



SAN DIEGO POLICE

## CRIME LABORATORY

## LABORATORY OPERATIONS MANUAL

Revised October 2019

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## **1. LABORATORY INTRODUCTION**

The San Diego Police Department Crime Laboratory is a full-service criminalistics laboratory comprised of the following units and programs:

- Clerical
- Crime Scene
- Crime Scene Reconstruction
- Firearms
- Forensic Biology
- Forensic Chemistry
- Forensic Technology
- Latent Prints
- Polygraph
- Quality Assurance
- Questioned Documents
- Regional Computer Forensics Laboratory (RCFL)
- Safety
- Trace Evidence
- Vault

The general operating hours of the laboratory are 0700-1700 hours, Monday through Friday. Inquiries can be made by calling 531-2577 during these hours. The Commanding Officer and Crime Laboratory Manager (Program Manager) have oversight over all laboratory programs and units.

Crime scene specialists, criminalists (for officer involved shooting scene investigations or crime scene reconstructions), a polygrapher, a narcotics vault employee, and a duty supervisor are on call 24 hours a day.

The unit consists of two-word processing operators, a clerical assistant working as a receptionist, and a supervising administrative aide. The unit coordinates efforts on laboratory case files (typing reports and filing case packets), subpoenas, ordering supplies for the laboratory, and compiling administrative information for reports to the crime laboratory manager, and payroll.

## JOB DUTIES

#### Crime Lab Administrative Aide Duties

- A. Supervise two Word Processor Operators and one Clerical Assistant II. Write performance evaluations, counsel and advise employees.
- B. Prepare, route/obtain approvals of, and track laboratory requests for purchases. Create spreadsheets showing expenditures, projected expenditures and justification for purchases. Provide accounting of grant related expenditures and training to the Commanding Officer and Crime Lab Manager. Provide Fiscal Management staff with spreadsheet detailing grant related training expenditures and assist in reconciling discrepancies.
- C. Contact vendors to obtain quotes, invoices, and contract information. Work closely with Fiscal Management staff to ensure all necessary purchase documents are in order (i.e., sole source memos, quotations) and City Auditors and City Purchasing have everything needed to provide the laboratory with our purchase orders.
- D. Track spending of all laboratory PO's verify receipt of goods and reconcile invoices. Work closely with Fiscal Management to resolve payment issues with vendors. Use the One SD SAP system to monitor PO's and invoices.
- E. Assemble and coordinate routing/approvals of training requests for laboratory employees. Create and maintain spreadsheets detailing training events and costs. Reconcile employees' travel expense reports prior to sending to Fiscal.
- F. Reconcile blood draw charges while checking against the laboratory's blood/urine log and FileOnQ database for accuracy. Consult with contract staff, vault staff, Chemistry supervisor or Quality Assurance Manager to reconcile inaccuracies or problems.

- G. Review/approve toxicology requests, contact detectives, and consult with Chemistry supervisor to resolve issues.
- H. Using the City's e1472 form, prepare 'Requests for Council Action' to apply for and expend grant funds for laboratory supplies, equipment, training, etc. Monitor and follow up with the Department's grant coordinator to ensure timely processing.
- I. Prepare spreadsheet showing laboratory costs to provide narcotics and toxicology analyses related to H&S violations; provide to County of San Diego Auditors to be eligible to receive allocations from the Criminalistics Laboratory Fund as determined by the court.
- J. Coordinate the laboratory's intern/volunteer program. Provide information to interested applicants, collect their documents and maintain database/waiting list. Notify Backgrounds Investigations office or Volunteer Services Coordinator to initiate the background process for applicants.
- K. Coordinate with Fiscal Management analyst and laboratory supervisors to facilitate inspection of laboratory assets.
- L. Work closely with Commanding Officer and Crime Lab Manager and assist other laboratory supervisors with administrative, training and purchasing issues.

## Receptionist

- A. Answer phone calls from officers, public, City Attorney's Office, D.A.'s Office, etc.,
- B. Help walk-in traffic,
- C. Distribute alcohol and toxicology results to officers, City Attorney's office, D.A.'s office, etc.,
- D. Process subpoenas,
- E. Distribute alcohol reports,
- F. Separate copies of toxicology reports, and distribute them,
- G. File toxicology reports and toxicology request forms,
- H. Report copiers' usage and order supplies for copy machines,
- I. Take outgoing mail to the mail room, pick up and distribute incoming mail
- J. Prepare payroll,
- K. Prepare overtime report,
- L. Maintain attendance roster and log book
- M. Distribute DNA CODIS Hit Memos, and

N. Order supplies from Staples and from Central Stores weekly. Distribute upon receipt.

#### Word Processing Operator Duties

- A. Provide assistance to Detectives and Officers in LabLynx work request entry,
- B. Check submitted requests for accuracy,
- C. Ensure all required documentation is submitted with requests, i.e., search warrants, consent forms,
- D. Provide training in LabLynx work request entry,
- E. Create tickets in Redmine when necessary for any LabLynx issues.
- F. Distribute Breath/Alcohol discovery packets to the DA/CA,
- G. Distribute narcotics reports to the City Attorney and DA Liaison. Fax to Juvenile DA, South Bay DA and Harbor Patrol as designated. Retrieve and send reports as requested;
- H. Type correspondence, personal/confidential correspondence, and rush cases for Laboratory personnel as needed. These may include letters, memos, accreditation items, Statement of Qualifications, ALPS Award memos, Letters of Commendation, Certificates, and miscellaneous items;
- I. Process discovery requests when received from the Quality Assurance Manager;
- J. Scan laboratory case files to computer, email reports to detectives, and maintain hardcopy files of ongoing cases. Convert past year's hard copy case files to electronic, purge cases not required to retain;
- K. Enter lab work requests submitted by Investigative Units;
- L. Prepare, disseminate, and update various lab rosters;
- M. Provide backup to the Clerical II desk including subpoena processing, alcohol report distribution, blood/urine log and BioTox report distribution (see Clerical II Manual); and
- N. Serve as OCA for Administrative Aide as required (see Administrative Aide Manual).

## 3. CRIME SCENE RECONSTRUCTION PROGRAM

#### RESPONSIBILITIES OF THE RECONSTRUCTIONIST AT THE CRIME SCENE

The on-call Reconstructionist is required to have expertise in the following areas:

- A. Bloodstain pattern interpretation
- B. Firearms trajectory reconstruction
- C. Alternate light source applications
- D. Chemical presumptive tests, and
- E. General scene reconstruction

Criminalists involved in the program are required to be on-call several weeks a year. When on-call, they are required to respond to crime scenes to employ their expertise in one of the above listed areas. Criminalists are responsible for assessing and interpreting the scene evidence, providing a written report in a reasonable period of time, and for providing expert testimony in trials as needed.

#### PROGRAM ADMINISTRATION

This program is administered by a supervising criminalist, acting in the capacity of a crime scene program coordinator. The following are responsibilities of that coordinator:

- A. Establish the on-call schedule for the criminalists to ensure callout coverage
- B. Assess the training needs of the reconstructionists and facilitate any necessary training
- C. Conduct periodic meetings to discuss issues
- D. Conduct technical or administrative reviews of the crime scene reconstruction reports as needed
- E. Facilitate the proficiency testing program for the reconstructionists.

## 4. CRIME SCENE UNIT

#### UNIT DESCRIPTION

General office hours are 0630 to 1700 hours, Monday through Friday. Crime Scene Specialists are on 24-hour call back for homicide investigations and other crime scenes. The CSS services are requested by a sergeant (or above), the watch commander, or laboratory supervisors.

The Crime Scene Unit consists of one Crime Scene Specialist Supervisor and eight Crime Scene Specialists (CSS). The CSS photographs and collects evidence at crime scenes, autopsies, search warrants, hospitals, and suspect processing. Additionally, they process evidence and crime scenes for latent prints. Civilians fill all positions within this unit.

The Crime Scene Unit utilizes interns and/or volunteers to process evidence for latent prints and to assist at crime scenes.

#### JOB DUTIES

#### Crime Scene Specialist

The duties of the crime scene specialists encompass, but are not limited to:

- A. Call back
  - 1. Available on a rotating 24-hour schedule to assist in investigations.
- B. Crime scene/morgue scene/victim and subject processing.
  - 1. Respond to the scene.
  - 2. Examine scene for physical evidence.
  - 3. Photograph, collect and preserve evidence.
  - 4. Prepare evidence and photograph lists.
  - 5. Take aerial photographs of scene.
  - 6. Process scene and evidence for latent prints.
  - 7. Prepare reports.
- C. Vehicle processing
  - 1. Photograph and examine for evidence.
  - 2. Process vehicle for latent prints.
  - 3. Prepare reports.
- D. Evidence processing
  - 1. Process items for latent prints using various techniques.

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- 2. Preserve latent prints (i.e. lifts or photography).
- 3. Process items for the identification, collection and preservation of latent prints, DNA, trace, shoe/tire impression, and blood evidence.
- 4. Prepare reports.
- E. Court testimony
- F. Administrative services
  - 1. Department and Unit training,
  - 2. Assist in determining budget, equipment, and supply needs,
  - 3. Photography for Department functions, and
  - 4. Other duties as needed.

#### Crime Scene Unit Supervisor

The duties of the crime scene unit supervisor encompass, but are not limited to:

- A. Supervises the collection and preservation of crime scene evidence and the development of latent print evidence,
- B. Reviews reports to ensure that evidence is properly recorded and described,
- C. Oversees that correct procedures are followed to ensure that the integrity of the evidence is properly maintained,
- D. Determines work schedules,
- E. Sets case priorities and making assignments as necessary,
- F. Provides technical direction and coordination in the training of subordinates,
- G. Maintains inventory of supplies and equipment,
- H. Evaluates subordinates' performance,
- I. Conducts unit inspections to monitor compliance with unit and laboratory policies and procedures and,
  - Prepares staff work to include:
  - 1. statistics
    - 2. projections of expected workload
    - 3. staff reports.

#### Technical Support

J.

The Crime Scene Unit uses Interns and Volunteers to fill the position of Technical Support. The following qualifications are required for the position:

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Technical Support personnel will be trained in the identification, collection and preservation of latent prints, DNA, trace, shoe/tire impression, and blood evidence. Upon completion of this training, the technical support personnel will be competency tested in the above-mentioned areas. The technical support trainee will have 90 days to complete his/her training and pass a competency test.

The technical support trainee will be allowed to attend crime scenes under the supervision of a Crime Scene Specialist. They will not be allowed to take photographs and/or collect items of evidence. They will be allowed to assist the Crime Scene Specialist with the processing of the crime scene for latent prints (including homicide scenes).

## 5. FIREARMS UNIT

The Firearms Unit is located on the 6<sup>th</sup> floor of Police Department Headquarters and the Firearms Testing Facility is located on the P2 level. The unit is staffed from 0630-1700 hours, Monday through Friday by four (4) criminalists and one (1) laboratory technician.

#### UNIT FUNCTIONS

The Firearms Unit provides examination, analysis, identification, and expert testimony on firearms evidence in criminal matters and administrative and other special investigations. The unit also acts as a resource on firearms information.

Generally, criminalists will examine firearms evidence to make visual, microscopic, and chemical evaluations and comparisons. Their observations and conclusions will be reported in written reports and in courtroom testimony if called upon to do so. The laboratory technician will perform IBIS entry and conduct operability tests to a more limited extent than the criminalist and will testify in court when necessary.

#### JOB DUTIES

#### Criminalist III (Technical Lead)

The duties of the Criminalist III in the Firearms Unit also include those of the Criminalist I and II in addition to:

- Coordinating the technical operation of the unit in accordance with quality assurance standards.
- Creating, reviewing, and/or revising technical policies and procedures prior to final approval by the Supervisor and Quality Manager.
- Coordinating training of new and current employees.
- Developing technical training modules in the unit.
- Coordinating, reviewing, and approving new method and instrument validations and verifications, including documentation, prior to final approval by the Quality Manager.
- Acting as a technical reference for the unit Supervisor, Quality Manager, and any auditors.
- Acting as a mediator, when necessary, in the technical review process.
- Providing technical consultation, as needed, to members of the unit and other laboratory employees.
- Working with the supervisor and Quality Manager to ensure criminalist compliance with QA, laboratory, and unit policies and procedures.
- Evaluating new technologies to determine if appropriate for the unit.
- When technical problems are identified, coordinating with the Quality Manager and Supervisor to ensure appropriate corrective actions are taken.

#### Criminalist I and II

The list of duties of the criminalist include, but are not limited to, the following:

- A. Determining firearms operability
- B. Firearms identification
- C. Making appropriate trace evidence screens on the items being examined
- D. Bullet/missile comparisons
- E. Cartridge/cartridge case comparisons
- F. Gunshot residue (GSR) distance determination
- G. Determining possible firearms used in a case
- H. Firearm test fire
- I. Ammunition comparison
- J. Trigger pull determination
- K. Unloading impounded firearms
- L. Crime scene reconstruction
- M. Silencer evaluation
- N. Confirmation of identifications
- O. Preparation of reports
- P. Technical reviews of firearms related reports
- Q. Training of new employees
- R. Rotation on the call-out team
- S. Assist in budget process for determining Unit needs
- T. Court room testimony
- U. Serial number restoration
- V. Maintenance of the ammunition reference library
- W. Gun write-offs with the Property Room
- X. Help with the annual inventory of the Firearms reference collection, if requested by the supervisor
- Y. IBIS Entry
- Z. Caliber identification
- AA. Any other task as needed by unit or unit supervisor

#### Laboratory Technician

The laboratory technician duties include, but are not limited to, the following:

- A. Cartridge case information entry into a database such as IBIS
- B. Operability checks of firearms on walk-in cases
- C. Unloading firearms upon request of the Property Room
- D. Assisting with the annual inventory of the firearms collection
- E. Maintenance of the ammunition and breakdown collections
- F. Assist the firearms unit as needed in other duties

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#### Unit Supervising Criminalist

The unit supervisor duties include, but are not limited to, the following:

- A. Assigning and prioritizing casework,
- B. Interviewing and hiring employees,
- C. Reviewing reports and examining case notes,
- D. Evaluating employee performance,
- E. Providing orientation for new employees or criminalists newly rotated into the unit,
- F. Tracking the progress of assigned casework and status of backlogs,
- G. Preparing budget requests, memos or reports as requested by the laboratory manager,
- H. Compiling monthly statistics,
- I. Reviewing and revising analytical procedure or unit policy as needed,
- J. Providing information and/or conducting weekly meetings to keep the staff informed about Department, laboratory, and criminalist events.

#### UNIT DESCRIPTION

The Forensic Biology Unit is comprised of fourteen Criminalists, a DNA Technical Manager, a CODIS Administrator, a laboratory technician, and two Supervising Criminalists.

#### UNIT FUNCTIONS

The Forensic Biology Unit provides analysis on all reasonable requests from most investigative units of the San Diego Police Department using the most current technologies available.

The Forensic Biology Unit's primary duties are to analyze items of physical evidence to locate and identify biological material and perform DNA analysis on that biological material.

The biological materials that the unit can either presumptively identify, or confirm the presence of, are: blood, semen, and saliva. DNA analysis may be performed on all of these substances as well as hair, bone, and other body fluids or tissues.

The DNA testing capabilities of the Forensic Biology Unit include both autosomal and Y chromosome STR DNA testing. Mitochondrial DNA testing is not performed at the San Diego Police Department Crime Laboratory.

Additional duties performed by the Forensic Biology Unit include the validation and implementation of new technologies, courtroom testimony, and participation in the crime scene reconstruction program as described in Section 3.

#### JOB DUTIES

#### Supervising Criminalist

The Supervising Criminalists of the Forensic Biology Unit oversee the Forensic Biology Unit and analysts. The responsibilities will include assigning casework, interacting with attorneys and detectives to determine case priorities, reviewing the work product of all analysts and monitoring the overall job performance of analysts. Duties and responsibilities:

- A. Establishes casework priorities based on negotiations and discussions with investigators and district attorneys,
- B. Assigns casework to analysts,
- C. Reviews reports and examines case notes,
- D. Reviews and evaluates the performance of subordinates,
- E. Works with the DNA Technical Manager to review and establish unit, specific policies and analytical procedures when appropriate,
- F. Interviews and hires new employees,
- G. Trains the new employees on department policies and procedures,
- H. Works with the DNA Technical Manager to coordinate analyst training,
- I. Keeps track of workload statistics,
- J. Prepares budget requests,
- K. Holds unit meetings to disseminate department, laboratory, or unit specific Information, and
- L. Prepares reports as required by the Command Officer or Crime Laboratory Manager.

#### DNA Technical Manager

The DNA Technical Manager will oversee the technical operation of the DNA Laboratory as outlined by the Quality Assurance Standards. The DNA Technical Manager will evaluate new technologies, resolve technical problems, assess and design training programs, and ensure the unit adheres to all quality assurance guidelines. The DNA Technical Manager is authorized to shut down the DNA laboratory should a serious technical problem develop.

Duties and responsibilities for the technical operation of the laboratory as outlined by the Quality Assurance Standards,

- A. Reviewing, revising and approving any DNA-related technical policy or procedure prior to final approval by the QA Manager,
- B. Approving and overseeing training of new and existing employees (when applicable) in DNA analytical procedures, including completion of training documentation,

- C. Overseeing, reviewing and approving DNA method validation, including completion of validation documentation, prior to final approval by QA Manager,
- D. Working with the QA Manager on any QA reports involving a DNA technical issue, and reviewing and signing off on those QA reports,
- E. Acting as a technical reference for the QA Manager,
- F Performing some technical reviews of DNA case files,
- G. Acting as a mediator when necessary in the technical review of DNA casework in the Forensic Biology Unit,
- H. Providing technical consultation as needed to the members of the Forensic Biology Unit,
- I. Working with Unit Supervisor and QA Manager to ensure compliance of the DNA analysts with QA and Unit policies and procedures,
- K. Reviewing the DNA proficiency tests completed by the Forensic Biology Unit,
- L. Conducting casework analysis, and
- M. Prepares reports as required by the Commanding Officer or Crime Laboratory Manager.

## Casework CODIS Administrator

The Casework CODIS Administrator is responsible for the security and integrity of the local CODIS network, the CODIS software, and the data within the local database. The Casework CODIS Administrator ensures the data within the local CODIS database is in compliance with NDIS guidelines. If the Casework CODIS Administrator determines at any point that the CODIS network, software, or entered data has been compromised, the DNA Technical Manager will be immediately notified.

The DNA Technical Manager and Casework CODIS Administrator will determine the proper course of action, which ultimately may include shutting down the CODIS network.

Duties and Responsibilities:

- A. Oversees the entering of DNA profiles from casework into the local database,
- B. Ensures that DNA profiles are searched against the local CODIS database,
- C. Uploads data to the California CODIS database,
- D. Downloads and searches DNA profiles from the CJIS WAN website,
- E. Performs upgrades to the CODIS software with the assistance of the CODIS Help Desk,

- F. Ensures that a backup is maintained for the information in the local database,
- G. Assists in the training of analysts in the operation of CODIS software, and
- H. Disseminates CODIS information to the rest of the Forensic Biology Unit.

#### Criminalist I and II

The job descriptions for Criminalist I and II are similar except that Criminalist II duties may be more extensive and Criminalist II analysts are expected to work more independently. In addition to the normal educational requirements of the Criminalist position, DNA Criminalists must complete college-level classes in Biochemistry, Molecular Biology, Genetics, and Statistics and/or Population Biology.

Criminalist I and II's primary duties involve locating and identifying biological material on items of physical evidence and performing DNA analysis. Analysts are required to document all exams, tests, observations, results, summarize the findings in a written report, and if necessary, testify in courts of law.

Duties and Responsibilities:

- A. Receives, inventories, screens, and preserves items of physical evidence
- B. Locates and identifies biological material,
- C. Conducts DNA analysis to determine possible associations between the evidence and any reference samples provided,
- D. Writes reports summarizing the findings and provides expert testimony in court,
- E. Remains technically current and knowledgeable in appropriate analytical methods,
- F. Participates in the evaluation and validation of new technologies or methodologies,
- G. Participates in any special projects as assigned by the Supervising Criminalist or Laboratory Manager,
- H. Informs the Supervising Criminalist or DNA Technical Manager of problems that develop at any stage of a case, and
- I. Uses the technical manual, unit policies manual and general quality assurance manual to deal with any procedural question or analytical method.

#### Laboratory Technician

The laboratory technician functions as a support position for the Forensic Biology Unit. Duties include ordering supplies, calibrating instruments, monitoring operating temperature of equipment, performing routine maintenance of equipment, and cleaning

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the unit on a weekly schedule. The laboratory technician maintains a database of all chemicals ordered by the unit. If the position of Laboratory Technician is unfilled the duties and responsibilities will be shared among current employees. Certain functions described above may be performed by volunteers or interns but only under the direct supervision of the laboratory technician or other qualified analyst.

Duties and responsibilities:

- A. Checks the calibration of instruments such as pipettes, thermal cyclers, and balances.
- B. Orders chemicals and supplies for Forensic Biology
- C. Maintains an accurate inventory of all chemicals located in the unit.
- D. Ensures that laboratory instruments, communal work areas, and floors are cleaned and decontaminated.
- E. Ensures that the operating temperatures of the unit ovens, incubators, refrigerators, and freezers are monitored.
- F. Ensures that victim, suspect, and physiological, and reference mouth swab kits are prepared for departmental use or for the collection of evidence at area hospitals.
- G. Performs other tasks as assigned by the Supervising Criminalist.

#### Interns/Volunteers

The local universities serve as a source of interns wishing to gain experience working in a crime laboratory. Interns working in the Forensic Biology Unit will typically have earned or are working toward a four-year or advanced science degree.

Interns and volunteers will assist the unit by performing certain clerical duties, cleaning the laboratory work areas and monitoring the operating temperature of equipment. These activities will always be performed under the direct supervision of the Laboratory Technician or Criminalist. The Laboratory Technician is ultimately responsible for making certain any duties completed by the interns and volunteers are performed correctly.

Depending on the experience level of an intern or volunteer they may also be involved in laboratory projects such as the validation of new technologies. This validation work will always be performed under the direct supervision of the DNA Technical Manager and within Forensic Biology Policy.

## 7. FORENSIC CHEMISTRY UNIT

#### UNIT DESCRIPTION

The Forensic Chemistry Unit (FCU) is budgeted for eight positions; one supervising Criminalist, one laboratory technician, and six criminalists. The unit is open for customer service from 0730 to1700 hours. Work schedules must be pre-approved by the unit supervisor.

The unit is located at Police Headquarters. Alcohol and Narcotics analyses are performed on the 6<sup>th</sup> floor in the Forensic Chemistry Unit.

#### UNIT FUNCTIONS

This unit performs controlled substance analysis, alcohol analysis, and maintains the evidential breath alcohol instruments and trains officers to perform breath alcohol testing.

General duties performed include:

- A. Perform analysis on suspected controlled substances in the form of solids, liquids, pills, and plant material,
- B. Analysis of blood samples for alcohol content,
- C. Court testimony regarding all aspects of analysis and interpretation of results,
- D. Equipment maintenance and calibration, and
- E. Staff work (generating reports, ordering supplies, validations) as needed.

#### JOB DUTIES

#### Supervising Criminalist

The duties of the supervisor in the Forensic Chemistry Unit include:

- A. Supervision of the analysis of alcohol in blood, breath, and urine samples as well as the supervision of the analysis of controlled substances,
- B. Ensure proper procedures are followed,
- C. Review and initial final case packets to ensure proper documentation of analytical procedures,
- D. Ensure adequate unit staffing levels every day,
- E. Ensure that new analysts receive the proper training and pass appropriate competency tests, written tests, and mock courts,
- F. Serve as a liaison between the contractors, department, district attorney's office, city attorney's office, and other end users of the laboratory,
- G. Inspect logs and records to ensure unit policies are being followed,
- H. Evaluate employee performance,
- I. Prepare staff reports:
  - 1. budget requests
  - 2. monthly unit statistics
  - 3. special projects
- J. Support and represent the staff in all professional endeavors in the unit to upper management, and
- K. Monitor and approve electronic time cards.

#### Criminalist I and II

The duties of the criminalists in the Forensic Chemistry Unit include:

- A. Analysis of impounded evidence including blood, urine, and controlled substances,
- B. Maintain neat work environment,
- C. Monitor instruments and arrange for repair as needed,
- D. Prepare reagents as needed,
- E. Prepare legible notes and/or reports on all substances analyzed,
- F. Maintain proper chain of custody for evidence,
- G. Testify in court on analyses when called to do so,
- H. Keep supervisor informed of operations, problems, and unusual circumstances,
- I. Carry out special projects as requested by supervisor,
- J. Act as a technical resource for the Department and others as needed,
- K. Assist other analysts with training in analytical and administrative procedures and technical problems,
- N. Participate in the development of new procedures,

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- O. Testify as alcohol and controlled substance analyst and as an alcohol impairment expert,
- Q. Prepare alcohol standards and quality control samples for use in analytical procedures,
- R. Perform and record calibration checks on breath testing instruments and maintain maintenance records of unit instruments used in casework,
- S. Prepare monthly statistics,
- T. Participate in and/or organize drinking studies as needed,
- U. Prepare individual reports for detectives for crimes other than Health and Safety and DUI violations. These include vice cases, sex crime cases, and homicides,
- V. Follow laboratory, Title 17, and safety procedures, and
- W. Teach breath instrument operator classes.

## Criminalist III (Technical Lead)

The duties of the Criminalist III in the Forensic Chemistry Unit also include those of the Criminalist I and II in addition to:

- Coordinating the technical operation of the unit in accordance with quality assurance standards.
- Creating, reviewing, and/or revising technical policies and procedures prior to final approval by the Quality Manager.
- Coordinating training of new and current employees in analytical procedures and ensuring completion of training documentation.
- Developing technical training plans in the unit.
- Coordinating, reviewing, and approving new method and instrument validations and verifications, including documentation, prior to final approval by the Quality Manager.
- Acting as a technical reference for the unit Supervisor, Quality Manager, and any auditors.
- Acting as a mediator, when necessary, in the technical review process.
- Providing technical consultation, as needed, to members of the unit.
- Working with the supervisor and Quality Manager to ensure criminalist compliance with QA, laboratory, and unit policies and procedures.
- Evaluating new technologies to determine if appropriate for the unit.
- When technical problems are identified, coordinating with the Quality Manager and Supervisor to ensure appropriate corrective actions are taken.

## Laboratory Technician

The duties of the lab technician in the Forensic Chemistry Unit include:

- A. Order needed supplies for Forensic Chemistry unit
- B. Prepare and stock reagents as needed.

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- C. Wash and stock lab ware as needed.
- D. Assist in monitoring instruments and arranging for repair as needed.
- E. Follow proper safety procedures.
- F. Keep supervisor informed of operations, problems, and unusual circumstances.
- G. Maintain proper public relations.
- H. Carry out special projects as requested by the supervisor.
- I. Participate in the development of new procedures, as needed.
- J. Help maintain and stock the unit and Room 138, breath instrument room.
- K. Assist Criminalist in breath instrument maintenance and quality assurance.
- L. Dispose of hazardous material and chemical waste as needed.

## 8. FORENSIC TECHNOLOGY UNIT

The Forensic Technology Unit (FTU) is located at Police Headquarters on the 6<sup>th</sup> floor. Office hours are based on an alternative work schedule and generally run from 0600 to 1730 hours. Staffing consists of four full time criminalists trained to provide laboratory analyses of mobile devices and related materials. All positions within this unit are currently filled by civilians.

The unit is responsible for extracting and/or examining digital evidence stored in mobile devices for the purpose of providing investigators with evidence that may assist in their investigation.

The unit also maintains the cell phone forensic tools distributed throughout the department by deploying system updates and performing any troubleshooting.

The examiners are available for needed technical assistance, such as recovery of data from corrupted storage media, conversion of audio/video tape to cd/dvd format, management of data files extracted by detectives, etc.

The staff is responsible for training investigators in the use of the department's forensic tools. This is done through providing both computer-based training available through Success Factors, and one-on-one assistance.

#### Criminalist III (Technical Lead)

The duties of the Criminalist III in FTU also include those of the Criminalist I and II in addition to:

- Coordinating the technical operation of the unit in accordance with quality assurance standards.
- Creating, reviewing, and/or revising technical policies and procedures prior to final approval by the Supervisor and Quality Manager.
- Coordinating training of new and current employees.
- Developing technical training modules in the unit.
- Coordinating, reviewing, and approving new method and instrument validations and verifications, including documentation, prior to final approval by the Quality Manager.
- Acting as a technical reference for the unit Supervisor, Quality Manager, and any auditors.
- Acting as a mediator, when necessary, in the technical review process.
- Providing technical consultation, as needed, to members of the unit and other laboratory employees.
- Working with the supervisor and Quality Manager to ensure criminalist compliance with QA, laboratory, and unit policies and procedures.
- Evaluating new technologies to determine if appropriate for the unit.

• When technical problems are identified, coordinating with the Quality Manager and Supervisor to ensure appropriate corrective actions are taken.

#### Criminalist I and II:

Job duties include, but are not limited to:

- 1. Extraction of data from mobile devices
- 2. Analysis of extracted data
- 3. Preparing reports on mobile device examinations
- 4. Court testimony
- 5. Training investigators in evidence collection pursuant to mobile device examinations
- 6. Maintaining equipment
- 7. Assuring quality control elements of the program are implemented throughout the process
- 8. Projecting, planning, and reviewing new technologies as they become available.

#### 9. LATENT PRINT UNIT

#### UNIT DESCRIPTION

The Latent Print Unit is located on the 6<sup>th</sup> floor (room 670) of the San Diego Police Department Headquarters building. - The hours of operation are Monday through Friday, 0600 hours until 1700 hours. The office is closed Saturday, Sunday and holidays.

The Latent Print Unit is composed of two Supervisors, one Latent Print Examiner III (Technical Lead), eleven Latent Print Examiners, and three Latent Print Examiner Aides.

#### LATENT PRINT UNIT FUNCTIONS

The Latent Print Unit is an integral part of the San Diego Police Department Crime Laboratory. The unit is charged with the responsibility of analyzing, comparing, evaluating, and verifying latent print evidence related to crimes.

#### JOB DUTIES

Latent Print Examiner III

The duties of the Latent Print Examiner III include:

- 1. Proposes new latent print technical policies and procedures in compliance with laboratory procedures, accreditation standards, and advances in the latent print field.
- 2. Revises current technical procedures.
- 3. Assists in the training structure of laboratory personnel in latent print analysis and comparisons.
- 4. Supports method validations by writing or reviewing validation studies.
- 5. Recommends new technical equipment and supplies.
- 6. Troubleshoots and resolves equipment issues.
- 7. Serves as a technical resource for the unit to help resolve technical issues.
- 8. Acts as a mentor that provides technical support to laboratory personnel in the latent print unit.
- 9. Leads technical briefings.
- 10. Works with the ALPS coordinator to resolve technical issues with automated fingerprint identification systems and automated archive systems.
- 11. Required to perform the tasks of the Latent Print Examiner II classification.

#### Latent Print Examiner I and II

The duties of the Latent Print Examiner I and II include:

- 1. Analyze latent print evidence to determine suitability.
- 2. <u>Perform latent print comparisons for identifications.</u>
- 3. Search latent print evidence through Automated Latent Print Systems (ALPS).
- 4. Perform technical reviews of casework in areas of competency
- 5. Collect known print exemplars, when needed
- 6. Provide training to latent print unit personnel.
- 7. Consults with attorneys for trial preparation.
- 8. Prepares materials for presentation of evidence in court.
- 9. <u>Serves as an expert witness in Municipal, Superior, and Federal Courts on all phases of latent print examination.</u>
- 10. Prepare and maintain records of examinations performed.
- 11. Writes official reports, indicating what evidence was submitted, the results of the examination, and the disposition of the items of evidence.

#### Latent Print Examiner Aide

The duties of the Latent Print Examiner Aide include:

NOTE: Latent Print Examiner Aides are assigned to perform routine analyses of latent print evidence and perform administrative responsibilities for the Latent Print Unit.

Latent print comparisons and identifications would be worked by the Latent Print Examiner I, II, or III.

- 1. Analyze latent print evidence to determine suitability.
- 2. Search latent print evidence through Automated Latent Print Systems (ALPS).
- 3. Perform technical reviews of casework in areas of competency.
- 4. Collect known print exemplars, when needed.
- 5. Retrieve and return Latent Print evidence for the unit.
- 6. Verify case information recorded on evidence packaging for completeness and accuracy.
- 7. Distribute email correspondence for the Latent Print unit.
- 8. Coordinate with Department personnel when officer corrections are needed.
- 9. Scan, distribute, and file case packet information for the unit.
- 10. Maintain records for the ALPS award recognition program.
- 11. Prepare and maintain records of examinations performed.
- 12. Writes official reports, indicating what evidence was submitted, the results of the examination, and the disposition of the items of evidence.

#### Supervising Latent Print Examiner

The duties of the Supervising Latent Print Examiner include, but are not limited to, the following:

- 1. Monitors the work of Latent Print Examiners in the analysis, comparison, evaluation, and verification of latent prints.
- 2. Prioritizes and schedules the work of subordinates in order to provide the timely identification of latent prints for police investigations.
- 3. Identifies training needs of the Latent Print unit, and coordinates training or instruction to subordinates to ensure that competencies and standards are met and maintained.
- 4. Reviews case reports prepared by subordinates to ensure they have been completed accurately and comply with departmental procedures in order to improve department operations.
- 5. Develops or evaluates new policies or proposals for changes in department procedures in order to improve department operations.
- 6. Monitors expenditures and accounting to ensure that given budgetary allocations are not exceeded.
- 7. Reviews unit needs and prepares or evaluates budget recommendations.
- 8. Coordinates equipment and supplies as necessary to ensure the section has the required materials on hand to perform tasks in a timely manner.
- 9. Serves as a liaison between the Crime Lab and the District Attorney, courts, coroners, and other departments, divisions or agencies to discuss or exchange information related to police investigations and evidence.

- 10. Monitors the court testimony of subordinates to ensure they can clearly and adequately present information in reference to a case in compliance with department procedures.
- 11. Writes informational memoranda, notes, or reports for San Diego Police Department use.
- 12. Speaks with crime lab personnel from other agencies to exchange information and coordinate activities in areas of mutual responsibility and interest.
- 13. Evaluates incoming incidents, cases, or reports to determine which warrant the attention of review of the Crime Lab Manager.
- 14. Performs employee evaluation duties by observing and analyzing job performance, preparing performance reports, and discussing progress and/or problem performance with employees.
- 15. Conducts interviews, evaluates candidates, and selects or recommends employees for hire.

## **10. POLYGRAPH UNIT**

#### UNIT DESCRIPTION

The Polygraph unit consists of interview and interrogation specialists (polygraphers) who conduct polygraph exams for both Investigations and Backgrounds. The unit is budgeted for three full-time examiners and is located on the 5<sup>th</sup> floor of the Police Headquarters building.

The examinations are scheduled by appointment. All examinations are recorded, and real time observation is available for the investigator.

A polygrapher is available for emergency call back for critical investigative needs. The examiners are able to carry portable equipment to area command locations for off-site tests.

#### JOB DUTIES

#### Interview and Interrogation Specialist I, II, and III

- A. Schedule polygraph examinations,
- B. Conduct pre-employment and criminal examinations in a competent, professional manner,
- C. Discuss cases with detectives prior to conducting the polygraph examination.
- D. Prepare accurate reports for conducted polygraph examinations.
- E. Conducting technical reviews.

- F. Rotate on-call responsibilities between examiners in the Polygraph Unit.
- G. File all examinations electronically for storage.
- H. Inform the Supervisor of needed equipment repairs or replacements.
- I. Alert the Supervisor to problems that develop which cannot be routinely handled.

#### Polygraph Unit Supervisor (Supervising Criminalist)

The Polygraph Unit Supervisor will supervise the administration and daily operation of the polygraph examiners, to include:

- A. Written evaluation of employees' performance on a schedule compliant with City policy.
- B. Ensure that the polygraph examinations are scheduled and conducted in a competent, professional manner.
- C. Review and approve training for polygraph examiners commensurate with the financial resources of the SDPD.
- D. Requisition necessary equipment.
- E. Maintain and prepare reports, statistics, and data relative to polygraph activity.
- F. Review polygraph examination reports.
- G. Conduct briefings with and about the Polygraph Unit as requested by the command.
- H. Clear pending requests in the Laboratory case tracking data base.

Quality management is a prime function and responsibility of every member of the Forensic Science Section. It is through rigorous quality assurance practices that the laboratory can ensure it is providing a reliable service to the Department.

The laboratory will maintain a quality assurance program administered by a quality manager (QM).

The quality management program consists of the following elements:

- Training,
- Methods selection, development, validation and documentation,
- Technical and administrative case review,
- Proficiency testing,
- Testimony monitoring, and
- Inspections/audits.

#### JOB DUTIES

#### The role of the Quality Manager is to:

- Administer the laboratory's proficiency testing program and (along with the unit supervisor) evaluate results and recommend corrective steps when warranted,
- Maintain training documentation,
- Schedule and coordinate annual audits of each technical laboratory unit, including an audit of management team practices and how they affect the quality of laboratory service. The crime laboratory manager will audit the unit supervisor effectiveness.
- Maintain and update the laboratory quality manual,
- Evaluate instrument calibration, performance, and maintenance records,
- Review and issue unit SOP and technical procedures,
- Monitor the validation of new technical procedures,
- Along with unit supervisors, investigate technical problems, develop remedial actions, and verify their implementation,
- Propose corrections and improvements to the laboratory's quality management program to the laboratory manager, and
- Maintain electronic records related to quality control monitoring which include:
  - 1. training records
  - 2. testimony evaluation
  - 3. proficiency tests

- 4. corrective steps taken where technical problems occur
- 5. statement of qualifications.

#### The role of the Crime Laboratory Manager is to:

- Set general laboratory and quality assurance policies, and
- Resolve any disagreement that arises in the implementation of these quality policies.

#### UNIT DESCRIPTION

Office hours are based on an alternative work schedule and generally run from 0900 to 1830 hours. Staffing currently consists of one full-time Document Examiner trained to provide laboratory analyses of document related materials.

#### UNIT FUNCTIONS

The unit is responsible for examining questioned documents evidence; drawing conclusions about source, authenticity, custody, and content, and issuing technical reports.

The examiner gives expert testimony in court regarding examination results.

#### JOB DUTIES

#### The Questioned Document Examiner is responsible for the following:

- A. Signature comparisons,
- B. Handwriting/hand printing comparisons,
- C. Number comparisons,
- D. Office machine comparisons,
- E. Mechanical impression comparisons,
- F. Trace/latent evidence examination,
- G. Altered document examination,
- H. Chemical and mechanical erasure detection,
- I. Forgery detection,
- J. Fabricated document detection,
- K. Printing process analysis,
- L. Paper and ink analysis,
- M. Exemplar collection,
- N. Other miscellaneous document examination/preparation, and

#### Unit Supervising Criminalist

- A. Assigns casework
- B. Compiles monthly statistics reports on casework,
- C. Conducts administrative casework review,
- D. Addresses the administrative needs of the unit, and
- E. Completes personnel evaluations.

The safety program is administered by the designated safety officer under the authority of the crime laboratory manager.

The safety program involves inspections of various elements of unit safety, including stored chemicals, hood efficiency, management of biological and hazardous waste materials, safety training of new employees, training on annual requirements, and regular documentation of various safety activities.

#### The Safety Officer is responsible for coordinating:

- A. Weekly, monthly, and quarterly inspections,
- B. Regular inspections of eyewashes and showers,
- C. Required safety training of employees,
- D. Disposal of biological and chemical hazardous waste,
- E. Maintenance of required safety documentation, and
- F. Monthly, quarterly, and annual safety reports.

#### UNIT DESCRIPTION

The general hours of operation of the Trace Evidence Unit are 0700 to 1600 hours. Three criminalists are assigned full time to the Trace Evidence Unit. These criminalists are under the direction of a supervising criminalist. The Trace Unit operates on the 6<sup>th</sup> floor of the Police Headquarters building.

#### UNIT FUNCTIONS

The criminalists in the Trace Evidence Unit perform several different types of analyses. These include examinations in the areas of:

- hairs and fibers
- paint
- impression evidence
- arson debris
- gunshot residue
- miscellaneous examinations
- crime scene reconstruction

#### Criminalist I

- A. Performs a variety of trace evidence analyses,
- B. Completes documentation of casework through generation of notes and report,
- C. Testifies in court as to result,
- D. May participate in crime scene investigation, and
- E. Assists in joint investigations such as vehicle processing.

#### Criminalist II

- A. Performs a variety of trace evidence analysis
- B. Generates casework documentation and reports, interprets results in court
- C. Performs crime scene reconstruction
- D. Will assist in joint investigations such as vehicle processing with Crime Scene Specialists.

#### Supervising Criminalist

- A. Assigns and prioritizes casework
- B. Interviews and hires employees
- C. Reviews and establishes policy
- D. Reviews reports and examines case notes
- E. Reviews and evaluates subordinates' performance
- F. Orients new employees on Department Policies and Procedure
- G. Coordinates training of new employees in analytical procedures
- H. Prepares budget requests
- I. Keeps track of workload statistics
- J. Reviews and revises analytical procedures when appropriate
- K. Holds regular meetings to keep staff informed about Department, Laboratory, and Criminalistics events
- L. Prepares reports as required by the Commanding Officer or Crime Lab Manager.

#### UNIT DESCRIPTION

The Narcotic Vault is located on the 5<sup>th</sup> floor in the Headquarters Business Center. The Vault is staffed by one property and evidence supervisor and two police property and evidence clerks (PPEC). The Vault is staffed from 0630 to 1600 hours. The service counter is open from 0630 to 1600 hours for release or return of evidence to court or for analysis. This includes narcotic impounds as well as blood and urine samples.

The Narcotics Vault is responsible for the storage and tracking of blood, urine and narcotic related substances impounded at the San Diego Police Department facilities. These items are held until they no longer have evidentiary value. Narcotic analysis result information is available to officers, detectives, investigators, by accessing the database or over the phone, through the Vault. Vault personnel will:

- Pull narcotics for destruction on a regular basis
- Participate in narcotic burns
- Participate in the annual vault inventory
- Transport narcotics from area stations
- Pull blood and urine samples ready for destruction every two weeks
- Retrieve blood and urine samples needing alcohol or tox testing impounded in the Property Room, when requested, and
- Receive blood and urine samples impounded in Room 138.

#### JOB DESCRIPTION

#### Police Property and Evidence Clerk

- A. Receive and separate narcotic impounds,
- B. File impounds in the vault,
- C. Process impounds for disposal and destruction,
- D. Record chain of custody of impounds,
- E. Release information over phone to investigators regarding analytical results,
- F. Notifies officers of non-sealed narcotics evidence or any other discrepancies that need to be addressed,
- G. Receive blood and urine samples from Room 138,
- H. File blood/urine samples,
- I. Prepare splits of blood or urine samples as directed by subpoenas,
- J. General housekeeping,
- K. Participation in the destruction of blood, urine, and narcotics evidence,
- L. Assists in completion of yearly Vault inventory, and
- M. Other tasks as assigned by the supervisor.

#### Police Property and Evidence Clerk Supervisor

- A. Verify narcotics samples (in percentage or as a whole) marked for destruction
- B. Coordinate the "burn" (destruction of narcotics) with SWAT/Narcotics, the burn facility, laboratory staff, truck rental vendor, and Fiscal,
- C. Interface with Canine Unit for release and destruction of narcotics samples for dog training purposes,
- D. Prepares bulk samples, as needed, for immediate destruction according to Health and Safety codes,
- E. Monitors and evaluates employee performance,
- F. Directs the completion of the yearly Vault inventory pertaining to narcotics impounds,
- G. Prepares reports, memos, and budgetary documentation as directed by the commanding officer or laboratory manager,
- H. Initiates follow-up procedures for unsealed evidence notices, and
- I. Compilation of Unit statistics.

#### UNIT DESCRIPTION

The San Diego Regional Computer Forensics Laboratory (RCFL) is located at 10385 Vista Sorrento Parkway and is housed on the first floor of the FBI's San Diego Field Office. The RCFL is a multi-agency task force devoted entirely to the examination of digital evidence in support of criminal and national security investigations. The unit contains both sworn and non-sworn personnel from State, Local and Federal agencies and is staffed from 0600-1700 hours, Monday through Friday.

Each RCFL is governed by an Executive Board that operates in a manner similar to that of a board of directors. The San Diego RCFL's Executive Board is composed of senior representatives from each of the participating agencies, and is chartered to review any policy, procedure, practice and/or rule affecting the day-to-day operations of the RCFL. The LEB does not hold any legal authority. The San Diego RCFL is ASCLD/LAB accredited since 2008.

#### UNIT FUNCTIONS

The primary mission of the RCFL is to effectively meet the digital forensics needs of all law enforcement agencies and departments throughout the San Diego and Imperial Counties. The SDRCFL's casework is prioritized according to the magnitude and time-sensitivity of the crime under investigation – regardless of the identity or jurisdiction of the submitting law enforcement agency or department.

Personnel assigned to the RCFL assist with the seizure of digital evidence, conduct impartial and objective analysis of digital evidence using the best available tools and procedures available, and; rigorously train its Examiners so they may effectively testify in court when needed. The RCFL also provides training to all participating agencies and departments located in its service area, in the proper techniques for seizing, storing and analyzing computer evidence—at no cost to these agencies.

The San Diego Police Department currently provides two Detectives to the RCFL. Investigators and supervisors are available for call out on cases as needed. These detectives report to the Crime Laboratory Manager or Assistant Crime Laboratory Manager.

#### JOB DUTIES

#### Police Detective

The San Diego Police Department currently assigns police Detectives to the RCFL as their participating members of the task force. The Detectives are trained by both the FBI's Computer Analysis Response Team (CART) and various outside vendors to obtain the CART Computer Forensic Examiner certification. As such, the role of the police Detective at the RCFL is to conduct impartial examinations of submitted digital evidence and not to act as the investigator or case agent. Detectives from the San Diego Police Department may examine evidence from agencies other than our department just as examiners from other agencies may examine evidence from the San Diego Police Department.

The list of duties of the police detectives include, but are not limited to, the following:

- A. Plans and prioritizes assigned casework,
- B. Acquires and utilizes suitable hardware and software interfaces to handle specific data handling situations,
- C. Ensures to the best of their ability that original evidence is not altered or destroyed while in the examiner's care and custody,
- D. Secures all signed out case evidence and derivative evidence according to security policy,
- E. Documents the forensic examination in reports and notes according to standards established by the SDRCFL Director,
- F. Identifies, diagnoses and corrects error and problem conditions encountered in the acquisition and examination of original evidence,
- G. Provides on-site or telephonic technical computer forensic assistance to law enforcement entities requesting such assistance in the seizure of original digital media for possible submission to the SDRCFL,
- H. Acts as the subject matter expert on digital forensic matters for Federal, State and local or military law enforcement agencies as requested,
- I. Provides training in forensic examination techniques to law enforcement entities as requested and approved by the SDRCFL Director,
- J. Provides court testimony on assigned case related matter as requested, and
- K. Is available for travel outside the SDRCFL jurisdiction to provide case support to other federal, state or local law enforcement agencies as directed by the SDRCFL Director

#### FEDERAL REIMBURSEMENT

Sworn task force members assigned to the RCFL are allocated vehicles and overtime funding from the Asset Forfeiture Funds program. Each sworn task force member from the San Diego Police Department receives a take home vehicle with a gas card and has the opportunity to work overtime as long as the overtime is related to an active examination, he/she is working. The vehicles and overtime are controlled by FBI policies and procedures.