



Office of Human Resources  
Forensic Scientist Senior - CE3185

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### General Statement of Duties

Performs technical professional level forensic work leading technical, research and development projects, applying the physical sciences to the investigation of crimes, conducting scientific laboratory analyses on physical evidence, scientific research, providing scientific consultation, and testifying as expert witness in courts of law.

### Distinguishing Characteristics

This class performs specialized, professional level forensic work including applying the physical sciences to the investigation of crimes, conducting scientific laboratory analyses on physical evidence, providing scientific consultation, and testifying as expert witness in courts of law. This class is distinguished from a Forensic Scientist II as individuals in this position lead technical, research and development projects with peers. The Forensic Scientist III is additionally distinguished from the Forensic Scientist Supervisor that performs professional and supervisory work over Forensic Scientists including planning, directing performance criteria for laboratory operations, and reviewing analytical casework and quality assurance/control program.

### Essential Duties

Conducts independent chemical and biochemical analyzes of evidence to identify and confirm compositions and interpret results for use in criminal investigations.

Maintains chain-of-custody for evidence by recording description of evidence, laboratory identification numbers, dates, times, tests performed, techniques used, and other pertinent information.

Prepares a detailed, technical report for each case which records findings and interpretation of results and consults with colleagues, investigators, and attorneys about findings and interpretation of results.

Prepares court testimony that links findings with conclusions to withstand scrutiny by adversarial experts, assists with the establishment the scientific soundness of analytical methods, and communicates cases effectively to jurors.

Performs continuously, and not limited to the following technical roles: Technical Lead, Validation Lead, Research Lead, and Lead Trainer for the unit.

By position as a lead trainer, Trains law enforcement personnel, subordinates, colleagues, medical personnel, and interns in the collection, handling, and examination of evidence, the theory of laboratory instrumentation, techniques to link evidence with other findings, and in the principles of effective courtroom presentation.

Operates and performs preventive maintenance and minor repairs on state-of-the-art laboratory and analytical instruments and equipment.

As the result of technical projects, provide recommendations for updates to standard operating procedures, training protocols and manuals.

Performs independent research to develop, validate implement new techniques and recommends acquisition of state-of-the-art instrumentation.

Visits crime scenes to provide technical recommendations on how to identify, collect, and preserve physical evidence.

Actively seeks publication or opportunities to present technical work in conferences.

When leading projects, develops or modifies work plans, methods, and procedures, determines work priorities, and develops work schedules to provide adequate staff coverage.

Provides work instruction and assists employees with difficult and/or unusual assignments. Assigns and distributes work, reviews work for accuracy and completeness, and returns assignments with recommendations for proper completion.

Resolves problems encountered during daily operations and determines appropriate solutions.

Provides feedback to Supervisors that contributes to the development of the performance enhancement plan, documents performance, provides performance feedback, and furnishes information for the formal performance evaluation.

Responds orally to informal grievances related to projects and relays information to the supervisor.

Documents situations which may be cause for disciplinary action and provides this information to the supervisor.

Performs other related duties as assigned.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

### **Competencies**

Attention to Detail – Is thorough when performing work and conscientious about attending to detail.

Decision Making – Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.

Information Management – Identifies a need for and knows where or how to gather information; organizes and maintains information or information management systems.

Interpersonal Skills – Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern, and politeness to others and relates well to different people from varied backgrounds and different situations.

Problem Solving – Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

Reading – Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.

Writing – Writes in a clear, concise, organized, and convincing manner for the intended audience.

### **Knowledge & Skills**

Knowledge of chemical laboratory techniques sufficient to be able to perform quantitative and qualitative chemical analyses of physical evidence.

Knowledge of the scientific method sufficient to be able to apply these principles to a forensic laboratory.

Knowledge of the scientific principles, methods, and processes used to conduct a systematic and objective inquiry including study design, collection, analysis, and interpretation of data, and the reporting of results.

Knowledge of the concepts, principles, and theories of the composition, structure, and properties of substances and of the chemical processes and transformations including uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

### **Level of Supervision Exercised**

By position, performs lead work.

### **Education Requirement**

Masters' Degree in Chemistry, Biochemistry, Biology, Physics, or a directly related natural science.

### **Experience Requirement**

Five (5) years of professional criminalist and forensic analysis experience in toxicology, forensic biology/DNA, drug chemistry, trace-evidence, or other forensic discipline including a demonstrated competence in using job specific analytical instrumentation.

### **Education & Experience Equivalency**

One (1) year of the appropriate type and level of experience may be substituted for each required year of post-high school education.

Additional appropriate education may be substituted for the minimum experience requirements.

### **Licensure & Certification**

By position, requires a valid Driver's License at the time of application.

By position, possession of Certification by the International Association of Identification (IAI). Certified Latent Print Examiner is preferred and if not received at time of employment must be obtained within the twenty four (24) months of employment as a forensic scientist II in the Latent Print Unit.

The Denver Crime Laboratory is an ISO 17025 accredited laboratory system. An individual certification with the (IAI) is required of individuals hired in this class (equal to or exceeding forensic scientist II) to enable this individual to train and mentor other latent print examiners within the unit. The National Academy of Science has recommended in its 2009 report that individual certification of forensic science professionals should be mandatory, and all forensic science professionals should have access to an individual certification process especially in the pattern recognition sciences such as latent print examiners. In determining appropriate standards for accreditation and certification, all forensic laboratories should take into account established and recognized international standards, such as those published by the International Organization for Standardization (ISO). No person (public or private) should be allowed to practice in a forensic science discipline or testify as a forensic science professional without certification and that approach is supported by the Denver Crime Laboratory for all of its units utilizing pattern recognition methodologies.

It is a condition of employment that the Denver Police Forensics & Evidence Division form for consent for collection of a DNA sample be completed at the time of hire.

Licenses and certifications must be kept current as a condition of employment.

### **Working Environment**

Subject to varying and unpredictable situations.

Subject to many interruptions.  
Pressure due to multiple calls and inquiries.

### Level of Physical Demand

1-Sedentary (0-10 lbs.)

### Physical Demands

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

Accommodation: Ability to bring objects into focus.

Balancing: Maintaining equilibrium.

Carrying: Transporting or moving an object.

Color vision: Ability to distinguish and identify different colors.

Crouching: Positioning body downward and forward.

Depth Perception: Ability to judge distances and space relationships.

Eye/Hand/Foot Coordination: Performing work through using two or more body parts or other devices.

Feeling: Perceiving attributes of objects by means of skin receptors, communication, or otherwise.

Field of Vision: Ability to sharply detect or perceive objects peripherally.

Fingering: Picking and pinching, through use of fingers or otherwise.

Handling: Seizing, holding, grasping, through use of hands, fingers, or other means.

Lifting: Moving objects weighing no more than 10 pounds from one level to another.

Reaching: Extending the hands and arms or other device in any direction.

Repetitive motions: Making frequent or continuous movements.

Standing: Remaining in a stationary position.

Stooping: Positioning oneself low to the ground.

Talking: Communicating ideas or exchanging information.

Walking: Ability to move or traverse from one location to another.

### Background Check Requirement

Criminal Check

Education Check

Employment Verification

Licenses/Certification

By position, Motor Vehicle Record

### Assessment Requirement

None

### Probation Period

Six (6) months.

**Class Detail**

**Pay Grade:** EX-13

**FLSA Code:** Y

**Established Date:** 7/14/2019

**Established By:** SO

**Revised Date:** 7/15/21

**Revised By:** GT

**Class History:**

Revised title.