bill can also outline basic principles of any policy which should include the following:

- Appointment of a neutral body to issue notifications and receive responses;
- Ensure that all cases affected by the error, mistake, negligence, or misconduct receive an evaluation, regardless of the manner of adjudication;
- Establish multiple avenues for communicating notifications (letters, websites, prison newspapers, etc.) and efforts to reach individuals should be exhaustive; and
- All outreach material should be written in partnership with both the prosecution and the defense.

The People of New York City are fortunate to have such comprehensive forensic science resources available to us. Past events have shown that mistakes happen, even at our prestigious laboratories. In order for our justice system to act transparently, with accountability, and responsively in service of justice for all New Yorkers, we ask that the Public Safety and Health Committees take action today. We are grateful for the City Council's past attention to improving forensic science practice and transparency at the OCME and look forward to further improving these tools to assure that all the City's forensic science service providers meet the expectations of good government and potentially create a world class educational and training tool in the process. Fortunately, the solutions suggested here have been implemented by government entities in Texas. We can leverage these previously established programs and improve upon them for New York City. Our recommended adjustments to Local Law 85 and Local Law 86 can build upon the foundation that City Council previously established and the creation of an institutional defendant notification policy will create an opportunity to bring criminal justice stakeholders together to advance justice. The Innocence Project encourages the Public Safety and Health Committees to take the decisive action that is needed to keep New York City on the leading edge of forensic science accountability and we look forward to supporting and assisting efforts that advance a forensic science system that is more accurate and more just.

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[24] Texas Forensic Science Commission, *Texas DNA Mixture Interpretation Case Review*, available at http://www.fsc.texas.gov/texas-dna-mixture-interpretation-case-review.
[25] Texas Forensic Science Commission, *Hair Microscopy,* available at http://www.fsc.texas.gov/sites/default/files/Statement%20re%20Texas%20HM%20Review%20Final%20Draft%5B1%5D.pdf.

The Bronx Defenders | Redefining public defense.

Written Testimony of The Bronx Defenders

New York City Council

Committees on Public Safety and Public Health

T2017-6990: Oversight - Examining Forensic Science Practices in the NYPD Crime Lab and OCME

Int 1235-2016: A Local Law to amend the administrative code of the city of New York, in relation to respecting the right to record police activities

December 14, 2017

Introduction

My name is Marika Meis and I am the Legal Director of the Criminal Defense Practice and the Director of the Forensic Practice Group at The Bronx Defenders. I submit these comments on behalf of The Bronx Defenders, and thank the Committees for the opportunity to testify.

The Bronx Defenders is a community-based public defender that provides fully integrated criminal defense, civil legal services, and social services to indigent people charged with crimes in the Bronx. We serve 30,000 Bronx residents each year.

I had the opportunity to testify in 2013 regarding City Council bills that increased transparency and oversight of OCME's Department of Forensic Biology. Those bills, which brought some much-needed transparency and oversight to OCME, were passed into law and we have seen direct benefits, including OCME now making forensic biology files available to defense counsel and posting their current DNA protocols online. But, more needs to be done.

More Needs to Be Done to Achieve Transparency at OCME's Department of Forensic Biology

As defenders on the front lines representing clients, we continue to see firsthand how the OCME's lack of transparency impairs the integrity of the criminal justice system, impedes our ability to provide zealous advocacy to our clients, and results in a fundamental lack of fairness to those accused of crimes. Science, including forensic science, is rooted in the concept of testable explanations and demands testing and openness.

If forensic evidence is not objectively tested, analyzed, and interpreted by adequately trained scientists, there can be no assurance that the results the government seeks to use against an accused are reliable and valid. Defenders must be able to answer questions such as:

- Does the laboratory have protocols?
- Are those protocols consistent with scientific standards?
- Are the methods being used by the laboratory validated?
- If so, did that validation include testing on samples that we see in actual casework?
- Was there external validation, meaning review by scientists outside of the laboratory?
- Does the laboratory follow the protocols?
- Has the analyst who conducted the testing passed proficiency tests?
- Are the proficiency tests comparable to actual casework?
- Are the tests administered blindly?
- Has the laboratory taken steps to address human error and cognitive bias?

Only though such transparency and openness can forensic science undergo the rigorous review that both science and criminal justice system demand. When liberty is at stake, we must apply the highest possible standards.

In this regard, we seek further disclosures and increased transparency so that we, as defenders, can ensure that forensic evidence is being properly used and any claimed results are sound. We join the comments of The Legal Aid Society detailing specific areas of lack of transparency, including the utter lack of openness concerning the use of the Forensic Statistical Tool ("FST") to provide likelihood ratios for DNA mixtures and using high sensitivity testing to test very small amounts of DNA under Low Copy Number ("LCN") testing, the failure to routinely provide electronic raw data ("ERD"), and OCME's maintenance of a local DNA databank for which at least one court has recognized there is no authority.[1]

[1] People v. K.M., 54 Misc.3d 825 (Sup. Court, Bronx Co. 2016).

We urge the Council to require further disclosure, including broad disclosure of past protocols, guidelines, validations and proficiency tests.

Of ongoing concern is that in developing and using FST and LCN, OCME is shrouded in secrecy that has long prevented independent review of these controversial methods – both of which are unique to OCME's Department of Forensic Biology. This practice is the opposite of good science, a basic precept of which is openness and independent review, particularly where novel methods are employed.

OCME provides ERD to defense counsel, but defense counsel must obtain a judge-signed subpoena to get it. The ABA Standards for DNA Evidence explicitly require disclosure of ERD, as well as proficiency tests.[2] We urge that ERD be routinely provided.

Complete Lack of Transparency at Police Laboratories

While we appreciate of the progress made and are hopeful that the Council will require further transparency at the OCME, as defenders of accused individuals at the trial level, our office is also in a unique position to observe and catalogue the complete lack of transparency of police laboratories in the City.

Unlike OCME, which is supposed to be an independent organization, much of the forensic science testing, other than DNA testing, is done by the NYPD. The NYPD operates several police laboratories that do a

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[2] **Standard 4.1 Disclosure**

(a) The prosecutor should be required, within a specified and reasonable time prior to trial, to make available to the defense the following information and material relating to DNA evidence:

(i) laboratory reports as provided in Standard 3.3;
(ii) if different from or not contained in any laboratory report, a written description of the substance of the proposed testimony of each expert, the expert's opinion, and the underlying basis of that opinion;
(iii) the laboratory case file and case notes;
(iv) a curriculum vitae for each testifying expert and for each person involved in the testing;
(v) the written material specified in Standard 3.1(a);
(vi) **reports of all proficiency examinations of each testifying expert** and each person involved in the testing, with further information on proficiency testing discoverable on a showing of particularized need;
(vii) the chain of custody documents specified in Standard 2.5;
(viii) **all raw electronic data produced during testing**;
(ix) reports of laboratory contamination and other laboratory problems affecting testing procedures or results relevant to the evaluation of the procedures and test results obtained in the case and corrective actions taken in response; and
(x) a list of collected items that there is reason to believe contained DNA evidence but have been destroyed or lost, or have otherwise become unavailable;
(xi) material or information within the prosecutor's possession or control, including laboratory information or material, that would tend to negate the guilt of the defendant or reduce the punishment of the defendant.

variety of forensic testing, including ballistics, firearm and toolmark identification (microscopic comparison of markings on ammunition components), fingerprint analysis, etc. In the Queens laboratory, the NYPD also performs chemical and/or physical analyses of evidentiary materials, such as: hair, fibers, bodily fluids, fingerprints, gunshot residue, fire accelerants, questioned documents, controlled substances, soil, metals, polymers, glass, and other types of forensic trace evidence required in scientific criminal investigations. These "forensic science" fields have been called into question as lacking the necessary foundations of testability and reproducibility required to ensure reliable results.[3] Some fields that involve pattern matching, like microscopic hair analysis, have been outright proven to be fallible although this "forensic evidence" was routinely used in criminal trials for many years.[4] As a result, as defenders we are rightly concerned about the lack of transparency required for us and our experts to adequately review these types of suspect forensic evidence.

We have witnessed firsthand the myriad ways in which the lack of transparency at police labs impedes defense attorneys' ability to zealously represent their clients, restricts an accused's ability to present a defense, and results in a fundamental lack of fairness for those accused of crimes.

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[3] Reports issued in 2008, 2009, and 2016, two by the research arm of the National Academy of Science, and one by the President's Council of Advisors on Science and Technology (PCAST) have unequivocally rejected the claim that firearm toolmark examination is valid and reliable science. See National Research Council, Committee to Assess the Feasibility, Accuracy, and Technical Capability of a National Ballistics Database, *Ballistics Imaging iii* (2008); National Research Council, *Committee on Identifying the Needs of the Forensic Science Community, Strengthening Forensic Science in the United States: A Path Forward*, (2009); President's Council of Advisors on Science and Technology, *Forensic Science in Criminal Courts: Ensuring Validity of Feature-Comparison Methods*, (Sept. 20, 2016).

The National Research Council (NRC) is a component of the National Academy of Science, which was created by congressional charter in 1863 to "investigate, examine, experiment, and report upon any subject of science." Act to Incorporate the National Academy of Sciences, sec. 3, 12 Stat. 806 (1863), http://www.nasonline.org/about-nas/leadership/governing-documents/act-of=incorporation.html. The NRC was established in 1916 "to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and advising the federal government." National Research Council, Committee to Assess the Feasibility, Accuracy, and Technical Capability of a National Ballistics Database, *Ballistic Imaging iii* (2008).

[4] The United States Department of Justice (DOJ), the Federal Bureau of Investigation (FBI), the Innocence Project and the National Association of Criminal Defense Lawyers (NACDL) reported that the FBI has found that testimony in at least 90 percent of trial transcripts the Bureau analyzed as part of its Microscopic Hair Comparison Analysis Review contained erroneous statements. Twenty-six of twenty-eight FBI agent/analysts provided either erroneous testimony or lab reports. The review focuses on cases worked prior to 2000, when mitochondrial DNA testing on hair became routine at the FBI.

The government identified nearly 3,000 cases in which FBI examiners may have submitted reports or testified in trials using microscopic hair analysis. As of March 2015, the FBI had reviewed approximately 500 cases, 268 of which involved an analyst giving testimony at trial inculpating the defendant. Of those 268 cases, erroneous statements were made in 257 - 96% of the cases. See Innocence Project newsletter April 30, 2015.

Specific Examples of a Lack of Transparency and Accountability at Police Labs

While police labs purport to do "scientific" testing, they fail to provide protocols or proficiency tests, meet with defense counsel, or make evidence available to defense experts in a usable form.

For example, the Firearms Analysis Section ("FAS") of the NYPD laboratory in Queens does ballistics/operability testing as well as microscopic comparisons of ammunition components.[5] FAS's policy only requires a reporting of a conclusion that an examiner sees sufficient agreement of individual characteristics, but this determination is left entirely to the examiner's subjective opinion.[6] FAS examiners do not take contemporaneous notes of comparisons that would permit another expert (or a judge or jury) to determine exactly what the examiner observed that led to a conclusion of a supposed match. While the laboratory utilizes $65,000 comparison microscopes that have the ability to capture high quality color images (microphotographs), examiners either do not take these images or do not provide them to defense counsel and instead turn over only poor quality black-and-white microphotographs that render independent review impossible.[7] Examiners also claim to follow protocols and take proficiency tests, yet neither the protocols nor tests are provided to defense counsel for review to determine whether they accord with industry standards and whether the tests resemble casework (for example, do the tests contain badly deformed ammunition components like those seen in casework versus pristine components which are much easier for an examiner to compare and "match").

Fingerprint analysis at the NYPD laboratory raises similar concerns. Most of these comparisons are done at Detective Squads in the boroughs and not at an actual laboratory. Yet, as with FAS, examiners (police officers) do not provide their protocols or proficiency tests. Nor do they meet with defense counsel to explain their conclusions. When we seek access to the prints used in a comparison, we are provided poor quality

[5] As to microscopic comparisons (firearm and toolmark identification) in the 2016 PCAST Report, following a review of more than 2,000 articles and presentations by members of the forensic community, states unequivocally: firearms examination "falls short of the scientific criteria for foundational validity." President's Council of Advisors on Science and Technology, *Forensic Science in Criminal Courts: Ensuring Validity of Feature-Comparison Methods,* p. 11 (Sept. 20, 2016).

[6] See attached FAS paperwork for reporting.

[7] See attached expert of FAS examiner's testimony.

photographs that preclude independent review; we are only permitted to view the actual evidence used by the examiner if our expert agrees to do an independent comparison at the NYPD.

Increased transparency and accountability will improve the integrity of the criminal justice system, the ability to provide zealous advocacy to our clients and the fairness to those accused of crimes, as well as increasing public confidence in the OCME and police labs. They will also help preserve the finality of convictions by ensuring that problems will not come to light after the conclusion of a case when they are much more costly and difficult to resolve. For example, when the lack of transparency leads to an undisclosed scientific concern that is later discovered, such as errors of a drug laboratory employee disclosed in 2010,[8] thousands of convictions could be at risk; transparency guards against this. The public, courts, prosecutors, victims and defenders should all share these goals.

We join the comments of Brooklyn Defender Services calling for broad discovery reform which would further these goals. Broad disclosure would greatly benefit defenders and improve the criminal justice system. If defenders do not receive vital information until the last minute, we cannot possibly comply with our obligation to provide effective assistance to our clients by evaluating the weight of the case against them and providing a meaningful discussion of a plea offer and the risks of going to trial, as the Supreme Court of the United States recently made clear is part of our constitutional obligation to provide effective assistance of counsel.[9] Slow and incomplete disclosure of DNA or other scientific evidence leads to delays in the already backlogged court system.

Intro. 1235-2016

We also take this opportunity briefly to express our strong support for Intro. 1235-2016, Councilmember Williams's bill making clear that so long civilians do not interfere with police activity they are free to record it. Such activity is clearly protected, in much of the country, under the First Amendment, but the ambiguous state

[8] A technician in the NYPD's forensics lab, Mariem Magella, was suspended for allegedly falsifying drug-test results, throwing into question "maybe thousands" of criminal cases — and prompting a panicked meeting yesterday between cops and the city district attorneys.https://nypost.com/2010/05/11/a-lab-tech-wreck-for-the-nypd/

[9] Lafler v. Cooper, __ U.S. __, 132 S. Ct. 1376 (2012); Missouri v. Frye, __ U.S. __, 132 S. Ct., 1399 (2012).

of the law in the Second Circuit renders this local law essential. It is axiomatic that when society provides certain people, the police, with a monopoly on the legitimate use of force, they must use this authority with great responsibility and great accountability. We all have seen, over the past few years, how fundamentally cell phone videos of policy activity from around the country have exposed countless abuses and lent an overdue element of reality to much criminal justice policy discussion. The Bronx Defenders has had multiple clients charged for recording police activity. The pending bill would go a long way toward ending this. Importantly, it includes a reasonably-framed private right of action so those whose rights are violated may pursue redress. Without this element, the bill, even if passed into law, would likely be no more than mere words on paper. Justice Brandeis taught us all almost a century ago about the value of "sunshine," of the public knowing what is being done in its name. The Council should pass this bill and the Mayor sign it into law forthwith.

Conclusion

We applaud the City Council and the Committees on Public Safety and Public Health for this hearing and urge the Council to ensure necessary transparency that would increase public confidence in the OCME and police lab, add to the integrity of the criminal justice system, enhance our ability to provide zealous advocacy to our clients, and result in more fundamental fairness to those accused of crimes. We stand ready to work with Council staff to draft legislation appropriate to these crucial goals.

FIREARMS ANALYSIS SECTION – MICROSCOPY
DEFINITIONS OF COMPARISON RESULTS

LAB # **DATE:**

Microscopic comparison of evidence to other evidence or test fired samples will result in one of the following conclusions:

LETTER **A** **Fired from One Gun** based on sufficient agreement of class and individual characteristics of the Firing Pin Impression.

B **Fired from One Gun** based on sufficient agreement of class and individual characteristics of the Breechface Impression.

C **Fired from One Gun** based on sufficient agreement of class and individual characteristics in Land Impression.

D **Fired from One Gun** based on sufficient agreement of class and individual characteristics in Groove Impression.

E **Fired from Different Guns** based on sufficient disagreement of class characteristics.

F **Fired from Different Guns** based on sufficient disagreement of individual characteristics.

G **Inconclusive** based on agreement of class characteristics but insufficient agreement or disagreement of their individual characteristics to either identify or eliminate the items as having been fired from the same firearm.

H **Inconclusive** based on agreement of class characteristics but lacks any individual characteristics to either identify or eliminate the items as having been fired from the same firearm.

U **Unsuitable** for microscopic examination based on a lack of discernible class and individual characteristics.

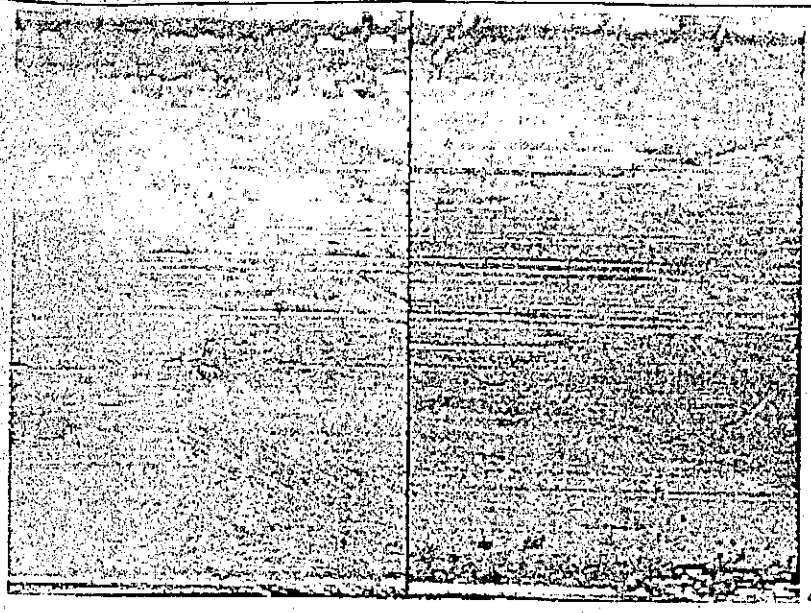
O **Other** which MUST be specified in the remarks section of the Comparison or General Case Notes.

Examiner's Initials: (1)

NEW YORK CITY POLICE DEPARTMENT
POLICE LABORATORY
FIREARMS ANALYSIS SECTION

LABORATORY #:
COMPLAINT #:
VOUCHER #:

FIREARMS PHOTO WORKSHEET



4 to 14, 22x

DET III
RANK/TITLE

INITIAL

THE COURT: Objection sustained.

Q. There is no training manual at NYPD for microscopic comparisons?

A. There is a training manual.

Q. And were you trained in that written training manual?

A. Yes.

Q. And do you have a copy of that training manual?

A. I do not.

Q. And when were you trained in that training manual?

A. In microscopy?

Q. Yes.

A. That would be 2002.

Q. And in that training manual there is no set standard for how many, how much matching there has to be for you to make an opinion?

MR. ROSENFELD: Objection.

THE COURT: I will allow that question.

A. There is no set standard in the manual. There's nothing. You learn on the job training.

Q. Well, in the field in general, there is no set standard for how much matching there has to be for you to make an opinion, as well, correct?

A. Well, I was trained in consecutive matching striae, as you see on my c.v. They have a standard.

We also use pattern matching which is a higher standard in any kind of line counting or striation count.

A pattern matching we do everyday. You walk into this room, you recognize different people, you recognize different patterns, different noses, different mouths, different types of hair. That's pattern matching. So we utilize that, that's a higher threshold than any kind of CMS or line counting.

Q. So your testimony is that you are trained in CMS, right?

A. I am trained in it, to be aware of it for questions like this.

Q. Well, that is a technique in the field called consecutive matching striae, right?

A. Yes.

Q. And that technique was developed to set specific standards for how many lines or matching areas were required in order for a person, an examiner to give an opinion, right?

A. Yes, this was by Alfred Biasotti from '57 to '59, consecutive matching striae is minimum threshold for a 3D object, such as a bullet, would be two sets of three lines or one set of six.

Q. And --

A. For, I am sorry, for 2D images, such as cartridge cases, it's a little higher. It's one set of, I am sorry, two sets of four or one set of eight.

Q. And although you were trained in that field, you don't use that at the NYPD lab that you work at?

A. We do. I said pattern matching is actually a higher threshold than that minimum standard of CMS.

Q. I am not asking if you do pattern matching. I am asking if your lab uses CMS method?

A. We all use CMS, but like I said we exceed CMS.

Q. The question is do you use CMS?

A. And I answered yes.

Q. So in each of the microscopic comparisons you do, you use the CMS method by the standards that you just gave?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. Is it your testimony that in your microscopic comparisons of ammunition components you use CMS?

A. Yes.

MR. ROSENFELD: Objection, Your Honor.

THE COURT: I will let this one go.

Q. Have you taken proficiency tests?

A. Every year in each discipline.

Q. What proficiency tests do you take?

A. I take one for microscopy, one for operability, one for serial number restoration, and one for the industry database.

Q. The one for microscopy is that the CTS test, collaborative testing?

A. Past couple of years they have been CPT, outside test that is performed by the laboratory. It's a quality assurance section within the laboratory purchases it, then gives it to me, and they don't even know what the answers are because the answers are on-line, they have to actually send the answers in and then they are told if I pass or not.

Q. But you know that that test is being administered when you take it, it's not a blind test, right?

A. Oh, yes, I mean I know it's a proficiency test, correct, it's not --

Q. A blind test?

THE COURT: Blind test, you can't all talk at the same time. While I am on it, you can't talk at the same time.

It's nice to display knowledge, however, the use of acronyms that you both know might be foreign to me and it might be foreign to the jury. So bear with us and try to spell it out for us.

Q. The collaborative testing services proficiency examine that you have taken is not a blind test, correct?

A. No, it's not.

Q. Because you know when it's being given to you, right?

A. You still have to come up with the right answers.

Q. You know when it's being given to you?

A. Yes, you know it's a proficiency test.

Q. And the industry standard is that blind testing is what's appropriate to actually test the person's ability to do the work?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. As a member of AFTI, are you aware that what is recommended for proficiency testing is blind testing?

MR. ROSENFELD: Objection.

THE COURT: Do you know that?

THE WITNESS: I do not. I am not aware of blind testing as a requirement.

THE COURT: Okay.

Q. And the collaborative testing services proficiency test that you are given have simplified problems for you?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. The collaborative testing services proficiency exam is not like real case work?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. The collaborative services proficiency exam doesn't include comparisons that are like real case work?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

MS. MEIS: Can we come to the side, Judge?

THE COURT: "Like."

Q. The collaborative testing services examination, proficiency examination, does not include real case work?

A. It's not real case work, but it definitely mirrors real case work. They provide test fires from the gun, which are the known samples, then they give you other samples, unknown bullets and casings, to identify back to the gun. Some may go back to the gun, some may not. So it's just like a real test or

we have an agreement of class characteristics, which I will get to in a few minutes, I will explain what that is.

And insufficient individuals so we can't make an identification, however, there's some consistency there.

There's unsuitable, where it just doesn't have any characteristics at all like a piece of lead or lead core, just unsuitable, no value, so you can't do anything with that.

That's the industry standard that's being utilized in every laboratory across the country.

MS. MEIS: I am going to move to strike that entire answer as nonresponsive.

THE COURT: Overruled.

Q. What I asked you about is what literature you rely on -- withdrawn.

You just gave me the options that you have in terms of making conclusions, right?

A. Yes.

Q. What I asked you is on what literature do you rely in making your examination, if any?

A. All of my case work is I utilize my standard operating procedure of the laboratory, okay.

My laboratory is an ISO accredited laboratory, the highest standard in the world. And we get inspected every so many years. And we are well within our means to operate as an accredited laboratory.

Q. So when a lab is accredited, what that means is that someone comes in and reviews the standards you have in your lab, right?

A. That's part of it, yes.

Q. And they review whether your lab is following those standards, right?

A. Yes.

Q. But they do not review whether your standards themselves are acceptable in the field?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. They do not review anything beyond that in terms of the quality of the standards your lab might be using?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. Accreditation is simply a matter of whether your lab is following its own internal standards?

A. That's part of it. They do more than just that to make sure you are fulfilling your own standards.

Your own standards have to be a certain level, up to a certain level then if they are being followed, not because you could just do whatever you want, you happen to be following that. It doesn't work that way.

Q. So your testimony is that a lab accreditation actually reviews the quality of the standards that your lab has

THE COURT: Ask the question. Ask the question. These questions have nothing to do with that question.

MS. MEIS: Well, they do because absent knowing the make and manufacturing processes for the make and model of every gun, there's no way he could possibly account for some class characteristics.

THE COURT: Ask him.

(OPEN COURT:)

Q. You are aware of the term subclass characteristics?

A. Yes.

Q. And you are aware that in order to account for subclass characteristics as AFTI indicates, you have to be aware of the manufacturing processes for the make and model of guns?

A. Yes.

Q. And do you keep a log of the make and model, manufacturing processes for the make and model of various guns?

MR. ROSENFELD: Objection.

THE COURT: Overruled.

A. No.

so, are you aware?

THE WITNESS: The entire field in firearms identification has the same standards, Your Honor.

Q. Are you aware of those standards?

A. Yes.

Q. And specifically the AFTI standards require an examiner to take documentation of the details of a comparison at the time it's being made?

A. I am not aware of that.

Q. And are you aware that AFTI recommends taking microphotographs of the microscopic comparison an examiner might do?

MR. ROSENFELD: Objection.

THE COURT: Overruled.

A. It's not a requirement.

Q. You are not aware -- you are aware of the guidelines, right?

A. I am not sure if their guidelines stipulate actual microphotographs. Because prior to photographs we actually used to take a sketch of our identifications.

Q. Is it an AFTI recommendation?

A. It's a recommendation.

Q. Right?

A. It's not a must, you must obey.

Q. AFTI recommends taking microphotographs of comparisons

answered [illegible].

Q. And AFTI recommends in addition to doing sketches or diagrams of the supposed matching criteria that an examiner is looking at, right?

A. Like you said photomicrographs.

Q. Or sketches and diagrams?

A. At one time, yes.

Q. And AFTI also recommends an examiner take detailed notes of what it is that they are looking at that they are claiming is a match, right?

A. Yes, we do take notes. Just let you know AFTI is not a governing body. It doesn't dictate what you should do, it makes recommendations.

Q. Well, AFTI published guidelines for the standardization of comparison and documentation, right?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. Are you aware, I mean you said you are aware that AFTI has standards and guidelines for your field, right?

A. Yes.

Q. And you are a member of that organization?
A. I am.
Q. And you are aware of what those guidelines are?
A. Yes.
Q. And it's your testimony that you as an examiner follow those guidelines?
A. Yes.
Q. And that NYPD follows those guidelines?
A. Yes.
Q. And do you keep up to date with literature and publications in your field?
A. Yes.
Q. For example, are you familiar with the AFTI article on subclass characteristics for the Smith & Wesson that was published in volume 39 of their journal in the summer of 2007?
A. Which Smith & Wesson model that would be?
Q. That would be the SW40VE?
A. I am not familiar with that particular article.
Q. You are aware that the failure to account for subclass characteristics can lead to a misidentification?
MR. ROSENFELD: Objection.
THE COURT: Sustained.
MS. MEIS: Judge, I have nothing further for voir dire. We do object to his qualification for the microscopy.

Q. Detective, the microscope that you use, how does that compare to this ELMO that we call it?

A. The microscope that I use is $65,000.

Q. In terms of magnification?

A. The optics are awesome. They are wonderful.

Q. In terms of amount?

A. They go from 6X to 102X.

Q. What does that mean?

A. Times. Times, six times normal like up to 102 times.

Q. Detective, you're an NYPD detective who works at a police lab, right?

A. Yes.

Q. And one of the things you do is microscopic comparison of ammunition components, right?

A. Yes.

Q. And by ammunition components I mean either cartridge casings, right?

A. Yes.

Q. Or fired bullets, right?

A. Yes.

Q. And what you do is you put those components in your microscope that allows you to view them at the same time?

A. Yes.

Q. And you use your eyes to determine whether you see any matching areas, right?

MR. ROSENFELD: Objection, Your Honor, form.

THE COURT: Overruled.

A. I use my eyes, yes.

Q. And there is no set number of matching area that is required for you to look at to declare a match?

A. Like I stated earlier there's a minimum criteria.

Q. Well, the terms you used when testifying is sufficient agreement, right?

A. Yes.

A. Well, I do have two photographs.

Q. You didn't indicate in anyway in your testimony or in your report what actual area you were looking at when you made that comparison?

A. Yes, it's called the breech face.

Q. Okay, you are looking only at the breech face impression?

A. Well, with respect to the breech face, yes, but also the firing pin impression I identified on both.

Q. And a breech face mark is a large area, right?

A. It can be.

Q. And you are looking at just a portion of that mark when you made your comparison?

A. No, I look at the entire thing.

Q. And you don't indicate in anyway what it was that you saw as being matching or similar between these two shell casings breech face impressions?

A. I took one representative photo of one area.

Q. So you did thirteen ammunition components and compared them to each other, right?

A. Um, um.

Q. Is that a yes?

A. Yes.

Q. And the microscope that you used as you said it's a really expensive piece of equipment, yes?

A. Yes.
Q. $65,000 or something, isn't that what you said?
A. Yes.
Q. And when you look at things you see them in color, right?
A. Yes.
Q. And that microscope, that really expensive piece of equipment at your police lab, has a camera on it, doesn't it?
A. It does.
Q. And you can just simply push the button and take a picture of what it is that you are looking at?
A. Yes, and I did.
Q. And those pictures can be taken in color as well, right?
A. They are taken in color.
Q. And while you are looking at what you are examining, you also have pen and paper right there next to you, right?
A. Yes.
Q. And you could take notes of what it is that you are actually seeing that you are saying matches or corresponds, right?
A. We don't operate that way.
Q. So you didn't do that in this case?
A. No. You are making it sound like I had to do that. I don't need to do that.

Q. Well, the AFTI guidelines that you talked about before for the organization you are a member of recommends that you do that, right?

A. No, it doesn't.

Q. It requires that you take sufficient documentation of what you are viewing so that another examiner without looking at the evidence could know exactly what it was that you saw when declaring sufficient agreement, right?

MR. ROSENFELD: Objection.

THE COURT: Overruled.

A. That's why I have a photograph. That photograph is one representation area, one representative area I should say, and anybody can look at it that's trained in microscopy and say I could see where he lined it up. That's why I take the photograph. It's not for court, it's not for you, it's not for this jury. And the notes are sufficient enough.

Q. My question, Detective, is for you it was sufficient enough, right?

A. For me, for the entire NYPD, and laboratories across the country, these notes are sufficient enough.

Q. And so you recognize that AFTI recommends that you do something additional in documenting your examination?

A. No, I don't.

MR. ROSENFELD: Objection.

THE COURT: Overruled.

A. No, I don't.

Q. And you took just a single photograph for all thirteen of these comparisons?

A. I took one photograph of the breech face impression for the thirteen casings, one photograph of the firing pin impression, then I took an additional photograph of the breech face impression comparing it to the test fires, and an additional photograph of the firing pin impression when comparing it to the test fires.

Q. For this report?

A. Yes.

Q. So it's your testimony that you took four microphotographs?

A. Yes, page three and page four.

Q. And what you did in your report and in your testimony is you said, well, to me there's a match of class characteristics and sufficient agreement of individual characteristics, right?

A. That's what the statement says, yes.

Q. That's the conclusion you made?

A. Yes.

Q. And in your worksheet where you can write about what it is that you actually saw, you simply put the conclusion which is a letter that corresponds to a definition sheet that you use at the NYPD Police Lab, right?

A. Yes, that's our standard operating procedure.

MS. MEIS: If we could have this marked as Defense N.

(Whereupon, Defense Exhibit N so marked for identification.)

THE COURT OFFICER: Defense N for identification so marked.

MS. MEIS: If that could be admitted on consent as Defense N in evidence.

MR. ROSENFELD: No objection.

THE COURT: What is it?

MS. MEIS: It is the definitions sheet used by NYPD for microscopic comparison.

THE COURT: Defense N for identification is admitted into evidence on consent.

(Whereupon, Defense No so marked into evidence.)

THE COURT OFFICER: Showing it to the witness.

Q. Are you familiar with that form, Detective?

A. Yes, I am.

Q. And is that indeed the form that your police lab uses in doing microscopic comparisons?

A. Yes.

Q. And on that form, fair to say there a list of A through O, letters, right?

A. Yes.

Q. And then they have corresponding definitions?

A. Yes.

Q. And those definitions simply talk about the conclusion that you stated of sufficient agreement of individual characteristics, right?

A. Yes.

Q. There is not any definition of what sufficient agreement is, right?

A. No, there's not.

Q. That's because that's completely subjective, it's for you to determine what sufficient agreement is, right?

MR. ROSENFELD: Objection.

A. That's exactly right.

THE COURT: Overruled.

MS. MEIS: Sorry, if I could have that Defense N in evidence so I could display it on the monitor. And just displaying Defense N in evidence up on the elmo.

Q. As the title indicates this is the Firearms Analysis Section Microscopy Definitions of Comparison Results, right?

A. Yes.

Q. And this is the same form you use for every comparison you do?

A. Yes.

Q. And, for example, the definition for letter A is fired from one gun based on sufficient agreement of class and

individual characteristics of the firing pin impression, correct?

A. Yes.

Q. And as I said no where in this form anywhere is sufficient agreement defined, right?

A. That is correct.

Q. And also no where on this form is there any indication of those subclass characteristics that you acknowledged exists in the field, right?

A. No indication of subclass.

Q. And in none of your reports or specifically in the report dealing with the thirteen casings that you compared, is there any indication that you, that you took a count of subclass characteristics in any way, shape, or form?

A. If subclass characteristics exist we discount them, but nothing is written about them because they are not utilized for identification.

Q. But they are important to be aware of as the AFTI organization that you are a member of says, right?

MR. ROSENFELD: Objection.

THE COURT: As to form it's sustained.

Q. Subclass characteristics exist, right?

A. They may.

Q. And in order to make an accurate determination you have to take a count of their possible existence in any given

comparison?

A. Absolutely.

Q. And there's no indication anywhere that you did that in this examination?

A. There is nothing indicated for subclass. Like I said we don't utilize it for identification. If there is the presence of s ot utilized. There may not have

Q. And xamination, whether there was any

A. I dc se.

Q. Isn' e marks and firing pin impression istics?

A. That'

Q. Are y , who is a prominent firearms examiner in your field?

A. Yes.

Q. And hasn't he said exactly that, that subclass characteristics always exists in firing pin and breech face impressions?

MR. ROSENFELD: Objection.

THE COURT: Sustained.

Q. Are you aware that Ron Nickels has opined and published articles saying that these subclass characteristics do exist for impression marks?

BY MS. MEIS:

Q. You didn't write anything in your report except for the conclusion in your bench notes?

A. That's the standard operating procedure of the laboratory.

Q. And you agree that a bullet is round, 360 degrees, right?

A. Yes.

Q. And there could be areas of matching and also areas of non-matching, if you look at the entire area of a bullet, right?

A. There wouldn't be non-matching as opposed -- as far as like disagreement, there may be areas that there was nothing, but you will not have disagreement on two bullets that are identified from the same gun or fired from the same gun.

Q. You didn't indicate anywhere in your report what area you were looking at between land one and land two and land three and land four, where you found the supposed sufficient agreement, right?

A. Like I stated, this is how we take notes, I don't indicate where and what section. It doesn't work that way. That's not the standard operating procedure of the laboratory.

Q. It is a no, you didn't do it?

A. I don't have to do it, you are making it seem like I failed to do something when I didn't.

Q. You could have documented what you were actually looking at or what you were claiming that there was sufficient agreement of and you didn't.

ADA ROSENFELD: Objection.

THE COURT: Sustained.

Q. When you talk about the microphotograph that you took, the microphotograph that you took, showing you --

(Whereupon there was an off-the-record discussion between counsel at this time.)

MS. MEIS: Defense O for identification.

(Whereupon, the above-mentioned item is received and marked as Defendant's Exhibit O for identification at this time.)

(Whereupon the following occurred in open court.)

THE COURT OFFICER: Defense O so marked.

Hand it to the witness?

MS. MEIS: Yes, please.

Q. Do you recognize that, detective?

A. Yes.

Q. And what do you recognize it to be?

A. This is Page 3 of 4 of my notes.

Q. And is that a photo, a microphotograph of the comparison that you were just discussing?

A. Yes.

MS. MEIS: I would ask that it be admitted into

evidence as Defense O.

A. This is a very bad copy by the way, just to point that out.

THE COURT: People?

ADA ROSENFELD: Brief voir dire.

THE COURT: Sure.

VOIR DIRE EXAMINATION OF DETECTIVE VALENTI

BY ADA ROSENFELD:

THE COURT: Come up. Come up. Come up.

(Whereupon there was a sidebar discussion off-the-record between all counsel and the Court at this time.)

(Whereupon the following occurred in open court.)

THE COURT: Go ahead Mr. Rosenfeld.

ADA ROSENFELD: Yes.

Q. Detective, what we are looking at in the picture?

What are we seeing in that picture? How clear is it and what is it a picture of?

A. This is a picture comparing bullet five, which is the morgue bullet to a test fire which is marked 1.3, except this is a really lousy copy because it is probably faxed over and maybe copied a few times.

It is not a very clear photo.

Q. What does it represent?

A. It represents those two bullets being compared to one

another, it is one land area, one repetitive area.

ADA ROSENFELD: I have no objection.

THE COURT: Without objection, Defense O for identification is in evidence as Defense O in evidence.

(Whereupon, the above-mentioned item is received and marked as Defendant's Exhibit O in evidence at this time.)

(Whereupon the following occurred in open court.)

THE COURT OFFICER: Defense O so marked in evidence.

BY MS. MEIS:

MS. MEIS: And I am just publishing this for the jury on the ELMO.

Q. This is Defense O in evidence, that represents the picture that you took of the area that you were comparing, right?

A. That's a copy, yeah. Like I said, it is a fairly lousy copy.

Q. Well, you have reports that you provided to the prosecutor, right?

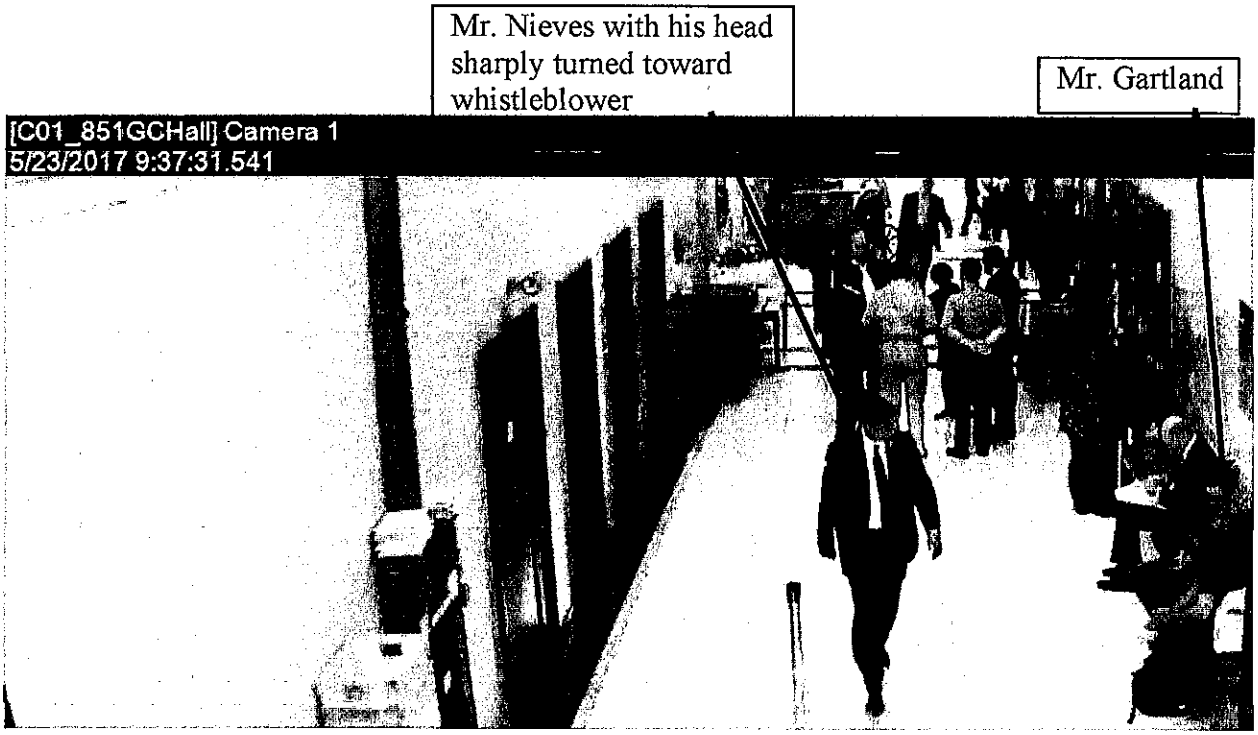
A. But they are faxed out and photocopied and there is your result right there.

Q. You are aware that the prosecutor provides reports to the defense?

A. I am aware of that.

1. NYPD Deputy Inspector Howard Redmond who heads the Mayor's NYPD security detail and is a defendant in active federal civil rights lawsuit dating back to 2014 violating whistleblower's First Amendment right on 4/27/17 at the Mayor's public town hall meeting in Long Island City that the news media has refused to report and City Council members have refused to do anything about:

2. NYPD Lieutenant Nieves of the Mayor's NYPD security detail stalking a whistleblower as he talked with the New York Post's Michael Gartland on 5/23/17 inside of the Bronx Supreme Court about being illegally prevented by Mr. Nieves, other members of the NYPD, Rachel Atcheson of the Mayor's Community Affairs Unit, and Bronx Supreme Court officers from attending the Mayor's public resource fair meeting that was held in that courthouse on that date in violation of the First Amendment and an applicable federal criminal statute.



by his exercise of that right; and (3) the defendant's actions caused him some injury." *Dorsett v. Cnty. of Nassau*, 732 F.3d 157, 160 (2d Cir.2013).

At oral argument, counsel for the defendants asserted for the first time that Higginbotham's videotaping of the arrest was not protected by the First Amendment because it was not "expressive conduct." In supplementary briefing requested by the Court (Dkt. No. 20), the defendants rely on *Pluma v. City of New York*, No. 13 Civ. 2017(LAP), 2015 WL 1623828 (S.D.N.Y. Mar. 31, 2015), in which the court dismissed the First Amendment claim of a "citizen journalist" who was pepper-sprayed while filming police activity in Zuccotti Park. The court stated that "[t]he only potentially expressive actions that Plaintiff took leading up to his injury... involved filming" the police activity, but went on to note that "neither the Supreme Court nor the Second Circuit has addressed the right to photograph and record the police." *Id.* at *7 (internal quotation marks omitted). The court concluded: "It consequently remains unclear whether Plaintiff's filming was protected by the First Amendment." *Id.* But it further held that, even assuming a First Amendment interest, the complaint had not alleged a causal connection between the plaintiff's activity and the pepper-spraying. *Id.* at *8.

Pluma appears to rely on a line of cases suggesting that recreational photography or filming for personal use is not protected by the First Amendment, because it lacks an "identifiable message sought to be communicated, [and] an identified audience to whom a message [is] being broadcast." *Montefusco v. Nassau Cnty.*, 39 F.Supp.2d 231, 242 n. 7 (E.D.N.Y.1999) (suggesting, but not holding, a schoolteacher's photography of female teenagers was not protected by the First Amendment); *see also Porat v. Lincoln Towers Community Ass'n*, No. 04 Civ. 3199(LAP), 2005 WL 646093, at *4-5 (S.D.N.Y. Mar. 21, 2005) (holding that a photo hobbyist's recreational photography of residential buildings was not protected). Whatever the merits of that legal proposition, it does not apply to a journalist who was filming a newsworthy protest for broadcast by a news organization. *See Porat*, 2005 WL 646093, at *5 (contrasting the plaintiff's case with "the classic First Amendment example of a reporter attempting to take a photograph for publication with a specific story"). *Pluma* may be distinguishable on the basis that the plaintiff in that case, although he called himself a "citizen journalist," did not allege that he ever intended to disseminate his videos: the complaint merely alleged that he went to Zuccotti Park "with hopeful reflection upon the efforts of Occupy Wall Street." *Pluma*, 2015 WL 1623828, at *7. To the extent *Pluma* is not distinguishable, however, the Court declines to follow it. While videotaping an event is not itself expressive activity, it is an essential step towards an expressive activity, at least when performed by a professional journalist who intends, at the time of recording, to disseminate the product of his work. *See generally* Seth F. Kreimer, *Pervasive Image Capture and the First*
379 *Amendment: Memory, Discourse, and the Right to Record,* *379 159 U. Pa. L.Rev. 335, 381-86 (2011) (arguing that "the modern process of image capture is an essential element in producing, and ultimately disseminating, photos, videos, and montages which modern First Amendment doctrine solidly recognizes as protected media of communication").

The defendants also raise the issue whether, more narrowly, a right to record police activity exists, a question that neither the Supreme Court nor the Second Circuit has decided. All of the circuit courts that have, however, have concluded that the First Amendment protects the right to record police officers performing their duties in a public space, subject to reasonable time, place and manner restrictions. *See See Am. Civil Liberties Union of Ill. v. Alvarez*, 679 F.3d 583, 608 (7th Cir.2012) (invalidating a state eavesdropping statute as applied to the recording of police officers in the performance of their duties in traditional public fora); *Glik v. Cunniffe*, 655 F.3d 78, 82, 85 (1st Cir.2011) (holding that there is "a constitutionally protected right to videotape police carrying out their duties in public" and that the right was clearly established; noting the "fundamental and virtually self-evident nature of the First Amendment's protections in this area"); *Smith v. City of Cumming*, 212 F.3d 1332, 1333 (11th Cir.2000) (recognizing a First Amendment right to photograph or videotape police conduct); *Fordyce v. City of Seattle*, 55 F.3d 436, 439 (9th Cir.1995) (recognizing a "First

part on *Fordyce*, recognized the breadth of that ruling by finding that the law clearly established as to the constitutional right to photograph an accident scene during a public investigation. *Adkins v. Limtiaco*, 537 F. App'x. 721, 722 (9th Cir. 2013) (citing *City of Houston v. Hill*, 482 U.S. 451, 461 (1987) and *Fordyce*, 55 F.3d at 439). For similar reasons, the court finds that under the law of this circuit there is and was on December 7, 2012, a clearly established right to record police officers carrying out their official duties.

Defendant attempts to narrowly define the issue in this case for purposes of the immunity analysis. He argues that there are no cases holding that a probationer, such as plaintiff, has a clearly established First Amendment right to record a search of her residence conducted pursuant to her searchable probation status. According to defendant, all relevant case law, including the cases previously discussed, only establish the right to record a police officer in public.[5] ECF No. 35-1 at 5-6. While the distinction is noted, it is one lacking any meaningful difference here. The location of where the video recording was being made was plaintiff's place of residence. If a plaintiff has a clearly established constitutional right to record from a public place where the plaintiff has the lawful right to be, a plaintiff surely has such a right in his or her home. There simply is no principled bases upon which to find that although the right to record officers conducting their official duties only extends to duties performed in public, the right does not extend to those performed in a private residence. The public's interest in ensuring that police officers properly carry out their duties and do not abuse the authority bestowed on them by society does not cease once they enter the private residence of a citizen. To the contrary, there appears to be an even greater interest for such recordings when a police officer's actions are shielded from the public's view. Further, there is no reason to believe that plaintiff's status as a probationer would diminish the public's interest in how police exercise their authority in a private citizen's homes.

[5] However, for a right to be clearly established for purposes of qualified immunity there need not be a factually identical case finding the particular conduct unconstitutional. *Torres v. City of Madera*, 648 F.3d 1119, 1128 (9th Cir. 2011). "To the contrary, [the Ninth Circuit has] repeatedly stressed that officials can still have 'fair warning' that their conduct violates established law 'even in novel factual circumstances,' and even when a novel method is used to inflict injury.'" *Id.* at 1129 (citation omitted).

UNITED STATESDISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

Kalan Sherrard, Plaintiff, - against - Deputy Inspector Howard Redmond, Defendant.	15-Civ-7318 (MAB) (KNF)

Memorandum of Law In Opposition To Defendant's Motion For Summary Judgment

Of counsel:

Michael G. O'Neill

C. Plaintiff Establishes A First Amendment Claim.

Plaintiff establishes a First Amendment claim by showing that his arrest was motivated by his exercise of a right guaranteed by the First Amendment. Kalan's clothing and personal appearance, here wearing nothing but pink briefs, is unquestionably expressive conduct. *See Zalewska v. Cty. of Sullivan,* 316 F.3d 314, 321 (2d Cir. 2003). The question here is simply whether it was a factor in his arrest.

Again, plaintiff's video provides the evidence from which a jury could infer that Kalan was arrested because the police disapproved his manner of dress. The policemen on scooters and defendant made a beeline for Kalan, and they had to drive past upwards of six or eight bicycle riders, many of whom were obviously violating the provisions of the Vehicle and Traffic Law and New York City Rules and Regulations cited as the basis for Kalan's arrest. Kalan was the *only* bicycle rider that the police showed any interest in. When defendant exited his car, he stated into his radio that "we got one stopped over here." "One" stopped, not several.

Why was Kalan arrested? There was nothing different about his conduct. Indeed, his conduct was more lawful that most of the other ten or so bike riders that appear in the video. The only explanation is his appearance. Arresting plaintiff because of his unorthodox manner of dress violated his First Amendment Rights.

Defendant points out that other bike riders were arrested. This is interesting, although not necessarily for the reasons cited by defendant. When Kalan was stopped, the police showed no interest in any of the other bike riders. They remained at the scene voluntarily.

Both plaintiff's video and the videos produced by defendant have sound, and there were no orders or instructions to stop other riders.

The video file produced by defendant ending in "0109" is interesting. At the very beginning of the video, defendant's voice can be heard over the police radio saying "we got one stopped over here," which is also heard on plaintiff's video. At 28 seconds, we hear "we're gonna hit this one guy for a summons and arrest." The camera then swings around and focuses on Kalan, who is obviously the "one guy" being referred to. At 35 seconds a short female bicycle rider observes "you guys are blocking traffic." A similar comment is heard at 43 seconds. This young woman was one of the other four individuals arrested. At 50 seconds, we see a bicyclist on a bicycle that was modified so that the rider is about six feet off the ground riding in the direction of the police, waiving his legs in the air as if taunting or mocking the police. At 56 seconds we hear somebody say, in reference to the rider on the tall bicycle, "arrest this guy." A half dozen police on scooters pursue the rider of the tall bicycle on a slow chase, but try as they might, they are unable to stop him, and they eventually give up interest.

The record fails to reveal why the other individuals were arrested. Perhaps the female rider was arrested for haranguing the police about blocking traffic, and clearly there was an effort to arrest the rider of the tall bicycle who was taunting the police. The video produced by defendant does not show any basis for arresting the other four individuals. The video produced is on four files and there is no real continuity. One wonders whether the video was edited.

Patrolmen's Benevolent Association
Of The City Of New York, Incorporated

NEW YORK CITY COUNCIL COMMITTEE ON PUBLIC SAFETY
Hearing on Introduction 1235
December 14, 2017, 1:00pm
Committee Room - City Hall

MEMORANDUM IN OPPOSITION TO INTRO. NO. 1235

The Patrolmen's Benevolent Association of the City of New York (NYC PBA) and its over 24,000 members, who patrol New York City's streets and do the difficult and dangerous work of protecting every resident, every visitor and every business operating within the five boroughs, opposes Intro. No. 1235, which relates to the right to record police activities.

New York City police officers are acutely aware that they can and will be recorded during the performance of their duties, not only by civilians, but also by the Department-issued body-worn cameras that will soon be worn by virtually every NYPD member assigned to an enforcement role. While these video recordings are a feature of 21st century policing, they also have serious implications for police officers' ability to perform their duties safely and effectively, especially when they are being captured by civilians at the scene of police action. This legislation fails to adequately consider and address these concerns, and will likely exacerbate the already contentious atmosphere that police officers face on the street.

While some federal courts have held that the First Amendment affords the public a right to record police activities, the case law on that issue is far from uniform, and at least one circuit court has held that no such right exists.[1] Moreover, those courts that have recognized a First Amendment "right to record"[2] have also universally acknowledged that the right is not absolute, but rather, subject to reasonable restrictions.[3] Police department orders governing the right to

[1] See Akins v. City of Columbia, 2:15-CV-04096-NKL, 2016 WL 4126549 (W.D. Mo. Aug. 2, 2016); aff'd sub nom. Akins v. Knight, 863 F.3d 1084 (8th Cir. 2017).
[2] The First, Third, Fifth, Seventh, and Eleventh Circuits have held that there is a First Amendment right to record police interactions. See Gericke v. Begin, 753 F.3d 1, 7 (1st Cir. 2014); Field v. City of Phila., 862 F.3d 353 (3d Cir. 2017); Turner v. Lieutenant Driver, 848 F.3d 678, 689 (5th Cir. 2017); Smith v. City of Cumming, 212 F.3d 1332, 1333 (11th Cir. 2000).
[3] See, e.g. Gericke v. Begin, 753 F.3d 1, 7-8 (1st Cir. 2014) ("Reasonable restrictions on the exercise of the right to film may be imposed when the circumstances justify them.").

record in several other jurisdictions generally include provisions to protect police officer safety and the effective administration of law enforcement that are much more thorough and well-considered than the provisions of this legislation.[4]

Critically, this legislation would grant a broad right to "record police activities and maintain custody and control of any such recording and of any property of instruments use in such recording." The unlimited scope of this right would pose a significant danger, as it would allow any member of the public at large to have unfettered access to any police activity, without designating a "zone of safety" within which members of the public would be barred from entering. The absence of any such defined "zone of safety" would not only jeopardize the safety of police officers, who would have to be on guard for bystanders approaching the site of police activity, but would also potentially jeopardize the safety of the individual recording the activity and other members of the public as well.

Instead of defining a "zone of safety," the proposed law provides that "[i]t shall be an affirmative defense that a reasonable officer in the position of such officer would have had probable cause to believe that the person recording police activities physically interfered with an official and lawful police function, or that such officer's actions were otherwise authorized by law." Such an affirmative defense, with its requirements of reasonability and probable cause, is insufficient protection for officers in the field who must make split second decisions to ensure their safety and the safety of others. Moreover, requiring that the recording witness have "physically interfered" with a police function does not account for the many ways in which interference may occur without rising to the level of physical contact, including, among others, by merely entering the zone of safety.

The legislation would also prohibit police officers from "seizing property or instruments used by any individual to record police activities" except in cases "otherwise authorized by law." This prohibition does not adequately delineate the proper and lawful purposes for which such property might be seized, including for investigative purposes.

Of particular concern is the inclusion in the bill of a private right of action for "unlawful interference with recording police activities." First, while the bill lists a number of actions that would constitute "unlawful interference," they are all either ill-defined or extremely broad, making it unclear what types of actions might expose an officer to liability. Second, the potential exposure, which includes punitive damages, declaratory and injunctive relief, and attorney's fees, is enormous, and represents an effort on the Council's part to go much farther than it has in

[4] Washington D.C.'s order, for example, notes that members of the public do not "have a right to interfere with police activity," and allows police officers to direct members of the public to move away from a position that impedes or threatens the safety of others. Similarly, Baltimore's order provides that there is a right to record "when the person recording otherwise has the right to be there, does not interfere with a member's safety, and does not obstruct, hinder, delay, or threaten the safety of another or compromise the outcome of legitimate police actions and/or rescue efforts."

the past in connection with similar legislation. Officers in the field should not be subject to such liability, and the fear of such repercussions will no doubt inhibit officers in the performance of their duties. Finally, the potential for such significant exposure may embolden private citizens to interfere with police activity and incentivize lawyers to bring potentially frivolous litigation in the hopes of receiving a windfall.

To the extent the proposed legislation is motivated by a professed need to protect and promote the video recording of police interactions, such need is already being met in large part through the use of body worn cameras. The Council has already allocated significant resources to implement this technology, and strict guidelines and mechanisms for oversight are in place to ensure that recordings are made and preserved in a safe and effective way. Encouraging private citizens to engage in video recording of police interactions not only has the potential for creating an unsafe environment, but also is largely unnecessary.

Ultimately, the rules governing police officers' conduct towards civilians on the scene of police activities — whether or not those civilians are engaged in recording the activity — are best addressed by Department procedure, not through legislation. The City Charter grants the Police Commissioner wide latitude to exert authority over essentially every aspect of the NYPD's governance and operations. The Council cannot and should not usurp that Charter-mandated authority by attempting to legislate every aspect of NYPD operations, particularly those that would significantly impact officer safety in the line of duty.[5]

In light of the foregoing, the NYCPBA strongly opposes Intro. 1235 and urges the committee to reject this legislation.

[5] Indeed, a number of other jurisdictions – including Washington, D.C., Baltimore, Fairfax County, Virginia, and Philadelphia – have chosen to address the "right to record" issue via police department orders or directives, and not through legislation.

5 Boro Defenders
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Committee on Public Safety
Chairperson Vanessa L. Gibson
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New York City Council
Committee on Health
Chairperson Corey Johnson
district3@council.nyc.gov

New York City Hall
City Hall Park
New York, New York 10007

RE: Int. No. 1235 - In relation to respecting the right to record police activities.

Support for Int. No. 1235

At 5 Boro Defenders, a group of hundreds of public defenders, civil rights attorneys and advocates from across NYC founded in 2006, we are sure that the committee is well aware of the usefulness of citizen recordings of police misconduct. The countless cases of police brutality caught on video by Good Samaritans with camera phones - and some of the highest profile tragedies, like the murders of Eric Garner in Staten Island, Walter Scott in South Carolina, and Philando Castile in Minnesota - have undoubtedly made the committee supportive of this crucial tool. We write to the committee as an organization daily on the frontlines of the criminal legal system in support of the protections proposed in Intro. No. 1235. We write to relate the truth about NYPD reaction to everyday people using their cell phones to lawfully record police activity. Our stories are based on the experiences of thousands of New Yorkers we speak with every year in the course of our jobs as public defenders and advocates. We write in support of Int. No. 1235, and respectfully offer a change to the current language in order to clarify the legislative intent and strengthen the protections of the bill for citizen recording of the actions of the NYPD.

Among thousands of clients arrested or harassed for lawfully recording police activity we offer a few illustrative examples. In one case, a client was walking home when he came upon a man about to receive a summons for urinating on the sidewalk. The man was yelling irately that he was innocent of the offense so our client took out his camera phone in case the incident escalated. In the recording, which was only audio, one can hear our client's calm, respectful tone. The officers, on the other hand, were loud and abusive. The officers took out their own personal cell phones and began recording the civilian witness as he record, shouting, "How does it feel?" When our client refused to be intimidated and kept recording, one officer tackled him and arrested him, while yelling "welcome to Bed-Stuy, white boy!" If our client's recording had not survived the incident, he might have been convicted of disorderly conduct based on the officers' false accounting of the events.

Other clients have reported similar stories of the police taking out their own personal cell phones and recording them in retaliation for them recording the police. Of course, this is far from the most serious form of police retaliation for lawful civilian activity. Many clients have had their cell phones confiscated by police and their videos deleted. Clients have been demeaned, harassed, falsely charged and even physically assaulted. In one instance a woman took a photo of a police officer standing near a turnstile and the officer followed her into the subway station and onto the platform, where he demanded she delete the photo she took. Officers appear to be well aware that the Patrol Guide specifically forbids them from arresting people engaging in their lawful first amendment right to record police, but they do not care. In one case an officer mockingly encouraged the client, as he was arrested, to sue for his unlawful arrest for recording the police. The protections of Int. No. 1235 and specifically the right of action created therein should do much to deter this type of police misconduct.

Importantly, many arrests have been shown to be unlawful through the video recording of a Good Samaritan. Time and again our clients are charged with resisting arrest or assault of a police officer (a felony charge) and it has been the recordings of fellow community members that have shown no such resisting or assault to have taken place. Instead these

citizen recordings show the violation of our clients' rights by the officers involved. In one such case, a client was walking down his residential street when officers backed up in their unmarked car, travelling the wrong way down the one-way street. The car struck our client, who then exchanged words with the plain-clothes officers in the unmarked car. The officers got out of their car and threw him against it, eventually arresting him and charging him with assault on a police officer. The video recording by a neighbor clearly showed the police misconduct and assault on our client and resulted in eventual dismissal of the charges. The lawful citizen recording of police interactions with New Yorkers is absolutely essential to providing a check on police power and importantly, abuse of that power.

As in the case above, many of the cases in which citizen recordings have been most helpful have been in low-level misdemeanors where the incident involved a street encounter with police. In our experience prosecutors rarely conduct independent investigations of misdemeanors - they do not personally interview any of the officers involved until the eve of trial, nor do they affirmatively obtain surveillance video that might be available. Often, this results in surveillance being wiped during regular maintenance and therefore completely lost for use by prosecution or defense. These misdemeanor cases don't typically involve forensic evidence. This citizen journalist recording is absolutely crucial evidence in these cases, as even misdemeanor or violation *charges* could result in the accused person losing their job or their housing, or being charged with a probation or parole violation. On the other hand, if a recording shows our client engaged in unlawful activity, it helps us better counsel them about potential plea offers allowing a speedy resolution of the case.

Recommended revision to language of Int. No 1235

The City Council should do everything in its power to protect citizen journalists and ensure oversight of the NYPD by the citizens whose tax dollars fund it. To that end, we also write to suggest a language revision to the bill to strengthen and clarify the legislative intent.

Section 10-902, second sentence, currently reads as follows:

> "Nothing in this chapter shall be construed to permit a person to engage in actions that physically interfere with an official and lawful police function, or to prevent the seizure of any property or instruments used in a recording of police activities otherwise authorized by law, or to prohibit any officer from enforcing any other provision of law."

We feel that the underlined portion would appear to authorize the police to seize a phone used to record lawful police activities ("otherwise authorized by law"); or, put differently, only prohibits police from seizing phones when they are used to record unlawful police activity. This language contradicts the legislative intent proposed by Int. No. 1235; to protect the absolute right of citizens to record police activity.

We suggest that it be revised to read

> "…to prevent the seizure of any property or instruments used in a recording of police activities **where** the seizure is otherwise authorized by law…"

This proposed revision ensures that police are prohibited from seizing a cellphone or recording device unless such seizure is otherwise authorized by law.

Conclusion

As public defenders, civil rights attorneys and advocates for those involved in the criminal legal system, we support Int. No. 1235, with our aforementioned revision. We believe this legislation will address the too-common problem of unlawful seizure of cellphones and recording devices. Both the protections and right of action created within Intro. No. 1235 should serve to deter such illegal seizures and ensure that the citizenry of New York City is able to continue to observe and record police interactions; a vital component of a healthy and functioning democracy. Thank you for considering our input.

Cc: Jonathan Ettricks
Legislative Documents Unit
New York City Council
hearings@council.nyc.gov

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Deputy Chief Emanuel Katranakis

Address: 1 Police Plaza

I represent: NYPD.

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Craig O'Connor

Address: 421 East 26 street NY, NY

I represent: OCME

Address: 421 East 26 street NY, NY

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Barbara Sampson

Address: 520 First Ave NY, NY

I represent: OCME

Address: 520 First Ave NY, NY

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Dina Maniotis

Address: 421 East 26th St.

I represent: OCME

Address:

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 12/14/2017

(PLEASE PRINT)

Name: DR GAIL COOPER

Address: 520 1st Avenue, NY10016 (OCME)

I represent: OCME

Address: 520 1st Avenue, NY 10016

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: Dec 14, 2017

(PLEASE PRINT)

Name: MARIE SAMPLES

Address: 421 E 26th St ny ny 10016

I represent: nyc office of Chief Medical Examiner

Address: 421 E 26th St ny ny 10016

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

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☒ in favor ☐ in opposition

Date: 12/14/2017

(PLEASE PRINT)

Name: Rebecca Johannesen

Address: 421 E. 26th St., NY, NY 10016

I represent: OCME

Address: 421 E. 26th St. NY, NY 10016

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1235 Res. No. _____

☒ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: JOSHUA CAHN

Address: 199 WATER ST NY NY 10038

I represent: LEGAL AID SOCIETY

Address: 199 WATER ST NY NY 10038

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. T2017 Res. No. 6990

☐ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Sergio De La Pava

Address: _____

I represent: New York County Defender Services

Address: 100 William St. 20th Flr. NY, NY

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THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Director of Legislative Affairs Oleg Chernyavsky

Address: 1 Police Plaza

I represent: NYPD

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1235 Res. No. _____

☑ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Yul-san Liem

Address: _____

I represent: Justice Committee

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1235-2016 Res. No. _____

T2017-6990 ☒ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Marika Meis

Address: _____

I represent: The Bronx Defenders

Address: 360 E. 161st Bronx, NY 10451

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1235 Res. No. _____

☑ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Michael Sisitzky

Address: _____

I represent: New York Civil Liberties Union

Address: 125 Broad St, New York

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Tovaki Komatsu

Address: _____

I represent: Self

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Julie Fry

Address: 199 Water St. NY, NY 10038

I represent: The Legal Aid Society

Address: 199 Water St. NY, NY 10038

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THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Guy Raimondi

Address: 177 Livingston St 7th Fl Brooklyn

I represent: Brooklyn Defender Services

Address:

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

T2017-6990 ☐ in favor ☐ in opposition

Date: 12/14/17

(PLEASE PRINT)

Name: Sarah Chu

Address: 40 Worth St, Suite 701, NYC 10013

I represent: Innocence Project

Address:

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. ___/___ Res. No. ___/___

☐ in favor ☐ in opposition

Date: 12/14/2017

(PLEASE PRINT)

Name: Florence Hutner, General Counsel

Address: 421 E. 26th St.

I represent: Office of Chief Medical Examiner

Address: same

Please complete this card and return to the Sergeant-at-Arms