Office of Human Resources

Forensic Scientist II – CE0412

General Statement of Duties

Performs full performance 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 counts 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 counts of law. This class is distinguished from a Forensic Scientist I that performs entry level professional forensic work while receiving on-the-job training in the methods, practices, procedures, and equipment of forensic science by applying physical sciences to the investigation of crimes and conducting scientific laboratory analyses on physical evidence. The Forensic Scientist II is distinguished from the Forensic Scientist III that performs technical lead work with peers and is 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.

Guidelines, Difficulty and Decision-Making Level

Guidelines are generally but not always clearly applicable, requiring the employee to exercise judgment in selecting the most pertinent guideline, interpret precedents, adapt standard practices to differing situations, and recommend alternative actions in situations without precedent.

Duties assigned are generally complex and may be of substantial intricacy. Work assignment is performed within an established framework under general instructions but requires simultaneous coordination of assigned functions or projects in various stages of completion.

Employee is responsible for determining time, place, and sequence of actions to be taken. Unusual problems or proposed deviations from guidelines, practices, or precedents may be discussed with the supervisor before being initiated.

Level of Supervision Received & Quality Review

Under administrative supervision, the employee has personal accountability for carrying out an assigned function, program, or project within the scope of established guidelines and objectives and is expected to resolve problems that arise in the normal course of the work. Completed work is generally reviewed for soundness of judgment, conclusion, adequacy, and conformance to policy.

Interpersonal Communication & Purpose

Contacts with the public or employees where explanatory or interpretive information is exchanged, defended, and gathered and discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised

None
**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.

Under the guidance of a Forensic Scientist III or Forensic Supervisor provides training to 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 the principles of effective courtroom presentations.

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

Performs research or supports validation projects under the direction of a Forensic Scientist III or Forensic Supervisor, to develop and implement new techniques and recommends acquisition of state-of-the-art instrumentation.

By position, visits crime scenes to independently identify, collect, and preserve physical evidence.

By position provides input to, work plans, methods, procedures, and work priorities.

Resolves problems encountered during daily operations and determines appropriate solutions with escalation to Supervisor when needed.

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.

**Education Requirement**

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

**Experience Requirement**

Three (3) 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.

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<th>Working Environment</th>
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<tr>
<td>Subject to varying and unpredictable situations.</td>
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<td>Subject to many interruptions.</td>
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<td>Pressure due to multiple calls and inquiries.</td>
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<th>Level of Physical Demand</th>
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<tbody>
<tr>
<td>1-Sedentary (0-10 lbs.)</td>
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<th>Physical Demands</th>
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<td>(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):</td>
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- **Standing**: remaining on one’s feet in an upright position.
- **Walking**: moving about on foot.
- **Carrying**: transporting an object, usually by hand, arm, or shoulder.
- **Balancing**: maintaining body equilibrium to prevent falling over.
- **Stooping**: bending the body by bending spine at the waist.
- **Crouching**: bending body downward and forward by bending legs.
- **Reaching**: extending the hand(s) and arm(s) in any direction.
- **Handling**: seizing, holding, grasping, or otherwise working with hands.
- **Fingering**: picking, pinching, or otherwise working with fingers.
- **Feeling**: perceiving attributes of objects by means of skin receptors.
- **Talking**: expressing or exchanging ideas by means of spoken words.
- **Hearing**: perceiving the nature of sounds by the ear.
- **Repetitive motions**: making frequent movements with a part of the body.
- **Eye/hand/foot coordination**: performing work through using two or more.
- **Lifting**: raising or lowering an object up to 10 pounds.
- **Far acuity**: ability to see clearly at 20 feet or more.
- **Near acuity**: ability to see clearly at 20 inches or less.
- **Depth Perception**: ability to judge distance and space relationships.
- **Field of Vision**: ability to see peripherally.
- **Accommodation**: ability to adjust vision to bring objects into focus.
- **Color Vision**: ability to distinguish and identify different colors.
Lifting: raising or lowering objects weighing no more than 10 pounds, from one level 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: E-812
- FLSA Code: Y
- Management Level: 10
- Established Date: 9/21/2018
- Established By: Lori Schumann
- Revised Date: 5/31/19
- Revised By: Susan O'Neill
- Class History: 5/31/19 changes to incorporate new Forensic Scientist III.