1.0 CODIS Terms and Abbreviations

9 NYCRR Part 6192
The policy which provides for the establishment and operation of the DNA Identification Index in New York State.

ASCII
American Standard Code for Information Interchange. Text-only, with no formatting such as tabs, bold or underlining.

Accredited laboratory
A DNA laboratory that has received formal recognition that it meets or exceeds a list of standards, including the FBI Director’s Quality Assurance Standards, to perform specific tests by a nonprofit professional association of persons actively involved in forensic science that is nationally recognized within the forensic science community in accordance with the provisions of the Federal DNA Identification Act (42 U.S.C.§14132) or subsequent laws.

Administrative removal
The deletion of a DNA record upon verification of the fact that the DNA record is not eligible for inclusion in SDIS and/or NDIS.

Allele
In classical genetics, one of the alternate forms of the gene at a particular locus. In DNA analysis, the term “alleles” is commonly extended to include DNA fragments of variable length and/or sequence which may have no known transcriptional product but are detected in a polymorphic system.

Arrestee
The known sample from a person who has been arrested and in accordance with the law of the applicable jurisdiction is required to provide a DNA sample for analysis and entry into a state DNA database. The term “arrestee” includes persons who have been charged in a formal criminal instrument, such as an indictment.

Arrestee Hit
The disposition in CODIS for a match which has been confirmed between a forensic sample and a sample from the Arrestee Index.

Arrestee Index
An Arrestee Index consists of DNA records of persons who have been arrested or indicted with a crime and are required by law to provide DNA samples.

Assessment
A review of a laboratory, conducted by the FBI’s CODIS Unit, to ensure compliance with the NDIS Operational Procedures and State/Federal law with respect to the laboratory’s participation in NDIS.
Autosearcher
A CODIS program that automatically searches all DNA profiles in a user specified index against all profiles in one or more other user specified indexes.

Base Pair Distance
When profiles containing particular loci are compared, the base pair distance is the microvariant amount that can exist for the alleles to still be considered a match. For example, a base pair distance of 1 would allow an allele 4 to match any of the following: 3.3, 4, and 4.1. This parameter can be set by the administrator. During review of a candidate match, the reviewer must check whether the alleles are indeed matching.

Benchwork Match
The disposition in CODIS for a case-to-case match found by the analyst or technical reviewer before any database search is ever done; once both profiles are in the database and searched against each other.

Biological Child
The CODIS specimen category for DNA profiles generated from known reference samples provided voluntarily by an adult child or provided with the parental/guardian consent for a minor child of a reported missing person. The DNA record for this specimen category is stored in the Relatives of Missing Person Index. These DNA profiles are removed once the individual for whom the samples were submitted has been identified or if the individual voluntarily providing the reference sample is determined not to be related to the missing person.

Biological Father/Mother
The CODIS specimen category for DNA profiles generated from known reference samples provided voluntarily by the biological father/mother of a reported missing person. Profiles in this specimen category are stored in the CODIS index known as “Relatives of Missing Persons Index.” These DNA profiles are removed once the individual for whom the samples were submitted has been identified or if the individual voluntarily providing the reference sample is determined not to be related to the missing person.

Biological Sibling
The CODIS specimen category for DNA profiles generated from known reference samples provided voluntarily by the biological sibling of a reported missing person. Profiles in this specimen category are stored in the CODIS index known as “Relatives of Missing Persons Index”. These DNA profiles are removed once the individual for whom these samples were submitted has been identified or if the individual voluntarily providing the reference sample is determined not to be related to the missing person.

Cambridge Reference
The CRS is the standard sequence used in mitochondrial sequence DNA typing to which other mitochondrial DNA types are compared. Mitochondrial DNA profiles are reported as differences from the standard reference sequence [Anderson, S., et al. Sequence and organization of the human mitochondrial genome. *Nature* 1981; 290:457-465].

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Candidate Match
A possible match between two or more DNA profiles discovered by CODIS software. A qualified DNA analyst from each affected laboratory must verify a candidate match. Candidate matches must complete a confirmation process before being reported as a match or hit.

Candidate Profile
A DNA profile matching the target DNA profile (see target DNA profile).

Case Disposition
The final outcome (confirmed conviction, offender hit, forensic hit, etc.) of a criminal case aided by CODIS.

Case Report
A report generated by a forensic laboratory documenting the results of the analyses of the crime scene evidence.

Casework Laboratory
A forensic DNA laboratory responsible for DNA profiles developed from crime scene evidence.

CJIS-WAN
The FBI’s Criminal Justice Information Services Wide Area Network that provides communications network for the United States law enforcement community. Originally designed to support the Integrated Automated Fingerprint Identification System (IAFIS), the FBI is expanding the scope of the CJIS-WAN to include all federal, state and local crime laboratories participating in the National DNA Index System.

CMF
Common Message Format, an ASCII text file format which can be used for importing data into CODIS or exporting data out of CODIS.

CODIS
The COmbined DNA Index System administered by the FBI. CODIS links DNA evidence obtained from crime scenes, thereby identifying serial criminals. CODIS also compares crime scene evidence to DNA profiles obtained from offenders, thereby providing investigators with the identity of the putative perpetrator. In addition, CODIS contains profiles from missing persons, unidentified human remains and relatives of missing persons.

There are three levels of CODIS: the Local DNA Index System (LDIS), used by individual laboratories; the State DNA Index System (SDIS), used at the state level to serve as a state’s DNA database containing DNA profiles from LDIS laboratories; and the National DNA Index System (NDIS), managed by the FBI as the nation’s DNA database containing all DNA profiles uploaded by participating states.

CODIS Administrator
An employee of the laboratory responsible for administration and security of the laboratory’s CODIS at a laboratory performing DNA analysis on forensic and casework reference samples. This is also a defined role within the software.
CODIS Core Loci
The 13 autosomal DNA loci that are accepted and required by CODIS for a particular DNA testing method. Currently the original STR core loci are CSF1PO, D13S317, D16S539, D18S51, D21S11, D3S1358, D5S818, D7S820, D8S1179, FGA, TH01, TPOX, and vWA. As of January 1, 2017, the expanded core consists of the original 13 loci plus D19S433, D2S1338, Penta E, Penta D, D1S1656, D2S441, D10S1248, D12S391, and D22S1045.

CODIS Information Technology (IT) User
A government employee of a CODIS laboratory who has login access to the CODIS system for computer hardware/software and telecommunications maintenance purposes but who is not authorized to add, modify or delete DNA records in CODIS.

CODIS Custodian/Supervisor
A member of the CODIS staff responsible for overseeing the CODIS system and all its functions (also called “LDIS Custodian”). This person fulfills the role of Casework CODIS Administrator as defined by the FBI QA Standards.

CODIS User
A government employee who: (1) has login access to the CODIS system and is authorized to read, add, modify or delete DNA records in CODIS; or (2) is a qualified DNA analyst responsible for producing DNA profiles stored in NDIS. This is a defined role within the software.

CODIS User Role (in the CODIS software)
Various combinations of full or limited access to the various functions in CODIS. CODIS Administrators have full access to all functions. CODIS Analysts have limited access to all functions. Certain titles such as QA/QC Analysts, LIMS Testing Analysts, and Profile Entry personnel, have full access to only some functions, as needed for their specific tasks.

Contract Laboratory
A laboratory, usually in the private sector, that performs DNA analyses under contract to a forensic laboratory.

Control Certification Form
This document certifies that the positive human DNA control(s) and the negative controls satisfy the requirements established by NIST. One document must be completed and submitted annually to the SDIS Custodian before DNA profiles can be uploaded into SDIS.

Cold Hit
Two DNA profiles matching with no prior indication that the profiles are related.
Composite DNA Profile
A DNA profile generated by combining typing results from different loci obtained from multiple injections of the same amplified sample and/or multiple amplifications of the same DNA extract. When separate extracts from a given evidentiary item are combined prior to amplification, the resulting DNA profile is not considered a composite profile. Unless there is a reasonable expectation of sample(s) originating from a common source (e.g., duplicate vaginal swabs, known reference samples, or a bone), allelic data from separate extractions from different locations on a given evidentiary item should not be combined into a composite profile.

Convicted Offender
The CODIS specimen category for a DNA profile generated from any person who has been convicted of a crime in federal, state, and/or local courts where the applicable law permits establishment of a DNA record for this person. In New York State, this is a person convicted of one of the crimes listed in Executive Law, Section 995(7). Profiles in this specimen category are stored in the CODIS index known as the “Convicted Offender Index” (or Offender Index). As of June 2006, all convicted felons in New York must give a sample to the database; as of October 2012, all those convicted in New York of a felony or misdemeanor must give a sample to the database.

Convicted Offender Index
A Convicted Offender Index consists of DNA records from offenders convicted of qualifying state crimes and juveniles who are required by the relevant jurisdiction to provide DNA samples.

Convicted Offender Lab
A forensic DNA laboratory responsible for DNA profiles developed from Convicted Offender samples. In New York State, this is the New York State Police Forensic Investigation Center in Albany.

Convicted Offender Sample
A biological sample containing DNA that is collected from a designated convicted offender for the purpose of DNA profiling.

Convicted Offender Profile
A DNA profile generated from a convicted offender sample. These DNA profiles are put into the CODIS specimen category “Convicted Offender” and are stored in CODIS index known as the “Convicted Offender Index.” These profiles establish an index of DNA identification records that are searched for matches against the DNA profiles generated from crime scene evidence.

Conviction Match
The DNA profile generated from crime scene evidence matches a DNA profile from a convicted offender, but the offender has already been convicted of the crime for which that evidence was collected. For NDIS level matches, this disposition is also used for any subsequent matches to a specific offender that is already solved via a match to a New York (or another state’s) database.
Criminal Justice Agency
A criminal justice agency is an agency or institution of the federal, state, or local government, other than the office of the public defender, which performs as part of its principal function, activities relating to the apprehension, investigation, prosecution, adjudication, incarceration, supervision or rehabilitation of criminal offenders. For purposes of participation in the National DNA Index System, the DNA Identification Act of 1994 was amended by Public Law 106-546 to include the Secretary of Defense in accordance with 10 U.S.C. §1565.

Criminal History Record
Documents generated by DCJS that contain arrest, charges, conviction, sentence, location and identifying information of a convicted offender.

DAO
Stands for District Attorney’s Office. There is one in each of the five boroughs of New York City.

Databank Coordinator
An employee or designee of the Division of Criminal Justice Services responsible for administrative requirements related to the New York State DNA Databank.

DCJS
Stands for Division of Criminal Justice Services. Acts as a liaison between local New York laboratories and the New York State Police Forensic Investigation Center. DCJS manages the program responsible for collection of offender samples in New York State, handles requests to expedite samples and database searches and handles legal requests for convicted offender information.

DCJS Match Letter
A letter generated by DCJS after a match between a forensic DNA profile and a New York State Police convicted offender profile has been confirmed. The purpose of this letter is to notify the laboratory of a confirmed match, provide case and agency information, the identity of the offender, and current offender location.

The DCJS Match Letter is provided to the DAOs upon request.

Deduced Missing Person
The CODIS specimen category for DNA profiles generated from examining reference samples (for example, a toothbrush, razor or hairbrush) of a reported missing person. Profiles in this specimen category are considered reference samples and are stored in the CODIS Missing Person Index. This index is searched and compared against the Relatives of Missing Persons Index and the Unidentified Human (Remains) Index.

Detainee
The known sample from a non-United States (U.S.) person detained under the authority of the U.S. and required by law to provide a DNA sample for analysis and entry into a state/national DNA database.
Detainee Index
Detainee Index consists of DNA records from non-United States (U.S.) persons detained under the authority of the U.S. and required by law to provide a DNA sample.

DNA Analysis Backlog Elimination Act
Authorized the collection of DNA samples from persons convicted of specified Federal Felony offenses, certain District of Columbia convicted offenders, and military offenders.

DNA Analyst
An employee that has successfully completed the laboratory’s training requirements for casework, database, known or casework reference sample analysis; passed a competency test; and entered into a proficiency testing program in accordance with the FBI’s Quality Assurance Standards for Forensic DNA Testing or DNA Databasing Laboratories. This individual conducts and/or directs the analysis of samples, interprets data and reaches conclusions. See also, Interpreting Analyst; Qualified DNA Analyst.

DNA Databank
The New York State Identification Index (as used throughout Executive Law Section 995) comprised of DNA profiles in the Convicted Offender index, the Forensic index and the Missing Persons index.

DNA HITS
The network-based application used by OCME to disseminate database matches to NYPD and the district attorneys’ offices.

DNA Identification Act

DNA Profile
The genetic constitution of an individual at defined locations (also known as loci) in the DNA. A DNA type derived from nuclear DNA typically consists of one or two alleles at several loci (e.g., short tandem repeat loci). The DNA type derived from mitochondrial DNA is described as differences in sequence in relation to the revised Cambridge Reference Sequence (Nature Genetics 1999, 23, 147). Also known as a DNA type.

DNA Record
A database record that includes the DNA profile as well as data required to manage and operate NDIS, i.e., the Originating Agency Identifier which serves to identify the submitting agency; the Specimen Identification Number; and DNA personnel associated with the DNA profile analyses.

Elimination Sample
A biological sample from a known individual (commonly a husband or consensual partner), other than the alleged perpetrator or victim, which is analyzed for purposes of identifying those portions of a forensic DNA profile attributable to the alleged perpetrator. This DNA profile for this specimen category may be stored at the state and/or local levels but is not eligible for upload to NDIS. However, NYC OCME does not enter elimination samples from cases into the system at any level.

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Employee
A person: (1) in the service of the applicable federal, state or local government, subject to the terms, conditions and rules of federal/state/local employment and eligible for the federal/state/local benefits of service; or (2) formerly in the service of a federal, state, or local government who returns to service in the agency on a part time or temporary basis. For purposes of a vendor laboratory, an employee is a person in the service of a vendor laboratory and subject to the applicable terms, conditions and rules of employment of the vendor laboratory.

Exact Match
An association between two profiles (single-source, fully deconvoluted, partially deconvoluted, or mixtures) that concludes that the two profiles, or components of the profiles, are the same.

Executive Law Article 49-B Section 995
Provisions of New York State law establishing the Commission on Forensic Science and the DNA Identification Index.

Expert System
The software program or set of software programs that interprets the data generated from DNA analysis instrument/platform in accordance with the laboratory-defined quality assurance rules and accurately identifies the data that does or does not satisfy such rules.

Expungement
The deletion of a DNA profile at the state and/or national index levels in response to the following: (1) a court order that has overturned a convicted offender’s conviction for a qualifying offense; (2) a court order establishing that charges were dismissed or resulted in acquittal, or no charges were filed within the applicable time period; (3) a death certificate or other document indicating that human remains have been identified; (4) if the missing person corresponding to the reference sample from a relative has been identified.

Familial Search
A deliberate, additional search of a profile against offenders after a routine CODIS database search has failed to produce any direct matches; conducted for the intended purpose of potentially identifying close biological relatives to the unknown forensic profile. A familial search is based on the concept that first-order relatives such as siblings or parent/child relationships, will have more genetic data in common than unrelated individuals. New York State’s familial search policy became effective October 18, 2017, for evidence samples to be searched against offender samples from SDIS.

FBI
The Federal Bureau of Investigation is the federal agency authorized by the DNA Identification Act of 1994 to issue quality assurance standards governing forensic testing and DNA databasing laboratories and to establish and administer the National DNA Index System (NDIS).
**Forensic DNA Laboratory**
Any forensic laboratory operated by the state or unit of local government that performs forensic DNA testing on crime scene evidence or materials derived from the human body for use as evidence in a criminal proceeding or for purposes of identification (Executive Law section 995(2)).

**Forensic DNA Profile**
A DNA profile generated from the testing of crime scene evidence. These profiles are from persons whose identities are not known with certainty and who left DNA at the scene of a crime or whose DNA was carried away from the scene of a crime. These profiles are put in the CODIS specimen category “Forensic Unknown”. Profiles in this category are stored in the CODIS index known as “Forensic Index”.

**Forensic DNA Testing**
Any test that employs techniques to examine DNA derived from the human body for purpose of providing information to resolve issues of identification (Executive Law section 995(2)).

**Forensic Hit (FH)**
CODIS case disposition when two or more forensic samples are linked; also called a case-to-case hit.

**Forensic Index**
A Forensic Index consists of DNA records originating from and associated with an evidence sample from a single source (or a fully deduced profile originating from a mixture) that is found at a crime scene. The Forensic Index contains Forensic Unknowns.

**Forensic Mixture category**
A specimen category in the CODIS software that originates from a forensic sample (biological sample found at the scene of a crime) containing DNA contributed from more than one source. Profiles must contain data for at least 8 autosomal loci which are part of the original CODIS Core Loci and must satisfy a statistical threshold for moderate match estimation threshold of $1 \times 10^7$ to be eligible for this category in NDIS. This category resides in the Forensic Mixture index.

**Forensic Mixture index**
This index contains the specimen category Forensic Mixture, which is made up of DNA profiles originating from and associated with evidence found at crime scenes; and which meet the requirements for Forensic Mixture samples.

**Forensic Match Letter**
A letter from a laboratory documenting a confirmed Forensic Match. This letter provides information regarding the investigating agency and offender information (for solved cases).
**Forensic Partial category**
A specimen category in the CODIS software that is stored in the Forensic Partial Index and originates from a single source (or a fully deduced profile originating from a mixture) Forensic Sample attributable to the putative perpetrator with either locus or allelic dropout at any of the 13 original core CODIS loci. Profiles must contain data for at least 8 of the original 13 core CODIS loci and must satisfy a statistical threshold for match rarity of approximately one in the size of the NDIS database to be eligible for this category in NDIS. Profiles that contain complete information at all 13 original CODIS core loci, but contain obligate alleles at the any of the expanded CODIS core loci also fit in this category.

**Forensic Partial Index**
A Forensic Partial Index consists of DNA profiles from forensic samples that do not contain results for all 13 original core CODIS loci and/or that may indicate a possibility of allelic dropout. Profiles must contain data for at least 8 core loci to be eligible for this index.

**Forensic SDIS Only Category**
Formerly known as the Required Alleles category, this category contains samples which either have <8 core loci, or have 8 or more loci but do not meet the Moderate Match Estimation threshold of $1 \times 10^7$, but which does meet the Match Estimation threshold for approximately one in the current database size $N$ for SDIS. A minimum of 6 core loci must be present in specimens submitted to this category. This category consists of both partial (single-source) and mixed (≥2 persons) samples. The Forensic SDIS Only category is part of the Forensic SDIS Only Index.

**Forensic SDIS Only Index**
An index at New York SDIS which contains crime scene evidence not eligible for NDIS, and will be uploaded no higher than SDIS. There are three main reasons a profile would not be eligible for NDIS; (1) the profile is between 6-7 loci and therefore not enough loci for NDIS; (2) the profile has 8 or more loci, cannot meet the Moderate Match Estimation threshold of $1 \times 10^7$ at the current database size $N$ for NDIS, but can meet the Match Estimation threshold of approximately one in the current database size $N$ for SDIS; or (3) the profile was generated using LCN methods, regardless of the number of loci present. It is highly recommended that obligate alleles are marked when appropriate for more stringent searching of partial and mixture profiles. The Forensic SDIS Only Index contains two specimen categories: the Forensic SDIS Only category and the Low Copy Number category.

**Forensic Sample**
A biological sample originating from and associated with a crime scene. For example, a sample associated with a crime scene may include a sample that has been carried away from the crime scene.

**Forensic Targeted**
A specimen category in the CODIS software that will be stored in the Forensic Targeted Index. A forensic targeted specimen originates from a forensic partial or a forensic mixture that does not meet the NDIS moderate match (MME) estimate threshold of 1 in 10 million, but does meet the match rarity estimate (MRE) threshold of 1 in 10 million if searched at a specified stringency by locus (high or moderate). In addition, samples in this category must have at least 8 of the classic core loci.
Forensic Unknown
The CODIS specimen category for forensic DNA profiles (single source or fully deduced from a mixture) that are generated from the testing of crime scene evidence, and are attributable to a putative perpetrator. Forensic Unknown profiles developed before December 31, 2016 must contain data at all original CODIS core loci to be eligible for this category; profiles developed after January 1, 2017 must contain all original core loci and have had the additional new core loci at least attempted. Profiles in this specimen category are stored in the “Forensic Index.”

Heteroplasmy
The occurrence of more than one mitochondrial DNA profile (mitotype) arising from a particular tissue(s) within an individual; exhibiting more than one base at a particular nucleotide position.

High Stringency
The number of alleles and the corresponding allelic values are the same between two DNA profiles at a given locus. For example, a 7, 9.3 matches 7, 9.3 at high stringency.

High Stringency Match
All alleles at all loci match at high stringency. A confirmed match between two or more DNA profiles. Hits can occur at or between any level (local, state and national) in the CODIS hierarchy. Hits can be a Forensic Hit, an Offender Hit, an Arrestee Hit (some states), or a Detainee Hit (Federal).

Homopolymeric Regions
The occurrence of variable lengths of the same nucleotide in a length of mtDNA (i.e. CCCCCC), these generally occur around the region of 16183-16193 in HV1 and 303-309, 311-315 in HV2.

Hypervariable Region I
A segment of increased variability in the mitochondrial DNA control region; the common nucleotide positions used in forensic mtDNA typing are 16024 to 16365.

Hypervariable Region II
A segment of increased variability in the mitochondrial DNA control region; the common nucleotide positions used in forensic mtDNA typing are 73 to 340.

Identification Aided
Similar to Investigation Aided; counted for a pedigree rank or direct match which leads to either an “ID Confirmed” or “ID Pending” disposition. The FBI uses this metric to track the effectiveness of the database program.

Identification Confirmed
ID confirmed. Disposition in CODIS when an individual is identified and confirmed; metadata and other information such as a copy of the death certificate support the confirmation of the identification.
Identifying Information
Information on a Convicted Offender’s personal characteristics and ID numbers, e.g. name, NYSID number, date of birth, social security number, etc. Identifying Information is prohibited in CODIS.

Identification Pending (ID pending)
A disposition in CODIS when an individual’s identification is still in the process of being confirmed by the medical examiner.

Index Offense
An offense defined in Executive Law Section 995, conviction of which determines eligibility for inclusion in the State DNA Databank as an offender.

Indictment
A formal written accusation originating with a prosecutor and issued by a grand jury against a party charged with a crime.

Interpreting Analyst
Forensic Biology analyst responsible for interpreting the DNA results in a case. Interpreting Analysts are CODIS analysts.

Investigating Agency
See Submitting Agency.

Investigations Aided (IA)
A criminal investigation equates to a case, which equates to a submission to a laboratory. An investigation aided for a casework laboratory is the number of cases submitted to the lab that were assisted by CODIS. Investigations aided = Investigations assisted = Cases aided = Cases assisted.

Juvenile
The known sample from a juvenile (as that term is defined by the relevant jurisdiction) who is required by state law to provide a DNA sample for analysis and entry into a state DNA database. The DNA profile for this specimen category is stored in an offender index as determined by the state that owns it.

Keyboard Search
A manual search of CODIS initiated by a CODIS user. In SDIS or NDIS a keyboard search is initiated by the SDIS or NDIS Custodian at the request of a lower-level lab. In LDIS the search is done by anyone who has been trained in the use of CODIS Searcher.

Keyboard Search Request
A request from an agency for a keyboard search of the DNA Databank at LDIS, SDIS or NDIS. This letter includes all of the information relating to the DNA profile, the requesting agency and certification of the control values.
Keyboard Search Result Letter
A letter from the Databank Coordinator documenting the results (match/no match) of the Keyboard Search.

Known Sample
Biological material whose identity or type is established. Examples of known samples would be a buccal specimen from a victim or suspect; or a sample contributed by the close biological relative of a missing person.

Laboratory
A facility: (1) employing at least two full time employees who are qualified DNA analysts; and (2) having and maintaining the capability to perform the DNA analysis of forensic and/or casework reference samples at that facility.

LAB-TYPES
A database which contains DNA profiles from Department of Forensic Biology staff, known contaminant DNA profiles, and other DNA profiles from known individuals (such as janitorial staff or crime-scene and laboratory personnel from NYPD).

LDIS
The Local DNA Index System contains DNA records that can be searched for local DNA matches and be uploaded (if eligible) into higher level (SDIS and NDIS) CODIS indexes.

LDIS Only specimen category
The category at the local level of CODIS which contains forensic profiles deemed ineligible for SDIS and NDIS. This category is in the LDIS Only Index.

LDIS Only Index
An index in LDIS which contains forensic profiles deemed ineligible for SDIS and/or NDIS. Examples include suspects’ profiles from suspects’ own clothing, or swabs from guns seized via search warrants.

Learning Management System (LMS)
The online training system used by the FBI for the Annual Review of NDIS Eligibility, for CODIS New User training, and QAS Auditor training.

Legal (sample)
The known reference sample from a person whose DNA sample is collected under applicable legal authorities provided that DNA samples that are voluntarily submitted solely for elimination purposes shall not qualify as a Legal specimen. An example of a Legal specimen is a sample collected from a person found not guilty by reason of insanity who is required by the relevant state law to provide a DNA sample for analysis and entry into a state DNA database. The DNA profile for this specimen category is stored in a Legal Index.
Legal Index
A Legal Index consists of DNA records of persons whose DNA samples are collected under applicable legal authorities.

LINKAGE
The DNA database used to search preliminary DNA results for case links. LINKAGE contains both casework non-mixture profiles (or deduced) forensic DNA profiles generated from casework and DNA profiles from suspects developed during the course of criminal investigations. As of October 2013, no further samples are being added to it; however it is still available for searching as before.

LINKAGE User
A laboratory employee who: (1) has login access to the LINKAGE system and is authorized to read, add, modify and/or delete DNA records in it; or (2) was a qualified DNA analyst responsible for producing DNA profiles stored in LINKAGE.

Low Copy Number or Low Template DNA Analysis
As defined by NDIS, based upon a laboratory’s internal validation, any DNA typing results generated from limited quantity and/or quality DNA template using conditions that have demonstrated increased stochastic effects are defined as Low Template or Low Copy DNA analyses. The stochastic effects which may be observed in DNA samples subjected to these conditions include allelic drop-in or drop-out, increased stutter and increased intra-locus peak height imbalance. When used to analyze limited quantity and/or quality DNA template below the stochastic thresholds, Low Template or Low Copy DNA conditions may include the following: additional amplification cycles, post-amplification purification, reduced reaction volume, injection enhancement by increased voltage or time, and nested PCR.

Low Copy Number specimen category
A specimen category existing at the Department of Forensic Biology LDIS and at New York State SDIS for the purpose of uploading and searching profiles generated using low copy number (amplification) techniques. Such profiles are not eligible for NDIS. This category is a member of the Forensic SDIS Only Index.

Low Copy Number Profile
Forensic Unknown composite profiles that have been analyzed using extra cycles during amplification. These samples are stored in the Low Copy Number specimen category in the Forensic SDIS Only Index.

Low Stringency
For a given locus, an allelic value for one allele from one profile is the same as an allelic value for one allele from another profile. For instance, a 10, 12 matches a 12, 13 at low stringency.

Low Stringency Match
At least one locus between two profiles being compared matches at low stringency, with the remainder of the loci matching at moderate stringency or higher.


Marked/Unmarked Profile
Marked profiles in Specimen Manager are profiles selected for upload to SDIS. Unmarked profiles are those profiles deselected for upload to SDIS. Pattern (a local legacy index), the LDIS Only index, and suspect profiles are unmarked by definition.

Match
A match occurs when CODIS makes an association between two or more DNA profiles and a confirmation is performed by designated laboratory personnel from each affected laboratory. At the Casework Laboratory and for the purpose of match evaluation, a high stringency match at all loci may be reviewed and evaluated by an individual who is currently or was previously a qualified DNA analyst. At the Casework Laboratory, a match at any loci at less than high stringency shall be reviewed and evaluated by a DNA casework analyst currently qualified in the technology being reviewed.

Match Confirmation
The process of determining if a potential candidate match generated by CODIS or other database software is a true match and should be reported to the investigating agency.

Match Estimation Utility
A module within CODIS Popstats which estimates the number of moderate matches a profile will generate in a database of a given size $N$.

Match Manager
Match Manager (MatchMan) is the CODIS module that allows for the managing and sorting of matches discovered through the use of CODIS. Matches are added to Match Manager by the Searcher and Autosearcher programs.

Match Report
Electronic report generated by CODIS when a potential candidate match is made by CODIS software.

Match Stringency
The overall stringency (low, moderate or high) for a match. The match stringency for the match between two DNA profiles is determined by the lowest locus-level stringency for all loci of the match. A Match Stringency is used to establish whether or not two DNA profiles are identified as matching. The CODIS software supports three Match Stringency levels: low, moderate, and high. Low stringency matches occur when one or more alleles match between the target and candidate profiles at a given locus. Moderate stringency matches require all alleles to match, but the target and candidate profiles can contain a different number of alleles. That is, if the target profile has three alleles and the sample profile has two, then two alleles must match. High stringency matches require all alleles to match.
Maternal Relative
The known reference sample voluntarily provided by a maternal biological relative who is not a mother, child or sibling of a reported missing person. The DNA profiles for this specimen category are stored in the Relatives of Missing Persons Index. These DNA profiles are removed once the individual for whom the samples were submitted has been identified or if the individual voluntarily providing the reference sample has been identified. This is also a disposition that can be used in CODIS to describe a mtDNA match.

Methodology
The term used to describe the analytical processes and procedures used to support a DNA typing technology: for example, extraction methods (manual vs. automated), quantitation methods (slot blot, fluorometry, real time), typing test kit and platform (capillary electrophoresis, real-time gel and end-point gel systems).

Mis-match (search)
A parameter within Searcher and Autosearcher which allows for one locus of a profile being searched to match (or not) below the stringency level being searched, and still return the result as a match. For instance, during a moderate search, if all but one locus with entered alleles, in the two profiles being compared, match at moderate or high stringency, one locus which is either a low stringency match or not a match at all, will be displayed. Searches allowing one mis-match are performed at LDIS and SDIS; the purpose is to identify offender and forensic matches in spite of a possible typographical or interpretational error at one locus of any given profile. If this parameter is set to “zero”, then the match must occur with no mis-matches at the selected stringency in order to be returned by the search.

Missing Person
The known reference sample of an individual reported missing, voluntarily provided by a relative or the person who filed the missing person report. The source of the DNA has been verified as originating from the missing person and is stored in the Missing Persons Index.

Missing Person Index
A Missing Person Index consists of DNA records of missing persons and deduced missing persons.

Mitochondrial DNA
A small circular piece of DNA found outside the nucleus in most cells and generally involved in the production of proteins responsible for energy production in the body. It is inherited maternally.

Mitotype
A mitochondrial DNA profile consisting of a listing of nucleotide sequence differences from a standard reference sequence; typically the Cambridge Reference Sequence (CRS) or revised Cambridge Reference Sequence (rCRS). The mitotype will vary depending upon the sequence detected.
**Moderate Match Estimation (MME) value**
A threshold value for a profile to meet to be eligible for upload into NDIS (1x10^7). This value is calculated automatically by the CODIS software upon a sample’s entry into the database, and is based on parameters including allele frequencies and database size. *It is possible for a sample to have a ME value of >1 and be able to pass the MME threshold of 1x10^7 for NDIS. Such samples are eligible for NDIS if they have at least 8 original core loci. Conversely, samples which meet ME but do not meet MME will not be allowed in NDIS.*

**Moderate Stringency**
For a given locus, a minimum number of common alleles and the corresponding allelic values must be the same between two profiles. The minimum number is determined by the profile with the fewest alleles. This is the standard search stringency. For instance, a 10 matches 10, 11 at moderate stringency, as does a 10 or a 10, 11 match a 10, 11, 12.

**Moderate Stringency Match**
A match between two DNA profiles in which the locus-level stringency match for all the loci of the match was either at moderate or high stringency. No loci matched at low stringency.

**NamUs**
National Missing and Unidentified Persons System; they maintain a website with sections for missing persons, unidentified persons, and unclaimed persons. Contains information relevant to missing persons DNA work.

**NCIC**
National Crime Information Center.

**NCIC Miscellaneous Field**
The designated free text field in NCIC where identifying information as to the location where DNA profiles have been produced may be placed. This field should also be used to enter information when a candidate DNA sample does not yield a DNA profile.

**NCIC Unidentified Person File**
The file in NCIC containing records for unidentified deceased persons; persons of any age who are living and unable to ascertain their identity; unidentified catastrophe victims; and body parts. For CODIS purposes, the DNA profile for unidentified persons in the Unidentified Human Remains Index is related to records in the NCIC Unidentified Person File.

**NCMEC**
National Center for Missing and Exploited Children. Relevant for missing persons work.
NDIS
The National DNA Index System. NDIS is one component of CODIS – the national and highest level index containing the DNA records contributed from participating federal, state and local laboratories. NDIS is administered by the FBI in accordance with the provisions of the DNA Identification Act of 1994, as amended.

NDIS receives DNA records from every lower level index and supports the searching functions of CODIS. These DNA records are comprised of forensic DNA profiles, convicted offender DNA profiles, arrestee DNA profiles, DNA profiles from missing persons and relatives, and anonymous DNA profiles contributed to a population database.

NDIS Standards for Acceptance of DNA Data
The document prepared by the FBI specifying the requirements for DNA data to be accepted for searching and storage at the national level. These must be reviewed by CODIS analysts annually, and currently consist of a web-based training followed by a quiz.

Negative Amplification Blank
A negative control sample containing amplification reagents without added DNA, used to detect DNA contamination of the amplification reagents during testing.

Negative Control
A specimen included in a batch of specimens which, when tested using DNA testing methods, should yield negative test results.

Negative Reagent Blank
A negative control sample containing all testing reagents without added DNA which is used to detect DNA contamination of any reagent during testing.

NIST
Stands for the National Institute of Standards and Technology.

No Match
CODIS case disposition for a moderate stringency candidate match between two cases that are not a true match.

No Suspect Case
1. A case with no suspect listed. This is determined by checking all paperwork associated with the evidence submission and case contacts.
2. A case in which DNA testing has been conducted and the listed suspect(s) have been excluded.

NYPD
Stands for the New York (City) Police Department.
NYS CODIS Administrator
The New York State CODIS Administrator is responsible for the oversight and approval of CODIS functions at the state level. This includes supervising the SDIS custodian.

NYS DNA Databank
The New York State Identification Index as used throughout Executive Law Section 995, which is comprised of DNA profiles in the Offender STR Index, the Forensic STR Index, the Unidentified Humans Index, the Missing Person Index and the Relatives of Missing Persons Index.

NYSID Number
The New York State Identification Number. A unique number assigned to a person upon fingerprinting. NOTE: This number is only applicable to New York State convicted offenders; other states have their own identifiers for offenders and arrestees.

Obligate Allele
See “Required Allele”.

Offender
An individual who is required by statute to submit a sample for DNA analysis and databasing. The term “offender” includes individuals who are convicted or arrested for a crime or juveniles adjudicated delinquent for an offense and required by state or federal law to provide a DNA sample for analysis and databasing.

Offender Duplicate
CODIS case disposition when the same offender matches a case more than one time due to duplicate testing of the offender. This also serves as a quality control of the database.

Offender Hit (OH)
CODIS case disposition when a DNA profile generated from crime scene evidence in an open case (case with no conviction) matches a convicted offender profile (or arrestee) at SDIS or NDIS.

Offender Laboratory
The laboratory responsible to NDIS for a DNA profile developed from a sample provided by a known offender. The offender laboratory for the State of New York is located at and administered by the New York State Police Laboratory.

Offender Match Letter
A letter from NYS DCJS (for state convicted offender matches) or the offender lab (offender matches at NDIS) documenting a confirmed Offender Match. Provides the offender’s identifying information and the investigating agency. It is used by the agency investigating the case to obtain a court order to acquire another biological sample from the convicted offender for comparison to crime scene evidence.

ORI
Stands for Originating Agency Identifier. Unique laboratory identification number that associates a specimen with a particular laboratory (OCME - NY030011K).
Other (pattern)
A legacy CODIS specimen category that the Department of Forensic Biology used for forensic DNA profiles generated from the testing of crime scene evidence that were known to match other forensic DNA profiles in the LINKAGE and/or LDIS databases; one of which had already been uploaded to the upper levels of CODIS. These (pattern) profiles were unmarked for upload to SDIS and were only searched in LINKAGE and/or LDIS.

Ownership
Ownership occurs when any of the following criteria are applicable:

(1) The originating laboratory will use any samples, extracts or any materials from the vendor laboratory for the purposes of forensic testing (i.e. a vendor laboratory prepares an extract that will be analyzed by the originating laboratory);
(2) The originating laboratory will interpret the data generated by the vendor laboratory;
(3) The originating laboratory will issue a report on the results of the analysis; or
(4) The originating laboratory will enter or search a DNA profile in CODIS from data generated by the vendor laboratory.

Forensic Biology takes ownership of CODIS specimens submitted by other agencies for testing at OCME, for instance Unidentified Human Remains that were received for mitochondrial DNA testing.

Partial Locus
A locus marked in the CODIS software as partial, will have curved brackets around the allele that is present, as an indicator that there is or may be at least one more allele that is not able to be reported. This aids in match review. For example, 10+{P} might be shown as matching a 9, 10 from the comparison profile at moderate stringency. In the future, a locus marked with this status may be searched at a lower stringency than the other loci in the profile.

Partial Match
An association between two single-source (clean or fully deconvoluted profiles), showing similarities but short of an exact match, that suggests that the source of an evidentiary profile is potentially a relative of the source of the other, partially matching, profile. Partial matches are inadvertent, and may be found at the local, state, or national levels (through comparison at the bench, LINKAGE, or CODIS searches). Partial matches differ from familial searches in that familial searches are deliberately performed, while partial matches arise as a by-product of standard searches.

Paternal Relative
The known reference sample voluntarily provided by a paternal biological relative who is not a father, child or sibling of a reported missing person. The DNA profiles for this specimen category are stored in the Relatives of Missing Person Index. These DNA profiles are removed once the individual for whom the samples were submitted has been identified or if the individual voluntarily providing the reference sample is determined not to be related to the missing person.
Pedigree Tree (Index)
The Pedigree Tree Index consists of DNA records of relatives and spouses of missing persons that are associated with a Pedigree Tree.

Pending
A CODIS disposition choice used temporarily while awaiting the final results from a confirmed match from the investigating agencies.

Perpetrator
The individual who commits a crime. The identity of the perpetrator may or may not be known to the police.

Personally Identifiable Information
Information that includes, but is not limited to, names, dates of birth, and social security numbers used to identify individuals. Personally identifiable information does not include information derived from the examination of the DNA sample. Personally identifiable information is prohibited in CODIS.

Platform
The type of analytical system utilized to generate DNA profiles such as capillary electrophoresis, real-time gel, and end-point gel instruments or systems.

Positive Human DNA Control
A known reference DNA sample traceable to the NIST standard reference material for which the DNA profile is known, and is used to demonstrate the acceptable performance of a DNA test.

Popstats
CODIS program available within the CODIS software to perform statistical calculations using the FBI population databases.

Privacy Act
Regulation which determines what information can be entered into CODIS in order to protect the rights of the individual.

Proficiency Testing
A quality assurance measure used to monitor performance and identify areas in which improvement may be needed. Proficiency tests may be classified as: (1) an internal proficiency test, which is produced by the agency undergoing the test. (2) An external proficiency test, which may be open or blind, is a test obtained from an approved proficiency test provider.

Qualified Auditor
A current or previously qualified DNA analyst who has successfully completed the FBI DNA Auditor’s training course.
Qualified DNA Analyst
A DNA analyst who has satisfied and continues to satisfy the experience, education, training, proficiency testing and continuing education requirements of the FBI Director’s Quality Assurance Standards (Standards 5 and 13), issued in accordance with the DNA Identification Act of 1994, as well as successful completion of a qualifying test prior to beginning casework or databasing responsibilities.

In the Department of Forensic Biology a Qualified DNA Analyst is defined as an Interpreting Analyst who is a Criminalist II or higher title meeting the above requirements.

Quality Assurance
Those planned or systemic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality.

Quality Control
The day-to-day operational techniques and activities used to fulfill requirements of quality.

Ranks
Associations made in CODIS from Relatives of Missing Persons in a pedigree tree to Unidentified Human Remains. The cases are ranked in joint pedigree likelihood ratio order.

Reference sample
A casework reference sample is biological material obtained from a known individual and collected for purposes of comparison to forensic samples. Also known as an exemplar or known DNA sample.

Relatives of Missing Person (Index)
Consists of DNA records from the biological relatives of individuals reported missing.

Requesting Laboratory
A laboratory that sends a request to the SDIS or NDIS Custodian to search SDIS or NDIS.

Required Allele
Specific designated alleles of a specimen are required to match in order for CODIS to declare a match. Required alleles are attributable to the perpetrator in a mixture, and are designated with a “+.” This requires the designated “+” allele to be present in any DNA profile possibilities returned from a database search. This will aid in excluding some of the spurious candidate matches which might occur if the locus is marked as inconclusive. For example, a 13+ would match 10, 13; 11, 13; 12, 13, 13, 13… but would exclude anything that did not contain a 13 allele. Only one allele per locus can be so designated.

Required Alleles Specimen Category (no longer exists under this name)
A specimen category of forensic unknowns and/or forensic category mixtures which can have up to one allele marked as an obligate, per locus. Samples in this category are only searched at LDIS and SDIS, not NDIS. As of October 2013 this category was renamed to Forensic SDIS Only.

Revised Cambridge Reference Sequence (rCRS)
A revision of the standard sequence (CRS) used in mitochondrial DNA typing.
“Scientific Reason”
A statement that supports a search using fewer than the required minimum of STR loci at the state or national level, such as the apparent presence of mixtures, sample degradation or limited sample availability.

SDIS
The State DNA Index System. The State’s repository of DNA records under the control of state authorities. SDIS is typically the central point of contact between all New York State local labs and NDIS. (See also Convicted Offender Laboratory).

SDIS Custodian
An employee or designee of the New York State Police responsible for, among other duties, maintaining SDIS, fulfilling technical requirements of CODIS and proper operation of the computer hardware on which the DNA Databank resides.

Search
A method for comparing target and candidate profiles to see if any match.

Search Stringency Parameters
Allows the user to define the number of alleles per locus that the target profile and candidate profile must have in common. It is a user-defined setting that is used as a filter to report locus matches of equal or higher stringency (see Low Stringency, Moderate Stringency, High Stringency).

Search Results
After CODIS determines that two or more DNA profiles match, an electronic report is generated by CODIS and is distributed to the laboratories responsible for the matching profiles.

Searcher
Searcher is an application within the CODIS suite of software products. It provides a means of locating specific DNA profiles by searching the profiles within the CODIS indexes for potential matches to a target DNA profile.

Single Typed Node
A pedigree tree index for those cases with only one relative sample that has been entered.

Specimen/Sample
The biological sample (for example, blood, semen or epithelial cells) that is the object of DNA analysis for purposes related to forensic identification or statistical population sampling.

Specimen Category
Used to classify a DNA profile and determine into which index a specimen can be transferred. For example, forensic unknown samples would be inserted into the Forensic index.
Specimen ID
Identification number associated with a DNA profile entered into the CODIS system. Specimen ID numbers must be unique and can be no longer than 24 characters. The OCME Department of Forensic Biology uses a standard format which is explained in section 4.1 of this manual.

Specimen Manager
Specimen Manager (SpecMan) is a CODIS module that provides a simplified, central interface for managing specimens (DNA records). In SpecMan, views of specimens can be created using different criteria, specimens can be marked/unmarked for upload and uploads can be sent.

Spouse
The known reference sample voluntarily provided by a presumptive parent of a common child. The DNA profiles for this specimen category are stored in the Spouse Index. The DNA record of a spouse shall be removed if the missing person corresponding to this reference sample has been identified.

Spouse Index
A Spouse Index consists of the DNA records of a presumptive parent of a common child of a missing person.

State Defined #1, 2, 3, 4, 5
CODIS match dispositions that can be defined by the state CODIS system in the event that the others are not appropriate.

Within New York, State Defined #1 is the designated disposition for second and later instances of a pattern, hitting the same offender at SDIS. DCJS does not issue Offender Match Letters for SD#1 matches.

The other four State Defined dispositions are not currently in use.

Statute of Limitation
A statutory provision which sets forth the maximum period of time that can lapse after a criminal act occurs for it to be taken to court. If that maximum time period passes and the perpetrator has not been formally charged for the criminal act, then he or she never can be.

Stringency
Stringency levels define the number of alleles that must match in order to produce a match (low, moderate, or high).

Subject Index
An Index in the State DNA Database that contains samples from convicted offenders seeking early release from prison or parole, probation instead of prison, a plea bargain to a lesser offense or those participating in the Department of Correctional Services’ discretionary program that results in early release of the offender into the community.
Submission Form
The DNA Databank Specimen Submission Form. This form, which contains the bar code number of the offender’s sample, is submitted to the convicted offender laboratory along with the offender’s DNA sample. This form contains the offender’s identifying information, and the facility responsible for the sample collection.

Submitting Agency
The agency that submitted evidence to a forensic DNA crime laboratory. The submitting agency is responsible for investigating crimes.

Suspect
An individual whose identity is known to the police and who is alleged to be the perpetrator of a crime. Exemplars collected from suspects include blood samples, buccal specimens (oral swabs), or abandonment samples (such as cups, cigarette butts, straws, soda bottles, etc.) submitted to the laboratory for DNA comparison purposes.

Suspect Case
1. A case in which DNA testing has been conducted and the listed suspect(s) have been included.
2. A case with a suspect listed and no DNA analysis has been performed to exclude them.

Target DNA Profile
A target profile is a DNA profile for which you are trying to find a matching DNA profile. This profile is submitted by a criminal justice agency for the purpose of searching against DNA profiles maintained by SDIS and NDIS which could match an indexed DNA profile.

Technical Leader
An employee who is accountable for the technical operations of the laboratory and who is authorized to stop or suspend laboratory operations.

Technology
The type of forensic DNA analysis performed in the laboratory, such as RFLP, STR, YSTR, or mitochondrial DNA.

Unidentified Human (Remains) Index
Consists of DNA records from recovered living persons (for example, children who can’t and others who can’t or refuse to identify themselves), and recovered deceased persons (including their body parts and tissues) whose identities are not known.

Unidentified Person
The DNA profile developed from the recovered deceased (including body parts and tissue) or an individual who is unidentified (for example, children who can’t and others who can’t or refuse to identify themselves). The DNA profile for this specimen category is stored in the Unidentified Human (Remains) Index.
Upload
The transfer of electronic data from a lower level of CODIS (LDIS or SDIS) to an upper level (SDIS or NDIS).

User
Personnel who have login access to CODIS and/or qualified DNA analysts who are responsible for producing the DNA profiles stored in NDIS.

User Defined #1, 2, 3, 4, 5
CODIS case dispositions that can be defined by the user in the event that the others are not appropriate.

User Defined 1 is used when OCME tests and enters a sample into the database that was previously tested and entered by another lab. Typically, this occurs in missing persons cases where OCME performs not only STR but mitochondrial testing as well.

User Defined 2 is generally used when a forensic sample hits an additional sample (offender duplicate) taken from the same offender which the forensic sample had hit previously. This is defined by agreement among all the NY labs.

User Defined 3 is generally used when a forensic sample hits a known sample at SDIS which turns out to be a victim, witness, consensual partner or other elimination sample which was unable to be obtained for in-house testing. Forensic samples involved in matches/hits of this type are then removed from the database. This disposition can also be the “catch-all” for all other uncommon match resolutions. This disposition is defined as needed by the LDIS lab upon concurrence by SDIS.

User Defined 4 is used for local level, suspect to evidence matches in instances where the suspect was not connected to the evidence case prior to the DNA results (i.e. cold). It is similar to an offender hit at the state level.

Use and Dissemination Agreement
An official document allowing the transfer of Databank information from one agency to another. This document contains requirements for the confidentiality and dissemination of DNA information and procedures for laboratories participating in SDIS and NDIS.

Waiting for More Data
Disposition in CODIS. Additional testing may be needed to confirm or refute the match or rank. This may or may not be possible; therefore this could end up being a “final” disposition for a match, however this is not optimal.

Warm match/hit
A warm match occurs when CODIS DNA profiles match based on prior knowledge. A typical example is when DNA profiles from several cases match that were submitted to the laboratory as a pattern, or when a suspect exemplar submitted for a particular case matches that case.
Extended Markup Language. Data format readable by computers and humans, which is used by LIMS.