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DOUGLAS COUNTY SHERIFF'S OFFICE

JOB TITLE: FORENSIC CHEMIST

Exempt: No Job Type: 4056E

Pay Grade: E405 Department: Office of the Sheriff

Approved By: Sheriff Darren Weekly **Date:** 01-10-23

General Duties: Performs a variety of crime laboratory forensic analysis duties in criminal proceedings by the Office and other related agencies. Performs professional forensic work conducting qualitative chemical analysis of evidence. Must prepare technical reports and have ability to testify in criminal proceedings.

General Duties: This position reports to the Douglas County Sheriff's Office and works at The Unified Forensic Lab.

The Unified Forensic Lab (UFL) provides forensic laboratory services to law enforcement agencies within the City of Aurora, Arapahoe County, and Douglas County in Colorado. The UFL is an entity designed to support all investigative functions of the agencies it serves. Responsible for all technical issues regarding the Chemistry section that provides the comprehensive forensic Chemistry service to the law enforcement agencies within these jurisdictions and others, as necessary. Performs mandatory technical review of cases and provides scientific consultation as necessary. Performs Chemistry analysis on case work to include interpretation of test results, forming opinions and conclusions, preparing reports, and testifying as an expert witness.

Supervision Exercised: No supervision exercised. May give guidance to investigators, and other personnel as well as training new chemists.

Supervision Received: Works under general supervision of the Chemistry Section Supervisor Work is assigned on a case-by-case basis and reviewed for accuracy and completeness.

Examples of Duties and Responsibilities:

- Conduct independent chemical analyses of evidence to identify and confirm compositions and interpret results.
- Analyze drug evidence for the presence of controlled substances as defined by the Colorado State Statutes and Federal Department of Justice.
- Determine the best method or methods to perform analysis.
- Interpret test results obtained from the proper microscopic, chemical, and instrumental methods and prepares detailed reports of analysis.
 - Operate, calibrate, troubleshoot, and perform preventative maintenance and repairs on state-of-the-art laboratory and analytical instruments and equipment, to include Gas Chromatograph / Mass Spectrometer (GC/MS), Fourier Transform Infrared Spectrometer (FTIR), microscopes, balances, and others.

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 Prepare a variety of reagents, solutions, standards, and controls using established forensic laboratory practices.

- Review and assist in revising standard operating procedures, training, quality control, and safety manuals, etc., within the chosen/related discipline.
- Assist with and/or coordinate laboratory maintenance, audits, and certifications.
- Regularly testifies as an expert witness in a court of law while maintaining composure under intense cross-examination.
- Perform independent research to develop and implement new techniques and recommends acquisition of instrumentation.
- Complete annual proficiency testing in chosen discipline.

Other Duties as Assigned to Include:

- Handle physical evidence, implement evidence control, document, and maintain chainof-custody, and preserve the integrity of evidence examined.
- Preparation of written and oral reports.
- Must successfully complete a competency test in controlled substance analysis prior to performing casework. Must maintain proficiency through successful completion of appropriate proficiency testing.
- Maintenance and stocking of crime lab supplies.
- Teaching/training in specific specialty areas.
- Court room testimony

Note: The successful applicant must be able to perform ALL the above job functions, unassisted, and at a pace and level of performance consistent with actual job requirements

Minimum Requirements:

- Must be eligible to work in the United States.
- A bachelor's or an advanced degree in a chemical, physical, or biological science or forensic science (ISO 17025/AR 3125)
- Working knowledge of general forensic science and associated responsibilities is required.
- Three years' experience in a laboratory setting. Prior exposure to forensic techniques or case work is highly desirable. A combination of higher education and experience may be considered.
- Knowledge of the operation, maintenance and repair of complex laboratory instruments.
- Thorough knowledge of scientific principles, standard laboratory procedures, analytical methods, and standard reagents. Knowledge of criminal laboratory procedures.
- Possess a valid Colorado driver's license at time of employment, or ability to obtain a Colorado driver's license.
- Ability to pass various qualifying examinations and background investigation.
- Have no convictions for felonies or crimes of moral turpitude.

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Essential Job Functions:

<u>Computer Skills:</u> Ability to utilize and understand a variety of computer systems and software applications.

<u>Mathematical Ability:</u> Ability to perform and interpret statistical calculations and complex mathematical principles and procedures.

Office Policies and Procedures: Demonstrates considerable knowledge of the ethical guidelines applicable to the position as outlined by professional organizations and/or federal, state, and local laws, rules and regulations.

<u>Legal Knowledge</u>: Demonstrates a working knowledge of criminal and procedural law with an emphasis on the rules of evidence. Ability to testify in court. Ability to read and interpret court documents.

<u>Investigative Knowledge:</u> Ability to recognize, identify, and document physical evidence pertinent to an identified scene and/or criminal investigation.

<u>Mental Abilities</u>: Ability to reason and apply logic in a multi-tasking environment. Comprehends and processes information quickly and accurately. Retains relevant information. Ability to exercise independent judgment in emergency and routine situations and to adopt quick, effective, and reasonable course of action.

<u>Physical Skills:</u> Must possess sufficient strength to lift, move, and push large items up to 50 pounds. Must be able to walk, stoop, kneel, reach and move about any given area for lengthy periods of time. Must possess visual and fine/gross motor skills for the use of laboratory equipment, processing requirements, and collection techniques.

<u>Safety</u>: Applies appropriate safety precautions in hazardous and potentially dangerous situations. potential exposure to hazardous materials, chemicals, narcotics, and blood borne pathogens; safeguards provided.

Shift Preparation: Possess and maintain ability to work and function effectively in a laboratory.

<u>Social Skills:</u> Establish and maintain effective relationships with peers, supervisors, and the public. Ability to interact with diverse groups and cultures in a complex society.

<u>Verbal Skills:</u> Speaks English clearly. Ability to communicate professionally with law enforcement officers, attorneys, public and peers.

<u>Written Communication and Data Entry:</u> Prepares reports, memos, forms, data entry, etc. This includes the documentation of own observations and actions. Writes legibly using acceptable English, grammar, punctuation and spelling. Assures accuracy of information.

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<u>Testimony:</u> Must be able to provide credible testimony in a court of law or any other legal proceeding or investigation.

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Consequence of Error: Work involves a multitude of responsibilities, which include, but are not limited to handling evidence, storage and custody of evidence, court presentations and testimony, computer entry and data storage. The consequence of error may result in the dismissal of criminal cases, loss of personal and crime lab credibility, expose department to civil liability and sanctions placed upon the Sheriff's Office.

Other: In the event of an emergency/disaster in or near the County, all County employees are expected to make every effort to be available to assist the County Manager, Elected/Appointed Officials and Department Directors to ensure the continued operation of any and all necessary County functions. This may mean being available to perform additional duties and hours beyond what is normally required. In the event an exempt employee does work more than 40 hours a week in support of County operations during an emergency, such employee may receive overtime or other appropriate wage compensation in accordance with existing County policies or at the discretion of the County.