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Office of the Inspector General**



**Investigation into the New York City Office of Chief
Medical Examiner: Department of Forensic Biology**

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EXECUTIVE SUMMARY

On January 10, 2013, the *New York Times* reported that the New York City Office of Chief Medical Examiner (OCME) was reviewing more than 800 rape cases in which a technician, now known to be Serrita Mitchell, may have mishandled evidence, “resulting in incorrect reports being given to criminal investigators.”¹ Shortly thereafter, the Inspector General opened an investigation after receiving several requests to investigate the allegation. The Inspector General also learned that on April 19, 2013, Theresa Caragine, Deputy Director of the Department of Forensic Biology within the OCME, resigned her position for allegedly failing to follow lab protocol. As a result, the Inspector General then expanded the investigation to include this alleged failure. This investigation determined that the OCME employed Serrita Mitchell for 10 years despite consistent poor reviews and underperformance from the beginning of her employment. More significant, mistakes in the identification of stains on articles of clothing by Mitchell and the misplacing of items in her cases went undetected for the same period. The Inspector General also found that Caragine, in two instances, ignored laboratory protocol regarding resolution of scientific disputes by rewriting a final report and reassigning cases when she disagreed with the findings rather than bringing them to the DNA technical leader for arbitration.

Office of Chief Medical Examiner

The OCME, in addition to death investigations, provides serological, DNA, and toxicological analyses for criminal investigations pending in New York City. The Department of Forensic Biology, a forensic laboratory operating within the OCME, is responsible for the serological examination and DNA testing of evidence collected by the New York Police

¹ “New York Examines Over 800 Rape Cases for Possible Mishandling of Evidence,” *New York Times*, Jan. 10, 2013.

Department in homicides, sexual assaults, and other crimes. In 2007, the Department of Forensic Biology moved into the OCME DNA Building, which houses state-of-the-art forensic biology laboratories, and significantly increased its workload and number of employees.

Serrita Mitchell

Mitchell commenced employment at the OCME in 2000 and entered a training program to become a criminalist II, a position responsible for analyzing and interpreting DNA test results, drafting reports, and testifying in court. Mitchell passed the technical portion of the training program, but repeatedly failed the oral competency examination – the portion of the training that ensures that an analyst can testify competently in a court of law. The OCME then informed Mitchell that she would not be permitted any additional opportunities to pass the oral competency examination, but would be relegated to criminalist I duties. Notably, Mitchell was permitted to retain her criminalist II salary and title. In addition, Mitchell's employee evaluation for that year indicated several weaknesses in her laboratory performance, resulting in conditional ratings in three of seven categories and an overall conditional rating, an indication that Mitchell needed improvement in those categories. Despite these myriad failures, the OCME did not terminate Mitchell's employment.

From 2002 until 2008, despite her reduction in responsibilities, Mitchell consistently received subpar evaluations, involving at least one conditional rating, with the exception of a single year. Notably, each supervisor who appeared before the Inspector General testified that they had not seen the previous supervisor's evaluation of Mitchell, and only had limited conversations about Mitchell's strengths and weaknesses. Then, on October 22, 2008, following an incident regarding Mitchell's evaluation of evidence, the OCME suspended Mitchell from conducting all but one limited test procedure.

Following Mitchell's suspension, it was determined by OCME Human Resources and Department of Forensic Biology management that Mitchell could no longer maintain a criminalist II title while performing only criminalist I level work. Accordingly, the decision was made to retrain her as a criminalist II. Mitchell struggled to pass several competency exams regarding varying techniques, but eventually succeeded and commenced supervised casework. Almost immediately, errors in Mitchell's casework became evident. On January 20, 2011, Mitchell was permanently suspended from casework.

The Department of Forensic Biology decided, based on the cumulative errors detected in Mitchell's case work, to commence a further review of her prior casework to determine if similar errors had occurred. The review revealed significant mistakes. In July 2011, the Department of Forensic Biology reported its corrective action – the errors that were uncovered and the remediation plan – to its accrediting body and to the New York State Commission on Forensic Science. The corrective action expanded into a three-phase process that concluded in February 2013. During the corrective action process, the OCME initiated administrative action against Mitchell, and she resigned her OCME employment effective November 2011.

Re-examination of Mitchell's cases revealed that she had not identified areas of evidence, in particular pieces of clothing from sexual assault kits, from which DNA could be extracted. The Department of Forensic Biology decided to re-examine all cases from 2001 until early 2011 in which Mitchell reported negative results, cases in which no biological evidence was found. During this re-examination, it was also discovered that items of evidence were misplaced from Mitchell's cases. At the conclusion of the corrective action, all evidence was re-associated with its proper case and all negative cases were re-examined and corrected as necessary.

Theresa Caragine, Ph.D.

The Inspector General also found that former Department of Forensic Biology Deputy Director Caragine, in two instances, ignored laboratory protocol regarding resolution of scientific disputes by rewriting a final report and reassigning cases when she disagreed with the findings rather than bringing them to the DNA technical leader for arbitration. In the first instance, Caragine disagreed with a criminalist's analysis and rewrote the report to conform to her conclusion, although the criminalist's supervisor had approved the criminalist's findings. She and the criminalist exchanged e-mails to try to schedule a meeting and both rewrote the report a number of times. Ultimately, Caragine reassigned the case to another criminalist. However, Department of Forensic Biology management learned of this matter prior to the dissemination of the report. Caragine and the initial criminalist were instructed to meet, as required by laboratory protocol, with the DNA technical leader, who found in favor of the criminalist's results. The report was redrafted to conform to those results and released to the district attorney. With regard to Caragine, she assured laboratory management that in no other instance had she disagreed with another analyst and reassigned the case.

In the second instance, Caragine disagreed with another criminalist's results, even though, as with the aforementioned case, the criminalist's supervisor had approved the findings. Caragine then held the file in her office for approximately seven months. In February 2012, an assistant district attorney called requesting a final report. Because the criminalist who had analyzed the data and written the report was on medical leave, the supervisor spoke to Caragine who then reassigned the case to another criminalist. That newly assigned criminalist reviewed the data and concurred with the original criminalist in all findings but one. The newly assigned

criminalist drafted a final report and Caragine technically reviewed it. The report was sent to the assistant district attorney.

After being confronted with another case in which it appeared that she reassigned a case because she disagreed with the criminalist's findings, Caragine offered to tender her resignation from the OCME effective immediately. Her offer was accepted and she resigned on April 19, 2013.

Policy Changes at OCME Addressing the Deficiencies Found in the Investigation

Prior to instant investigation, the OCME had taken some remedial measures, including instituting stricter competency requirements and a zero-tolerance policy relating to an employee who fails to pass all aspects of the training program. It also has been a long-standing rule that no criminalist have more than one case open for examination at any given time, and violators of this rule are subject to immediate disciplinary action. Moreover, sexual assault kits are now maintained in an evidence room and must be returned at the end of each day; only one kit is released at a time.

Further, with the respect to the deficiencies in the evaluation process, OCME has instituted a process whereby any employee evaluation that has a conditional rating or lower in any category is reviewed by the Quality Assurance Manager and the Director. An analysis is then conducted as to the next course of action, which may involve retraining in a specific area, retraining in all areas or, possibly the initiation of progressive discipline. Significantly, the current policy also requires that when an employee is transferred to a new supervisor, the new supervisor must be given all the employee's prior evaluations and nonconformities and in turn, write a plan for the staff member.

Recommendations

The Inspector General recommends that OCME provide unlimited access to supervisors of prior evaluations and nonconformities of their supervisees. The OCME should make supervisors aware of this accessibility, require review of the documents, and alert Human Resources of this expectation.

The Inspector General further recommends that the Department of Forensic Biology train all staff yearly on the requirement to have disputes resolved by the technical leader. The OCME is also reminded of the expectation to report “serious negligence or misconduct by laboratory personnel substantially affecting the integrity of the forensic results,” and should conduct yearly training of its staff on this requirement.

Inspector General further recommends that, given that OCME cases are analyzed in preparation for criminal prosecution, the OCME, and for that matter, all laboratories throughout New York State, should consider protocols to document and report significant disagreement surrounding data analyses and conclusions. In that vein, testing and case notes that reflect such dissension should be maintained in the case file. The New York State Commission on Forensic Science, as part of the statutory requirement to “develop minimum standards” in order to “increase and maintain the effectiveness, efficiency, reliability, and accuracy of forensic laboratories, including forensic DNA laboratories” throughout New York State, should determine what is to be deemed “significant disagreement,” thereby requiring memorialization of such dissension in final reports.²

² McKinney’s N.Y. Exec. Law § 995-b.

INTRODUCTION AND BACKGROUND

Jurisdiction

The federal Paul Coverdell Forensic Science Improvement Program awards grants to states and units of local government to help improve the quality of forensic science. In order to enhance confidence in laboratory operations, recipients of Coverdell grants are required to certify that there exists an independent entity with authority to investigate allegations of serious negligence or misconduct by laboratory personnel substantially affecting the integrity of the forensic results. To ensure the reliability and credibility of the forensic laboratory accreditation program in New York State and to comply with the Coverdell program, the New York State Commission on Forensic Science has designated the New York State Inspector General's Office as the independent investigatory entity. As a recipient of Coverdell grant funds, the New York City Office of Chief Medical Examiner, Department of Forensic Biology, is subject to investigation by the Inspector General.

The New York State Commission on Forensic Science

On August 2, 1994, Executive Law § 995-a created the Commission on Forensic Science ("Forensic Commission"), a 14-member board empowered with "develop[ing] minimum standards and a program of accreditation for all forensic laboratories in New York State, including, establishing minimum qualifications for forensic laboratory directors and such other personnel as the commission may determine to be necessary and appropriate, and approval of forensic laboratories for the performance of specific forensic methodologies."³ The Executive Law also mandates that the Forensic Commission "establish a subcommittee on forensic DNA

³ McKinney's N.Y. Exec. Law § 995-b.

laboratories and forensic DNA testing.”⁴ The DNA subcommittee is empowered with the sole authority “to grant, deny, review or modify a DNA forensic laboratory accreditation . . . provided that such authority shall be effectuated through binding recommendations made by the DNA subcommittee to the [Forensic Commission].”⁵

Currently, the Forensic Commission oversees 22 forensic laboratories in New York State. The Forensic Commission requires all forensic laboratories within New York State to obtain accreditation through the American Society of Crime Laboratory Directors/Laboratory Accreditation Board. (ASCLD/LAB)⁶

ASCLD/LAB

ASCLD/LAB is a non-profit professional society of crime laboratory directors and forensic science managers dedicated to providing excellence in forensic science through leadership and innovation. As memorialized in its bylaws, ASCLD/LAB establishes the following objectives: to improve the quality of laboratory services provided to the criminal justice system; to offer to the general public and to users of laboratory services a means of identifying those crime laboratory facilities which satisfy accreditation criteria; to develop and maintain criteria which can be used by a laboratory to assess its level of performance and strengthen its operation; and to provide an independent, impartial and objective system by which laboratory facilities can benefit from a total organizational review.

Most laboratories in New York State – including the OCME Department of Forensic Biology, the laboratory at issue in this investigation – are accredited under the ASCLD/LAB-

⁴ McKinney’s N.Y. Exec. Law §995-b (13).

⁵ McKinney’s N.Y. Exec. Law § 995-b (13).

⁶ The Forensic Commission permits a laboratory that is performing only toxicology analysis to be accredited by either ASCLD/LAB or the American Board of Forensic Toxicology, Inc. (ABFT).

International Accreditation Program. To sustain accreditation, forensic laboratories must adhere to ASCLD/LAB standards. For instance, analysts working in ASCLD/LAB accredited laboratories must participate in annual proficiency tests in each discipline in which casework is performed; and a designated percentage of analysts' case results must be subject to technical review by qualified peers and administrative review by supervisors. The ASCLD/LAB *International Program* also mandates that laboratories maintain a system whereby non-conformance is addressed through corrective actions. Specifically, in instances of non-conformance, ASCLD/LAB requires a laboratory to:

- determine the root cause of the problem;
- determine who may have been impacted by the occurrence(s);
- notify those who are potentially impacted by the occurrence(s); and
- appropriately correct and/or eliminate the cause of the occurrence.

Instances of significant non-conformance must be disclosed in writing to ASCLD/LAB within 30 days of discovery, with a statement of corrective action taken by the laboratory.

The New York City Office of Chief Medical Examiner

The New York City Office of Chief Medical Examiner (OCME), an independent subdivision of the New York City Department of Health and Mental Hygiene (“NYC Department of Health”), is responsible for the investigation of all deaths of persons in New York City occurring from criminal violence, accident, suicide, suddenly when in apparent health, or in any unusual or suspicious manner. In addition to death investigations, OCME also provides for criminal investigations pending in New York City, serological and DNA analyses conducted by its Department of Forensic Biology, and toxicological analyses conducted by its Forensic Toxicology Laboratory.

Appointed by Mayor Edward I. Koch, Charles Hirsch, M.D., served as Chief Medical Examiner for the City of the New York from 1989 until his retirement on January 31, 2013. Currently, Barbara Sampson, M.D., Ph.D., holds the position of Acting Chief Medical Examiner. As Acting Chief Medical Examiner, Sampson oversees the OCME, including the Department of Forensic Biology; the Director of the Department of Forensic Biology reports directly to the Chief Medical Examiner. Robert Shaler, Ph.D., was Director of the Department of Forensic Biology from 1990 until July 2006. He was succeeded by Mechthild Prinz, Ph.D.,⁷ who served as director from 2006 until her resignation on May 15, 2013. Prinz's management team consisted of two deputy directors: Patricia Wojtowicz and Theresa Caragine, Ph.D.,⁸ as well as several assistant directors, including Assistant Director for Quality Assurance Eugene Lien.⁹ During the period of Prinz's suspension and prior to the hire of a permanent director, OCME Chief of Staff Barbara Butcher acted as Interim Director of the Department of Forensic Biology. In July 2013, Timothy D. Kupferschmid assumed the position of Director of the Department of Forensic Biology.

The Department of Forensic Biology

The Department of Forensic Biology, a forensic laboratory operating within the OCME, is responsible for the serological examination and DNA testing of evidence collected by the New York Police Department in homicides, sexual assaults, and other crimes. OCME examines submitted evidence using forensic serology techniques to detect, characterize, and attribute

⁷ Dr. Prinz joined the Department of Forensic Biology in 1995 as a Criminalist IV. Thereafter, she was promoted to Assistant Director and Deputy Director until Shaler's retirement in July 2006.

⁸Wojtowicz was hired as Deputy Director in 2008. On January 24, 2013, she was suspended without pay; on January 30, 2013, the OCME terminated her employment. Caragine joined the Department of Forensic Biology in 2003 as a Criminalist III. She was promoted to Deputy Director in 2010. On April 19, 2013, Caragine resigned her OCME employment.

⁹ In 2001, Lien commenced employment at the OCME as a criminalist IV. In 2003, he was promoted Quality Assurance/Quality Control Manager. In 2008, he was given the additional title of Assistant Director and was also appointed the DNA Technical Leader.

bodily fluids. Once a body fluid stain is located and identified, it can be submitted for DNA testing. DNA testing can yield a genetic profile which in some instances can be sufficiently rare to be associated with a single individual to a reasonable degree of scientific certainty. After conducting tests on each sample, analysts compare the identity of the sample with other known samples. The Department of Forensic Biology participates in the FBI's Combined DNA Index System (CODIS), which links local, state, and national databases of DNA profiles from convicted perpetrators, unsolved crimes, and missing persons. Through CODIS, law enforcement can compare DNA profiles from crime scene evidence to DNA profiles of known offenders, potentially linking a DNA profile to a specific crime scene.

1. The Organizational Structure of the Department of Forensic Biology

Initially, the Department of Forensic Biology only accepted evidence in homicide and sexual assault cases. However, it soon expanded in size and began accepting evidence from other categories of crimes. To accommodate the increase in casework, the laboratory hired many more employees and created six "teams" designated to handle specific casework: (1) Homicide and Sex Crimes; (2) Property Crimes, which also processes all firearms submitted for DNA testing; (3) Hybrid Group, also referred to as the High Sensitivity DNA Team; (4) Exemplar Team, which includes the missing persons group, unidentified human remains group, and the World Trade Center group; (5) Quality Assurance/Quality Control; and (6) Validation, Research and Development.

Each team is staffed by an assistant director and several criminalists with varying degrees of responsibilities. Criminalists perform work in the analysis of evidentiary materials required in scientific criminal investigations, and are assigned different levels and tasks based on education

and experience:¹⁰ a criminalist I conducts serological examination of evidence and certain initial processes of DNA testing, excluding analysis and interpretation; a criminalist II analyzes and interprets DNA test results, drafts reports and testifies in court; and criminalist IIIs and IVs engage in the same work as criminalist IIs, with additional supervisory responsibilities. Criminalist IIIs supervise criminalist Is and criminalist IVs supervise criminalist IIs.

Upon their hire, criminalists are placed in training programs consistent with their title. Criminalist Is are trained in serological examination of evidence and initial processes of DNA testing; they are neither trained nor expected to testify in court. In contrast, the first six months of a criminalist II's employment includes participation in a two-stage training program: training and proficiency tests in laboratory procedures to analyze and interpret DNA test results; and an oral competency exam to ensure coherent testimony in court proceedings regarding the testing conducted at the laboratory. To be eligible for the oral competency exam, a criminalist must have passed proficiency tests in each subject area of training. Upon passage of the oral competency exam, a criminalist II is deemed competent to interpret and analyze data and testify in court regarding the results. Criminalists are given two opportunities to pass the oral competency exam in addition to two remediation opportunities. Every question must be answered correctly. Currently, if a criminalist fails the oral competency exam portion of the training program, the criminalist may be subject to transfer to another title, demotion to a criminalist level I title, or termination.

The Department of Forensic Biology employs a rotation system with designated stations for each step in the DNA analysis process. Criminalist IIIs supervise the rotations of criminalist Is and criminalists IVs supervise the rotations of criminalist IIs. All criminalists rotate to a new

¹⁰ Criminalist IIs, IIIs and IVs are required to have completed coursework in biochemistry, molecular biology and genetics.

assignment each week. Criminalists IIIs and IVs also evaluate their supervisees in formal yearly employment evaluations. Supervisors may observe their supervisees on rotation or can seek input from other rotational supervisors to accurately measure criminalists' performances.

2. Employee Evaluations

The NYC Department of Health requires all of its subdivisions to conduct yearly evaluations of its employees. The Department of Forensic Biology evaluations are administered by OCME Human Resources. Employee performance is measured using set standards consistent with the employee's position. The evaluation scale provides the following rating categories: Outstanding, Very Good, Good, Conditional (Needs Improvement), Unsatisfactory, and Unratable. The employee is evaluated by his or her immediate supervisor and given a rating for each individual standard as well as an overall score. The evaluation is prepared by an immediate supervisor, reviewed by that supervisor's superior, and then presented to the employee.¹¹ For example, criminalist I evaluations are prepared by the supervising criminalist III and reviewed by a criminalist IV, the criminalist III's supervisor. It is important to note that prior to 2011, evaluations were not reviewed beyond an employee's immediate supervisory chain. However, following the extensive corrective action discussed herein in which a subpar employee remained at work for over 10 years amid numerous substandard evaluations, currently, any evaluation that receives a conditional rating in any category is reviewed by the Quality Assurance Manager and Director of the Department of Forensic Biology. The evaluation process culminates in the submission of completed evaluations to the Human Resources department where they are maintained.

¹¹ Employees may submit formal written rebuttals upon receipt of conditional and/or unsatisfactory ratings.

THE INSPECTOR GENERAL FOUND THAT A SUBSTANDARD CRIMINALIST WORKED AT THE OCME FOR OVER 10 YEARS DESPITE CONSISTENT POOR REVIEWS AND WHILE SIGNIFICANT ERRORS WENT UNDETECTED.

Mitchell's Hire in 2000 as a Criminalist II

On January 3, 2000, Serrita Mitchell was hired as a criminalist II within the Department of Forensic Biology.¹² Mitchell was required to complete the criminalist II training program to be able to perform serology and DNA analysis, prior to conducting any testing. Mitchell successfully completed the training and proficiency testing in laboratory procedures. However, she attempted, unsuccessfully, to pass the oral competency examination: on October 17, 2000, and February 21, 2001, when she was given two opportunities to take the exam; and again on December 19, 2001, January 11, 2002, and January 22, 2002, when she was provided three attempts to remediate specific answers.

Shortly thereafter, the Department of Forensic Biology issued Mitchell a memorandum, dated January 29, 2002, which explained that her failure of the oral competency examination was based on repeated poor performance. Specifically, according to the memorandum, she “could not satisfactor[ily] explain and retain basic concepts . . . required for court testimony.” She, therefore, was not going to be provided any additional opportunities to attempt the oral competency examination. As a result, Mitchell was deemed “ineligible to work independently on casework or sign DNA reports,” and her responsibilities were reduced to those of a criminalist I. Notably, Mitchell was permitted to retain her criminalist II salary and title.

In addition to failing two oral competency examinations, in May 2001 Mitchell was formally evaluated by her immediate supervisor. The evaluation, which was reviewed and

¹²Mitchell's experience was consistent with the necessary requirements to qualify as a Criminalist II. At the time she was hired, Mitchell possessed a bachelor of science degree in general studies, biology and a master of science degree in biology, and had prior experience as a laboratory research assistant and faculty assistant.

approved by the assistant director, indicated several weaknesses in Mitchell's laboratory performance, resulting in conditional ratings in three of seven categories and an overall conditional rating. In particular, Mitchell was cited for significant problems such as, "lapses in maintaining a chain of custody . . . numerous instances where [she] has not properly followed prescribed guidelines for laboratory analysis," and disorganization. The Inspector General's investigation revealed that conditional ratings in a particular category, and especially an overall conditional rating, were uncommon and, therefore, cause for concern. After receiving this substandard evaluation, Mitchell received the memorandum indicating that she would not be permitted to remediate her oral competency exam again and would be relegated to criminalist I duties. Despite these myriad failures, the OCME did not terminate Mitchell's employment.

Mitchell's Continued Subpar Performance

Following the January 29, 2002 memorandum, for the next six years Mitchell continued to be employed by the OCME as a criminalist II performing criminalist I responsibilities. Despite her reduction in responsibilities, with the exception of a single year, she consistently received subpar evaluations.

In her 2003 evaluation, Mitchell improved marginally, receiving only one conditional rating and an overall good rating. However, the evaluation revealed similar issues identified in her May 2001 evaluation. Specifically, Mitchell was criticized for making careless mistakes such as, "the incorrect naming of samples (i.e. the victim's name instead of suspects name) or not clearly labeling samples both of which led to confusion and unnecessary fixing of paperwork." Although the typographical errors were caught and corrected, they were deemed serious in nature. In fact, Mitchell was retrained within that year. Notwithstanding, in Mitchell's 2004 evaluation, the same supervisor cited her for "careless" and "avoidable"

mistakes, and gave her a second conditional rating because she delayed placing samples into storage. Mitchell was counseled, but no further action was taken.

After 2004, Mitchell was assigned a new supervisor every year until 2009.¹³ Notably, each supervisor who appeared before the Inspector General testified that he or she had not seen the previous supervisor's evaluation of Mitchell, and only had limited conversations about Mitchell's strengths and weaknesses. In 2005, Mitchell was again cited for documentation errors. The supervisor justified the conditional rating in this category because Mitchell "ha[d] been spoken to about this, however it ha[d] occurred several times." However, she received an overall "good" evaluation. Mitchell's 2007 evaluation, completed in March 2008, is the only evaluation of Mitchell during her tenure at the OCME devoid of a conditional rating. On its face, it appears that Mitchell's performance improved. Nevertheless, the Inspector General's investigation revealed that the rating may not have been justified. Immediately prior to the evaluation period, Mitchell was transferred to another supervisor. This newly assigned supervisor, therefore, had a limited basis on which to judge Mitchell's performance. For instance, Mitchell received a "very good" rating in the category of documentation. However, the Inspector General reviewed at least one e-mail communication between a supervisor of a rotation and Mitchell's then supervisor concerning documentation errors similar to those for which she was cited in previous evaluations.

Shortly thereafter, on October 22, 2008, following two incidents regarding Mitchell's evaluation of sexual assault kits, the OCME suspended her from conducting all but one limited test procedure. As an initial matter, the 2008 evaluation, completed in April 2009, was highly

¹³ It should be noted, that the OCME could not locate Mitchell's 2006 evaluation; however it was determined that none had been completed because the Department of Forensic Biology had been in the process of moving to a new building. In February 2007, OCME opened the OCME DNA Building, which houses state-of-the-art forensic biology laboratories, as well as OCME's Administrative unit and Evidence facilities including a forensic garage to examine vehicles for forensic evidence.

critical and cited Mitchell for consistent errors in several evaluation categories. Specific instances include typographical errors and improper labeling of samples that led to the misinterpretation of samples. In each case, the documentation or sample errors were caught and corrected. However, the need for correction caused delay. The supervisor also noted mistakes in Mitchell's "processing and examination of sexual assault kits." Perhaps most significant was Mitchell's rating with regard to "the quality assurance and quality control programs" delineated in the Department of Forensic Biology Manual. In particular, the supervisor noted Mitchell had not followed the quality assurance and quality control standards. In total, Mitchell received a conditional rating in three of seven categories and an overall conditional rating.

The incidents that caused Mitchell's suspension occurred on October 14 and October 21, 2008. An Incident Report memorialized that on October 14, it was determined that regarding a sexual assault kit analyzed by Mitchell, she did not write an item number on one of the envelopes; she included an incorrect item number and wrong voucher number for one of the kit items; she did not date and initial a changed item number; she did not designate a number for one of the items; and "one of the envelopes was sealed by [Mitchell] with red/clear evidence tape. That seal had appeared to have been cut open then 're-sealed' with only the clear portion of the red/clear evidence tape. When [Mitchell] was approached about this . . . she stated . . . she cut off the red parts of the evidence tape and placed the clear part over the clear part of the first seal on the envelope."

Then, on October 21, a criminalist III reported to Quality Assurance Manager Lien that Mitchell had reported to her that a sexual assault kit inventory sheet did not indicate that any items were collected. The criminalist III then reviewed the inventory sheet and items with Mitchell. Although certain items were not indicated as having been collected, they were present

in the kit. When reporting these incidents to Mitchell's assistant director and Director Prinz,¹⁴ Lien noted his concern that Mitchell, in the October 21 case, "had failed to note the [swabs and smears] and did not even test them." With regard to the October 14 case, Lien declared: "Aside from the documentation problems, perhaps the most concerning issue to me is that she apparently tried to hide the fact that she cut open the seal." The OCME uses red/clear evidence tape to seal cases once analysis is complete. Lien was concerned because it appeared that Mitchell had cut the red portion off of the tape, leaving only the clear portion when resealing the envelope, an apparent effort to conceal the reopening. In her interview with the Inspector General, Mitchell acknowledged reopening the envelope, but denied trying to conceal that fact. Rather, she claimed that she cut off the red portion of the evidence tape in order to make the tape look neat.

As a result, Mitchell was suspended indefinitely from all but the one limited test procedure that dealt with quantifying the DNA that had been extracted from evidence.¹⁵ In this way, the OCME removed Mitchell from any contact with original pieces of evidence. Notwithstanding this limitation on Mitchell's duties, given her multiple deficiencies, it is unclear why she was permitted to engage in testing of any kind.

Following her suspension, Mitchell conducted this one limited test procedure for almost 14 months. However, in late 2009, it was determined by Human Resources and Department of Forensic Biology management that Mitchell could no longer maintain a criminalist II title while performing only criminalist I level work. Accordingly, the decision was made to place her in the

¹⁴ Although she participated in the decision to remove Mitchell from casework, Prinz testified that she only reviewed the 2008 evaluation during the corrective action.

¹⁵ Following Mitchell's suspension, the OCME conducted a limited review – an inspection of the labeling of the outer packaging – of certain sexual assault kits processed by Mitchell. The review found additional documentation errors, but at that point, Mitchell had already been removed from casework.

DNA Analyst Training Program. Concomitantly, Mitchell requested to be retrained. Consequently, Mitchell commenced the training program in December 2009.

The Retraining of Mitchell Resulted in the Discovery of Additional Errors

In December 2009, Mitchell entered the DNA Analyst Training Program for the second time in her tenure at the OCME. Although Mitchell had been employed at the OCME for almost 10 years with the criminalist II title, she entered the criminalist II training program. In the training program, analysts initially practice techniques on mock evidence. Once the analysts have passed competency exams in each technique, they then conduct supervised casework on limited cases.

During the training program, Mitchell was supervised by a criminalist IV. Mitchell struggled to pass several competency exams, but eventually succeeded and commenced supervised casework. Almost immediately, errors in Mitchell's casework became evident. Each error was formally documented by the filing a "Record of Confirmed Infraction," a document used by the OCME to memorialize errors to be maintained by the Human Resources department in the event administrative action is deemed necessary.¹⁶ From September 9, 2010, through January 19, 2011, a total of 13 Record of Confirmed Infractions were filed against Mitchell.¹⁷ Of particular significance, Mitchell had failed to process evidence contained within case files and failed to upload CODIS-eligible evidence to facilitate the search for potential suspects. On January 19, 2011, Mitchell's supervisor requested of his assistant director that she be removed from evidence examination duties because she had received four infractions within a short period

¹⁶ As of August 1, 2012, the Record of Confirmed Infraction is no longer used. Instead, at the recommendation of OCME's Human Resources department, a progressive discipline process is employed.

¹⁷ Two of the 13 Record of Confirmed Infractions were filed because Mitchell had exceeded the acceptable number of infractions within a certain period of time.

of time. His stated reason for the request was “to guard against any further errors that could either damage the turnaround time of pending cases or the accreditation of the forensic biology laboratory.” Thereafter, the assistant director contacted Quality Assurance Manager Lien and Director Prinz, and Mitchell was permanently suspended from casework effective January 20, 2011.¹⁸

Nevertheless, Mitchell’s most egregious errors had yet to be identified. On March 21, 2011, a Record of Confirmed Infraction cited two types of infractions: “Category A (due to incomplete/incorrect item or stain designation; note taking error, and/or undocumented deviation from protocol); Category D (falsification of evidence testing results).” After Mitchell was suspended from casework, the OCME reexamined two of Mitchell’s cases which served as the bases for this Record of Confirmed Infraction. The first case involved a T-shirt and a pair of jeans. While Mitchell had identified four stains on the T-shirt and two stains on the jeans, the reexamining analyst identified 15 stains on the T-shirt and 11 stains on the jeans – 20 more stains than Mitchell had identified. More significant, of the limited stains identified by Mitchell, several that she had reported as negative “showed no signs of ever being tested.”

The second reexamined case involved a pair of shorts, on which Mitchell had identified four possible stains. Initially, the reexamining analyst identified five possible stains. And, yet again, Mitchell’s case notes indicated that tests were performed on the four stains, but the notations and physical evidence within the case file did not support this representation. The re-examining analyst so determined because serological analysis to determine the presence of blood and/or semen requires the cutting of a small section of the stain; if it cannot be cut, the stain must be swabbed.¹⁹ Visible and documentary evidence should be present to indicate the technique

¹⁸ Mitchell also failed the oral competency examination yet again.

¹⁹ If an analyst chooses the latter, it must be documented in the case notes.

employed. In the case at issue, the re-examining analyst only saw evidence of cutting on two of the four stains identified by Mitchell, Mitchell's case notes failed to reveal any swabbing, and the uncut stains did not appear to have been swabbed. The Record of Confirmed Infraction regarding these two cases concluded, "it is unclear if [Mitchell] was simply improperly documenting swab tests of the evidence, or actually falsifying her presumptive serology testing." Of note, this possible instance of misconduct was not reported as expected under Coverdell.

However, as discussed above, the OCME did permanently suspend Mitchell from casework. In addition, the Department of Forensic Biology decided, based on the cumulative errors detected in Mitchell's case work, to commence a further review of her prior casework to determine if similar errors had occurred. Those results were deemed significant enough to require notification to ASCLD/LAB.

The OCME Reported the Corrective Action to ASCLD/LAB

As required by ASCLD/LAB *International* standards, Department of Forensic Biology Director Prinz reported the corrective action regarding the identification of two mistakes by Mitchell to ASCLD/LAB within 30 days of discovery.²⁰ Prinz and other management at the laboratory were involved in formulating the corrective action. Prinz's initial July 7, 2011, notification highlights two significant errors that were found:

Our DNA Analyst Training Program requires the analyst to conduct supervised casework on limited cases to ensure that real-life case scenarios are a part of the training. Due to concerns raised by other Forensic Biology DNA analysts who corrected deficiencies within cases in-progress from this employee, we decided in March 2011 to conduct a reexamination of evidence in her negative serology cases to ensure that results were correctly reported. Evidence was recalled from the New York City Police Department and assigned to other analysts. The re-examinations were completed in early June. It was discovered that results in two (2) cases were incorrectly reported to our customers.

²⁰ The Forensic Commission was copied on this letter, and all subsequent letters, to ASCLD/LAB as required by Forensic Commission rules.

Negative serology cases are cases in which no biological evidence was found upon examination of the evidence. The re-examination revealed that Mitchell was examining evidence but somehow not identifying areas of evidence, in particular pieces of clothing from sexual assault kits, from which DNA could be extracted. Specifically, Mitchell had indicated in two separate cases that “no blood was found” and “no semen was found,” when re-analysis of the evidence produced positive stains. Prinz noted in her letter to ASCLD/LAB that administrative action had been initiated against Mitchell and that a hearing seeking termination of her employment would be conducted.²¹ She further stated that the investigation of Mitchell’s past work was ongoing and that the OCME’s customers and ASCLD/LAB would be notified if errors affecting additional cases were found.

On March 28, 2012, Prinz sent another letter to ASCLD/LAB as an update to the July 7, 2011 notification regarding the corrective action. She explained that after discovering the two incorrectly reported negative cases, the Department of Forensic Biology decided to re-examine all cases from 2001 until early 2011 in which Mitchell reported negative results. Because as a technician, Mitchell was limited to examining sexual assault kits, the re-examination focused on sexual assault kits that included additional items, such as underwear, in order “to target the type of evidence she had issues examining.” A total of 116 cases were re-examined. Of the 116 cases, 26 cases initially reported as “negative for serology” were deemed positive. The OCME issued amended reports in all of the cases. More significant, of the 26 positive cases, seven CODIS-eligible profiles were developed and uploaded to the database. Of the seven profiles, three did not generate a match. Of the four remaining profiles, one profile matched a consensual partner, so the profile was removed from CODIS; one profile matched the convicted defendant; one profile was classified as a “warm hit to a named suspect,” – an indication that the suspect

²¹ On March 31, 2011, Mitchell was served with a Notice and Statement of Charges.

had already been connected to the case; and one was classified as “investigative aided,” an indication that the DNA profile has added value to the investigative process.

During the re-examination, the OCME also discovered 11 cases where a discrepancy existed in the inventory of the sexual assault kit – either an item was missing or an item from another case was found in the kit. Accordingly, the OCME commenced Phase II of the corrective action: 330 cases that Mitchell had examined were recalled from police property storage to ensure that the contents of each kit were consistent with the accompanying documentation. Prinz’s letter also reiterated that upon discovery of the errors, Mitchell was removed from casework, assigned to administrative tasks, and ultimately suspended from the laboratory. After the initiation of administrative action, Mitchell resigned her OCME employment effective November 2011.

On June 27, 2012, Prinz again updated ASCLD/LAB on the progress of the corrective action. She explained that, as of the date of the letter, 315 cases related to Part II of the corrective action had been re-inventoried. The review found 16 misplaced evidence items affecting 19 cases. However, some of the misplaced items were not from among the total 431 cases that were examined in Phases I and II. The OCME then realized that the Phase II review had been limited to the cases in which Mitchell had reported negative results, and had failed to consider that inventory items also could have been misplaced with cases Mitchell found positive for serology. As a result, on June 4, 2012, the OCME expanded the corrective action (Phase III) to include a review of an additional 430 cases that Mitchell had examined during the established period for misplaced evidence items. When questioned about the misplaced items among the cases, Prinz characterized them as “a black spot on the performance of the laboratory.”

The next updates to ASCLD/LAB were drafted by then Interim Director Butcher because on January 24, 2013, Prinz was suspended from the laboratory without pay following a January 10, 2013 article in the *New York Times* discussing this large corrective action. Butcher sent a final corrective action report to ASCLD/LAB on January 29, 2013, and then sent an amended final report on February 7, 2013. The February 7, 2013 letter reported that a total of 877 cases were examined. The re-inventory of the cases revealed discrepancies in contents of 24 sexual assault kits²² and documentation errors on the inventory sheet of 50 sexual assault kits. At the conclusion of the corrective action, all evidence was re-associated with its proper case and all documentation errors were corrected. In addition, of the 147 cases in which Mitchell originally reported negative serological findings, the corrective action ultimately found 37 cases that produced a positive result. Of the 37 new positive findings, the results were as follows: four cases had no DNA present; in 17 cases, DNA was detected but was not suitable for comparison to the suspect; in six cases, a mixture of DNA was detected that is only suitable for comparison to a known suspect; in one case, the assistant district attorney did not request further DNA testing; and the nine remaining cases developed CODIS-eligible DNA profiles. Of the nine CODIS-eligible profiles that were developed, four did not match to any offender; two matched known suspects; one matched a consensual partner; and two produced investigative leads “which may have enabled the earlier arrest and prosecution of the offender.”²³

²² A review of the discrepancies of the contents of the 24 sexual assault kits indicates that the misplaced items span the years 2001-2007. Prinz opined that Mitchell must have had two cases open at once, a breach of laboratory protocol. Mitchell, however, denied ever having two cases open at once. In addition, Prinz noted that Mitchell sometimes worked in the evenings unsupervised and, in those years, analysts maintained a personal locker where they stored the cases on which they were working. Currently, sexual assault kits are maintained in the evidence room and returned each day; only one kit is released at a time.

²³ The first of the two cases was submitted to the OCME in 2001. Mitchell reported no biological fluid on a pair of underwear. In 2011, the evidence was reanalyzed and a male DNA profile was detected and entered into CODIS. The profile matched a convicted offender, but whose DNA profile had been entered into the State DNA Index System (SDIS) in 2005. In 2012, the suspect was arrested and indicted, but the case was ultimately dismissed because the complaining witness refused to testify. The second case was submitted to OCME in 2003 and Mitchell

The letter also delineated remedial measures the OCME had taken in the wake of these findings.

Remedial Measures Instituted at the OCME

Even prior to the corrective action at issue, the OCME had instituted stricter competency requirements and, as described in Butcher's letter to ASCLD/LAB, a "zero-tolerance policy" relating to an employee who fails to pass all aspects of the training program. In addition, it has been a "long-standing strict rule" that no criminalist have more than one case open for examination at a time, and violators of this rule are subject to immediate disciplinary action. Moreover, sexual assault kits are now maintained in an evidence room and must be returned at the end of each day; only one kit is released at a time. Of import, since January 2010, the OCME has employed a blind re-analysis program for negative serological results. Following this corrective action, the OCME increased the percentage of re-analysis to 25 percent.

In addition, as noted earlier in this report, any employee evaluation that has a conditional rating or lower in any category is reviewed by the Quality Assurance Manager and the Director. An analysis is then conducted as to the next course of action, which may involve retraining in a specific area, retraining in all areas or, possibly the initiation of progressive discipline. Furthermore, when an employee is transferred to a new supervisor, the new supervisor must be given all of the employees prior evaluations and nonconformities and in turn, write a plan for the staff member.

THE INSPECTOR GENERAL'S INVESTIGATION FOUND THAT FORMER DEPUTY DIRECTOR THERESA CARAGINE IGNORED

again reported no biological fluid. In 2013, reanalysis resulted in the detection of a male DNA profile which matched a profile of another 2003 sexual assault case. After numerous failed attempts to locate the victim, the OCME ran the victim's DNA against OCME's unidentified remains/missing persons database. The DNA matched an unidentified female decedent from 2007.

LABORATORY PROTOCOL REGARDING RESOLUTION OF DISPUTES.

Following the extensive corrective action in 2011, the January 10, 2013 *New York Times* article reporting on it, the termination of Deputy Director Wojtowicz and the suspension of Director of Forensic Biology Prinz, OCME Chief of Staff Barbara Butcher was appointed Interim Director of the Department of Forensic Biology. With this change in management, analysts brought issues to Butcher's attention, two of which related to then Deputy Director of the Department of Forensic Biology Theresa Caragine.

On April 19, 2013, Caragine resigned her position for allegedly failing to follow lab protocol. The Inspector General commenced an investigation regarding this failure and whether it rose to the level of serious negligence or misconduct by laboratory personnel substantially affecting the integrity of the forensic results.

High Sensitivity DNA Testing

In January 2006, the OCME Department of Forensic Biology began utilizing High Sensitivity DNA Testing, the first public forensic laboratory in the United States to do so. High Sensitivity DNA Testing is used to detect and recover small amounts of DNA.²⁴ It is a powerful tool which can enhance law enforcement's ability to identify or exclude individuals suspected of crimes.

High Sensitivity DNA testing is a technique that enables forensic DNA testing to be performed on trace amounts of evidence. The technique involves extraction, quantitation, amplification, separation and analysis. Initially, the DNA is extracted from biological samples, such as blood, bone, hair, saliva, semen and skin cells. The DNA is then quantified, or

²⁴ High Sensitivity DNA testing is also referred to as Low Template (LT) DNA, Low Copy Number (LCN) "touch DNA," or trace DNA testing.

measured, to determine whether sufficient DNA is present to permit amplification and analysis. If enough DNA is available, it is then amplified by repeated cycles of copying the DNA loci, which are locations of DNA at which certain DNA markers, or alleles, are found. It is these DNA markers that can be used to identify individuals. The amplified DNA is then analyzed by the criminalists.

At times, DNA from more than one person is found on a piece of evidence, which is referred to as a mixture. When a mixture is found, the criminalists try to determine, based on certain criteria, how many persons are in the mixture – either “two or more persons” or “three or more persons.”²⁵ Criminalists also determine if enough data is available to deduce a DNA profile. If a DNA profile can be deduced, and considering other factors, the profile is uploaded to CODIS. In addition, if the OCME is provided with a suspect’s DNA profile, a determination can then be made as to whether that suspect’s DNA is in the mixture. Initially, the High Sensitivity DNA Section in the OCME could only either exclude a profile or state that a profile could not be excluded – a qualitative analysis. However, in 2011, OCME developed the Forensic Statistical Tool which, as detailed below, provides a quantitative analysis.

The Forensic Statistical Tool

In April 2011, OCME began utilizing the Forensic Statistical Tool (FST). Prior to the advent of FST, the laboratory, when analyzing DNA could only either exclude a DNA profile or state that a profile could not be excluded. Without software available, the OCME was unable to present a quantitative answer as to the probability of whether a certain DNA profile was more likely or less likely present in the mixture. Scientists at the OCME decided to develop software

²⁵These terms are derived from the laboratory manual.

that could present a likelihood ratio based on certain inputted data.²⁶ In 2008, Adele Mitchell, a statistician, was hired to assist in developing the software, eventually known as FST. Caragine was also instrumental in creating FST. FST calculates the probability that the DNA mixture could come from a specific person. It does so by computing a likelihood ratio, which essentially weighs the answers to two questions: first, how much better is the mixture explained by the suspect's DNA being a contributor; and second, how much better is the mixture explained by the suspect's DNA not being a contributor. Certain information derived from interpretation of the data must be inputted into the software: (1) how much DNA is in the mixture, and (2) how many people are in the mixture. During 2009-2010, the ongoing developments with FST were presented numerous times to the DNA subcommittee of the Forensic Commission. Following approval of FST by the DNA subcommittee, OCME staff was trained in it and then tested to ensure competency.

Disagreements in Interpreting Data

Because High Sensitivity DNA involves small amounts of DNA, differences in interpretation of data occur. In most instances, these differences are resolved during the technical review process through discussion and reference to the OCME procedure manual. Nevertheless, instances do arise in which differences of opinion cannot be resolved. The Forensic Biology Section includes a procedure to resolve such disputes:

Legitimate differences of opinions or disputes concerning the interpretation of results may occur. If differences of opinion cannot be resolved by the analyst, supervisor, and/or manager, then the appropriate Technical Leader will be the final arbiter.

²⁶ OCME scientists testified that the DNA community had been discussing the implementation of likelihood ratios as well. Currently, laboratories in other countries are developing software similar to the FST.

This investigation revealed, however, that this avenue of utilizing the technical leader was rarely invoked. In fact, many of the criminalists interviewed by the Inspector General were not aware that this protocol existed until the unresolved disputes discussed herein arose in the laboratory. They further noted that this protocol for unresolved disputes appears in a section of the manual entitled “Forensic Biology Protocols for Forensic STR Analysis: General Guidelines for DNA Casework,” an area of the manual the criminalists claimed does not clearly indicate inclusion of the protocol. Regardless, laboratory administrators noted that all OCME employees are required to review and familiarize themselves with the manual. Indeed, a memorandum to all Department of Forensic Biology employees entitled “Progressive Discipline,” effective since August 1, 2012, states, in pertinent part:

Employees of the Office of Chief Medical Examiner (OCME) Department of Forensic Biology must at all times abide by the policies, rules, and standards set forth in the OCME Policy Manual, the New York City Department of Health and Mental Hygiene (DOHMH) Standards of Conduct, the Time and Leave manual, and the Equal Employment Opportunity Handbook, as well as the Department of Forensic Biology Standard Operating Procedures.

Since 2008, Quality Assurance Manager Eugene Lien has been the DNA technical leader. Following the instances of disagreement involving Caragine where he was not consulted, Lien sent an e-mail reminding all laboratory employees of their responsibility to refer unresolved disputes to him.

The First Case Involving a Conflicting Opinion with Dr. Caragine

A criminalist III within the High Sensitivity DNA section related that following the change in hierarchy within the Department of Forensic Biology, he felt comfortable meeting with Interim Director Butcher regarding an issue involving Caragine. The criminalist III related the following facts.

In 2011, a case was assigned to the criminalist III involving swabs of DNA from a gun. DNA testing on one of the swabs produced results from which the criminalist III deduced that the recovered DNA from the grip of the firearm included “a mixture of DNA from at least two people.”²⁷ The criminalist III drafted a report of his findings, which was reviewed and approved by his supervisor, a criminalist IV. In March 2011, the report was finalized and sent to the district attorney associated with the case.

As often occurs in criminal cases, the OCME also was later (June 2011) provided the DNA of a suspect and asked to compare it with the DNA obtained from the previously analyzed items of evidence. Because FST was being employed at the lab at this time, the criminalist III ran comparisons of the DNA to determine the likelihood ratio of whether the suspect was included in what he had determined to be a two-person mixture. Based on these criteria, the result indicated that it was slightly more likely that the suspect’s DNA was not in the mixture. In November 2011, the criminalist III then drafted a second report indicating this finding. The report was reviewed and approved by the same criminalist IV supervisor in February 2012. According to lab protocol, reports that include FST require a second level of review, usually by an assistant director. However, in an effort to reduce the backlog of cases, Deputy Director Caragine conducted the technical review of the report in January 2013. At this point, the criminalist III had transferred to the Quality Assurance Section. Nevertheless, as is the practice in the OCME, he retained the cases he had analyzed while a member of the High Sensitivity DNA section. This practice allows for continuity and only requires one analyst to testify in court should the need arise.

²⁷Analysis of a swab of another area of the gun found “a mixture of DNA from at least three people.” Because no conflict existed in the OCME regarding this determination, it is not discussed herein.

In late January 2013, when the files were returned to the criminalist III, he learned that Caragine not only disagreed with his results and analyses, but also had rewritten the report to conform to her results. Specifically, Caragine did not agree with the criminalist III's initial conclusion that the mixture from the grip of the firearm involved at least two persons. Rather, she concluded based on her interpretation of the data that the mixture involved at least three persons. As such, using the FST, she computed the likelihood ratios as a three-person mixture, a change in inputted data which resulted in a different outcome. She then re-wrote the report and returned the files to the criminalist III.

The criminalist III then requested, by e-mail, to meet with Caragine so that she could explain her different interpretation of the data as a three-person mixture. However, they were unable to meet due to varying schedules. A week after the initial e-mail, the criminalist III wrote to Caragine that the assistant district attorney assigned to the case had called for an update. Nevertheless, Caragine was still unable to meet. Approximately a week later, on February 13, 2013, the criminalist III revised the report back to his initial conclusion of a two-person mixture and left the file for Caragine's review. He wrote to Caragine, "I feel far more comfortable with a 2p [two-person] interpretation for the swab from "grip of firearm". I changed the paperwork accordingly. Let me know if that is alright with you." On February 23, 2013, Caragine responded to the criminalist III's e-mail:

I am going over cases today and am confused by your corrections. The FST manual specifies the number of different alleles that makes a sample a 3p or a 2p. The mixture in question, has a locus with 6 different alleles and a locus with 5 different alleles. Moreover, from the first amp[lification], there are many blips present. This sample should have been re-amped immediately when you saw your STR results. That did not happen. Regardless of that, the mixture qualifies as a 3-person mixture from the data that were generated. I will not sign off on a case as a reviewer where we are going against our manual. I am happy to show you how the mixture follows our manual.

The criminalist III testified to the Inspector General that when he checked the status of this case in the computer shortly after receiving this e-mail, he noted that it had been reassigned to his criminalist IV supervisor.

The criminalist IV supervisor testified that Caragine had informed her that she disagreed with the report's conclusions; she had modified the report and requested that the criminalist IV supervisor review it; and she electronically changed the author of the report to reflect the criminalist IV supervisor as the initial examiner. The criminalist IV supervisor described Caragine's actions as "exceptional." The criminalist IV supervisor explained that if she disagreed with a criminalist's conclusions, she met with the criminalist to ensure that everyone agreed to the changes. The criminalist IV supervisor testified that she has never inserted another criminalist's name on a report if she made changes. Because the criminalist IV supervisor was occupied with a court hearing, she requested another criminalist III in the High Sensitivity DNA section to review the case. Caragine conceded that it was rare to reassign a case to another criminalist unless a staff member was on leave or had left the OCME permanently. Caragine testified that because the criminalist III who had analyzed the data and drafted the report had transferred to the Quality Assurance Section, she spoke to the criminalist IV supervisor about transferring the case to the newly assigned criminalist III.

The newly assigned criminalist III testified that the criminalist IV supervisor had approached her and explained that a disagreement as to results had occurred between the criminalist III and Caragine, and asked her to review the data and reach a conclusion. The newly assigned criminalist III, like Caragine, determined the DNA mixture to be a three-person mixture. She re-wrote both the suspect report and the original evidence report to conform to her conclusion of a three-person mixture and returned the case file to the criminalist IV supervisor.

The reports were never reviewed, however, because at this point, the criminalist III who originally analyzed the data and drafted the reports brought the matter to the attention of Interim Director Butcher who removed the files from the office of the criminalist IV supervisor.

Butcher then spoke to Caragine about the above-described events and inquired as to why she did not present the case to the technical leader for resolution as required by laboratory policy. Initially, Caragine apologized that she had not met with the criminalist III. She then explained why she disagreed with the criminalist's III's finding of a two-person mixture. Butcher decided that, as mandated by laboratory policy, the technical leader would be the "final arbiter." The technical leader met with both Caragine and the criminalist III and determined the mixture to be of at least two people and not of at least three people.²⁸ The criminalist III then redrafted the report to conform to the ruling of the technical leader and the report was disseminated to the district attorney. With regard to Caragine, following her assurances that in no other instance had she disagreed with another analyst and reassigned the case, Butcher took no further action.

When the Inspector General inquired of Caragine as to why she reassigned this case when she and the criminalist III did not agree rather than present the conflicting conclusions to the technical leader for resolution as required by lab protocol, she responded that she did not view this situation as a disagreement. Rather, she believed that that criminalist III's conclusion was incorrect as against the protocols set forth in the OCME manual. She, therefore, did not seek out the technical leader. Given Caragine's response, it is difficult to imagine any scenario in which Caragine would submit to arbitration by the technical leader.

Of particular note, the suspect report in the case at issue was rewritten six times; yet, after each revision, the computer program utilized by the OCME overwrote the previous draft and

²⁸ The Inspector General makes no determination as to whether the mixture is a two-person or three-person mixture. The salient issue for the OCME administrators and this investigation is the breach of protocol.

only the most current draft remained. As such, the reader of the final report would be ignorant of the dissension among the criminalists and Caragine regarding this case. The only documentary evidence in the OCME case file that indicates the extent of review this case underwent is an internal OCME document called a “Schedule of Analysis,” which requires the initials and dates of each analyst and technical reviewer. Significantly, the FSTs run by both Caragine and the newly assigned criminalist III computing the data as a mixture of three persons – which were maintained in an OCME computer database – were not included in the case file because they were deemed “technically incorrect.”²⁹ Upon request, the FSTs were retrieved and produced to the Inspector General.

Many OCME criminalists and administrators explained that this level of disagreement is rare and that most cases proceed through the technical review process without issue. Nevertheless, given that OCME cases are analyzed in preparation for criminal prosecution, more care must be taken to ensure that final reports present any significant dissension among the criminalists and supervisors.³⁰ In that vein, testing that reflects such dissension should be maintained in the case file.

The Inspector General offers the following report in support of this position. In February 2012, the National Institute of Justice, in a report entitled “Latent Print Examination and Human

²⁹ The OCME represented to the Inspector General that a memorandum to file was being prepared to explain why the FSTs should not have been performed, and were therefore, not included in the case file. The OCME will present the memorandum to the appropriate district attorney.

³⁰ In July 2012, the OCME began utilizing the Laboratory Information Management System (LIMS). In LIMS, an audit log is maintained for each case that documents all entries that are made. This audit log includes new entries along with any changes that are made. If a draft report is created, the audit log will reflect who created the report, the date it was created, and the entries that are made. In addition, if changes are made to the draft, the audit log will show who made the change, the date the change was made, and what data was changed. However, the final report that is produced and disseminated still represents the final determination of the scientists and does not reflect any dissension among them.

Factors: Improving the Practice through a Systems Approach,”³¹ recommended the following regarding reporting disagreements among scientists:

9.4.2 Conflict Resolution

Once the agency establishes procedures for verifications, it also must adopt procedures for handling and documenting conflicting decisions. Conflict can occur because examiners have varying degrees of knowledge, skills, training, and experience. The agency must have a method to determine the result that will be reported as correct. Some agencies have a technical leader who makes the final decision. Others use a panel of examiners. Still others send conflicting results to another forensic service provider, which helps to mitigate some internal concerns (e.g., systemic error, personality conflicts, and bias) but is not practical for all agencies. ***Regardless of the procedure implemented by the agency, the existence of the disagreement should be noted in the report, and the basis for the final consensus should be stated in the report or other documentation.***

[Emphasis supplied]. The OCME, and for that matter, all laboratories throughout New York State, should consider protocols to document and report significant disagreement surrounding data analyses and conclusions.

The Second Case Involving a Conflicting Opinion with Dr. Caragine

In April 2013, another case was brought to Butcher’s attention involving Caragine that ultimately led to Caragine’s resignation on April 19, 2013. A few weeks earlier, a criminalist II learned that a case of hers had been reassigned while she was on medical leave. In fact, while the transferring of cases is uncommon, cases are reassigned if a criminalist is on an extended leave. In the instant matter, an assistant district attorney had called the laboratory requesting a final report. The progression of this case is as follows.

In June 2011, the criminalist II analyzed the swabs of DNA on three weapons recovered at a crime scene. Each weapon was swabbed in three areas thereby producing nine swabs with potential DNA. The criminalist II reviewed the data and concluded that

³¹ Expert Working Group on Human Factors in Latent Print Analysis. Latent Print Examination and Human Factors: Improving the Practice through a Systems Approach. U.S. Department of Commerce, National Institute of Standards and Technology 2012.

enough data existed from some of the samples from which a DNA profile could be deduced, while other samples did not include enough data to do so. The criminalist II's supervisor reviewed the criminalist II's data and conclusions and concurred in her findings. The file was then given to Caragine for a second technical review. The supervisor testified that she recalled a meeting with Caragine and the criminalist II in which they discussed that Caragine believed that more DNA profiles could have been deduced from the data. The file then remained in Caragine's office for approximately seven months.

The supervisor testified that sometime in February 2012, an assistant district attorney called requesting a final report.³² Because the criminalist II who had analyzed the data and written the report was on medical leave, the supervisor spoke to Caragine who then reassigned the case to another criminalist. That criminalist reviewed the data and concurred with the criminalist II in all findings but found one additional sample from which a DNA profile could be deduced.³³ Although Caragine could not recall the details of this case, others testified that Caragine believed that two additional DNA profiles could be deduced from the nine swabs. The criminalist drafted a final report and Caragine technically reviewed it. The report was sent to the assistant district attorney.

As with the other case discussed in this report, the final report overwrote the previous draft and was not retrievable. The Inspector General also determined, however, that a computer-generated document entitled "Identifiler 28/31 Cycle Profile Generation Table – Evidence Casefile," which contains the initial criminalist's conclusions, or case notes, had been removed from the file, and only the second criminalist's Generation

³² Although the supervisor testified to having received a telephone call from the assistant district attorney, no notation exists to that effect on the case contact sheet located in the file.

³³ This additional DNA profile resulted in a new upload to CODIS.

Table is contained in the case file. The explanation provided was that once the report was rewritten, the initial Generation Table, which at that point conflicted with the new report, was removed from the case file and replaced with the Generation Table that supported the final report. The OCME was able to retrieve from a computer database the original Generation Table and produce it to the Inspector General.³⁴ Just as with the earlier case, the recipients of the final report would have no understanding that any disagreement occurred regarding the conclusions in this case.

When the criminalist II returned from medical leave, she learned, by consulting the OCME database, that the case had been reassigned to another criminalist. The criminalist II inquired of her supervisor about the matter and later reported it to Butcher following Butcher's request that members of the laboratory report any issues to her. Butcher reviewed the file with Lien and then met with Caragine. After being confronted with another case in which it appeared that she reassigned a case because she disagreed with the criminalist's findings and feeling that her integrity was in question, Caragine offered to tender her resignation from the OCME effective immediately. Interim Director Butcher then drafted the resignation letter and Caragine signed it on April 19, 2013.

When queried by the Inspector General about these events, Caragine testified that she did not recall reassigning the case, but stated that "if somebody was out and I disagreed with their conclusions, it would make sense to me that I would give it to someone else. And I wouldn't want to put it out incorrectly and I wouldn't want to just change it without the analyst being able to look at it." When questioned as to what she would have done had the second criminalist reached the same conclusions as the

³⁴ The OCME also produced an Identifiler 28/31 Cycle Profile Generation Table generated by Caragine related to this case that also was not maintained in the case file.

criminalist II, Caragine declared, “If they had agreed with [the criminalist II] then yes we are back at square one, but if they came to the same conclusion I came to independently then that can go out correctly in my view.”

Quality Assurance Manager Lien testified that while no protocol exists prohibiting the reassigning of cases, the transfer of cases usually takes place at the early stages of a case. In the case at issue, the final report had been drafted by the criminalist II and her supervisor had approved the analyses and conclusions. Therefore, Lien posited that when Caragine was informed that the assistant district attorney had requested the report and that time was of the essence, she could have sent the report as drafted instead of reassigning the case to another criminalist. Caragine did not do so because she did not concur with every finding in the report.

Additional Case Involving the Criminalist III and Caragine

While testifying before the Inspector General, the criminalist III revealed another situation with Caragine. Shortly after the OCME began utilizing FST, the criminalist III had a case that was proceeding to trial. If a case were going to trial, the OCME would perform FST on the data so as to provide a quantitative analysis as opposed to a qualitative analysis. While he had previously prepared a report that provided a qualitative analysis as to the likelihood that the suspect’s DNA contributed to the mixture, the criminalist III inputted his data into the FST and produced likelihood ratios. He then drafted a new report that was approved by both his supervisor and Caragine; the report was sent to the assistant district attorney on September 14, 2011.

Approximately one month later, Caragine asked the criminalist III to run six additional possible comparisons on the FST. The OCME provided the six additional FSTs to the Inspector

General. However, they were not part of the case file, nor do any notations exist in the files to indicate that they exist or why they were performed. The criminalist III followed Caragine's instructions and produced the FST reports. However, after he did so, Caragine explained to him that although the six additional FST reports were generated, the report to the assistant district attorney did not need to be amended to include the additional information. The criminalist III related to the Inspector General that he felt uncomfortable not including the additional information and did not understand the logic behind Caragine's instruction. However, while the criminalist III was considering his next course of action, the final defendant pleaded guilty on November 1, 2011. In accordance with Department of Forensic Biology practice, no amendment to the report summarizing the conclusions of the six additional FST calculations was prepared because the criminal case was concluded. The criminalist III divulged this issue to the Inspector General because he said he felt "very uneasy about the whole situation."

When questioned about the additional FSTs in question, Caragine had no memory of the case. She speculated, however, that she asked the criminalist III to run the additional FSTs as an "intellectual exercise." However, when questioned by the Inspector General on this issue, Quality Assurance Manager Lien declared that the OCME does not use actual cases for scientific purposes. In response as to why she would have instructed that the report not be amended to include the additional FSTs, Caragine surmised that to include those FSTs would have been confusing to the recipients of the report and that the OCME only includes relevant information in its reports.

The Inspector General reviewed the six FST results with a criminalist IV who explained that the FSTs were statistically insignificant and should not have been run. Specifically, the FSTs included the likelihood ratio of the presence of Male Donor A (an

unknown person) in the mixture and the defendants in the case had been excluded as Male Donor A. Therefore, the results had no bearing on the criminal prosecution. In addition, the OCME had two scientists independently review the data. They drafted a memorandum to file in support of the decision not to amend the report.

FINDINGS AND RECOMMENDATIONS

The Inspector General determined that the New York City Office of Chief Medical Examiner employed Serrita Mitchell for 10 years despite consistent poor reviews and underperformance from the beginning of her employment. More significantly, mistakes in the identification of stains on articles of clothing by Mitchell and the misplacing of items in her cases went undetected for the same period. The Inspector General also found that Theresa Caragine, Deputy Director of the Department of Forensic Biology within the OCME, in two instances, ignored laboratory protocol regarding resolution of scientific disputes, by rewriting a final report and reassigning cases when she disagreed with the findings, rather than bringing them to the DNA technical leader for arbitration.

Serrita Mitchell

Mitchell commenced employment at the OCME in 2000 and entered a training program to become a criminalist II, a position responsible for analyzing and interpreting DNA test results, drafting reports, and testifying in court. However, although Mitchell passed the technical portion of the training program, she repeatedly failed the oral competency examination – the portion of the training that ensures that an analyst can testify competently in a court of law. The OCME then informed Mitchell that she would not be permitted any additional opportunities to pass the oral competency examination, but would be relegated to criminalist I duties. Notably, Mitchell was permitted to retain her criminalist II salary and title. In addition, Mitchell's employee evaluation for that year indicated several weaknesses in her laboratory performance, resulting in conditional ratings in three of seven categories and an overall conditional rating, an indication that Mitchell needed improvement in those categories. Despite these myriad failures, the OCME did not terminate Mitchell's employment.

From 2002 until 2008, despite her reduction in responsibilities, Mitchell consistently received subpar evaluations, involving at least one conditional rating, with the exception of a single year. Notably, each supervisor who appeared before the Inspector General testified that they had not seen the previous supervisor's evaluation of Mitchell, and only had limited conversations about Mitchell's strengths and weaknesses. Then, on October 22, 2008, following an incident regarding Mitchell's evaluation of evidence, the OCME suspended Mitchell from conducting all but one limited test procedure.

Following Mitchell's suspension, it was determined by OCME Human Resources and Department of Forensic Biology management that Mitchell could no longer maintain a criminalist II title while performing only criminalist I level work. Accordingly, the decision was made to retrain her as a criminalist II. Mitchell struggled to pass several competency exams regarding varying techniques, but eventually succeeded and commenced supervised casework. Almost immediately, errors in Mitchell's casework became evident. On January 20, 2011, Mitchell was permanently suspended from casework.

The Department of Forensic Biology decided, based on the cumulative errors detected in Mitchell's case work, to commence a further review of her prior casework to determine if similar errors had occurred. The review revealed significant mistakes. In July 2011, the Department of Forensic Biology reported its corrective action – the errors that were uncovered and the remediation plan – to its accrediting body and to the New York State Commission on Forensic Science. The corrective action expanded into a three-phase process that concluded in February 2013. During the corrective action process, the OCME initiated administrative action against Mitchell, and she resigned her OCME employment effective November 2011.

Re-examination of Mitchell's cases revealed that she had not identified areas of evidence, in particular pieces of clothing from sexual assault kits, from which DNA could be extracted. The Department of Forensic Biology decided to re-examine all cases from 2001 until early 2011 in which Mitchell reported negative results, cases in which no biological evidence was found. During this re-examination, it was also discovered that items of evidence were misplaced from Mitchell's cases. At the conclusion of the corrective action, all evidence was re-associated with its proper case and all negative cases were re-examined and corrected as necessary.

Theresa Caragine, Ph.D.

The Inspector General also found that former Department of Forensic Biology Deputy Director Caragine, in two instances, ignored laboratory protocol regarding resolution of scientific disputes by rewriting a final report and reassigning cases when she disagreed with the findings rather than bringing them to the DNA technical leader for arbitration. In the first instance, Caragine disagreed with a criminalist's analysis and rewrote the report to conform to her conclusion, although the criminalist's supervisor had approved the criminalist's findings. She and the criminalist exchanged e-mails to try to schedule a meeting and both rewrote the report a number of times. Ultimately, Caragine reassigned the case to another criminalist. However, Department of Forensic Biology management learned of this matter prior to the dissemination of the report. Caragine and the initial criminalist were instructed to meet, as required by laboratory protocol, with the DNA technical leader, who found in favor of the criminalist's results. The report was redrafted to conform to those results and released to the district attorney. With regard to Caragine, she assured laboratory management that in no other instance had she disagreed with another analyst and reassigned the case.

In the second instance, Caragine disagreed with another criminalist's results, even though, as with the aforementioned case, the criminalist's supervisor had approved the findings. Caragine then held the file in her office for approximately seven months. In February 2012, an assistant district attorney called requesting a final report. Because the criminalist who had analyzed the data and written the report was on medical leave, the supervisor spoke to Caragine who then reassigned the case to another criminalist. That newly assigned criminalist reviewed the data and concurred with the original criminalist in all findings but one. The newly assigned criminalist drafted a final report and Caragine technically reviewed it. The report was sent to the assistant district attorney.

After being confronted with another case in which it appeared that she reassigned a case because she disagreed with the criminalist's findings, Caragine offered to tender her resignation from the OCME effective immediately. Her offer was accepted and she resigned on April 19, 2013.

Recommendations

The Inspector General acknowledges that even prior to the instant investigation, the OCME had taken remedial measures. For instance, the OCME has instituted stricter competency requirements and a zero-tolerance policy relating to an employee who fails to pass all aspects of the training program. In addition, it has been a long-standing rule that no criminalist have more than one case open for examination at a time, and violators of this rule are subject to immediate disciplinary action. Moreover, sexual assault kits are now maintained in an evidence room and must be returned at the end of each day; only one kit is released at a time. And recently, the OCME increased the percentage of re-analysis for negative serological results to 25 percent in its blind re-analysis program.

Further, with respect to the deficiencies in the evaluation process, OCME has instituted a process whereby any employee evaluation that has a conditional rating or lower in any category is reviewed by the Quality Assurance Manager and the Director. An analysis is then conducted as to the next course of action, which may involve retraining in a specific area, retraining in all areas or, possibly the initiation of progressive discipline. Significantly, the current policy also requires that when an employee is transferred to a new supervisor, the new supervisor must be given all of the employees prior evaluations and nonconformities and in turn, write a plan for the staff member. The Inspector General recommends that OCME provide unlimited access to supervisors of prior evaluations and nonconformities of their supervisees. The OCME should make supervisors aware of this accessibility, require review of the documents, and alert Human Resources of this expectation.

The OCME is also reminded of the expectation to report “serious negligence or misconduct by laboratory personnel substantially affecting the integrity of the forensic results,” and should conduct yearly training of its staff on this requirement.

With regard to the cases involving Caragine, the Inspector General recognizes the level of disagreement that occurred is rare and that most cases proceed through the technical review process without issue. However, the Inspector General recommends that the Department of Forensic Biology train all staff yearly on the requirement to have disputes resolved by the technical leader.

Finally, the Inspector General recommends that, given that OCME cases are analyzed in preparation for criminal prosecution, the OCME, and for that matter, all laboratories throughout New York State, should consider protocols to document and report significant disagreement surrounding data analyses and conclusions. In that vein, testing that reflects such dissension

should be maintained in the case file. The Forensic Commission, as part of the statutory requirement to “develop minimum standards” in order to “increase and maintain the effectiveness, efficiency, reliability, and accuracy of forensic laboratories, including forensic DNA laboratories” throughout New York State, should determine what is to be deemed “significant disagreement,” thereby requiring memorialization of such dissension in final reports.³⁵

³⁵ McKinney’s N.Y. Exec. Law § 995-b.