

**DOUGLAS COUNTY
SHERIFF'S OFFICE**

JOB TITLE: CRIME LAB FORENSIC ANALYST – DNA

Exempt: No

Pay Grade: E405

Approved By: Sheriff Darren M. Weekly

Job Type: 4055E

Department: Office of the Sheriff

Date: 01-10-23

General Duties: This position reports to the Douglas County Sheriff's Office and is assigned to the Unified Metropolitan Forensic Crime Lab in the Forensic Biology/DNA section performing serological examinations and DNA analysis.

The Unified Metropolitan Forensic Crime Lab (UMFCL) is an ISO/IEC 17025:2017 accredited laboratory which provides forensic services to law enforcement agencies within Aurora, Arapahoe and Douglas Counties in Colorado. The UMFCL is an entity designed to support all investigative functions of the agencies it serves. Performs biology/DNA 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 crime scene technicians, investigators, and other personnel.

Supervision Received: Works under general supervision of the DNA Supervisor and DNA Technical Leader.

Primary Duties and Responsibilities:

- Responsible for the recognition, identification, documentation and scientific collection of physical evidence pertinent to the investigation of a criminal act.
- Examine and evaluate numerous types of evidence for the presence of biological materials (blood, semen, saliva) from submitted evidence items.
- Documents, handles, packages and receives evidence to maintain chain of custody in accordance with established forensic practices under state and federal laws. Properly maintain and document chain of custody. Isolate, purify and quantify DNA from items of evidence using appropriate techniques.
- Develop genetic profiles using the current accepted methodology. Generate and compare the resultant profiles by use of computer software. Determine the statistical significance of a DNA match.
- Maintain competent analytical skills, experience and expertise in Biology/DNA analysis; regularly demonstrate proficiency in this area.
- Determine the best method or methods to perform analysis.
- Interpret test results obtained from the proper microscopic, chemical and instrumental methods and prepare detailed reports of analysis.
- Operate, calibrate, troubleshoot, and perform preventative maintenance on state-of-the-art laboratory and analytical instruments and equipment.

- Assist with laboratory maintenance, audits and certifications.
- Interpret the scientific data gathered and prepare meaningful reports in a manner to be presented to a judge and jury in a court of law.
- Testifies as an expert in court in relation to scientific principles and examination results.
- Provides scientific assistance to attorneys and regulatory agencies.
- May train law enforcement personnel and crime scene technicians.
- Complete two annual proficiency tests in forensic biology/DNA.
- Preparation of written and oral reports, technical review and testimony to conclusions in courtroom proceedings.

Additional Duties and Responsibilities:

- Teaching/training in specific specialty areas.
- Additional duties as assigned.

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.
- Graduation from an accredited college or university with a bachelor's degree or an advanced degree in a natural science, criminalistics or a closely related field. If performing DNA analysis, the applicant shall meet the education requirements of the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories.
- Minimum of three years DNA casework—experience in an accredited laboratory, conducting independent casework
- Knowledge of the operation, and maintenance 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 within 90 days of hire.
- Ability to pass various qualifying examinations and background investigation.
- Have no convictions for felonies or crimes of moral turpitude.

Essential Job Functions:

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

Mathematical Ability: 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.

Legal Knowledge: 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.

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

Mental Abilities: Ability to reason and apply logic in a multi-tasking environment. Comprehends and processes new 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.

Physical Skills: 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.

Safety: Applies appropriate safety precautions in hazardous and potentially dangerous situations. Experience some exposure to inclement weather at scenes. Potential exposure to hazardous materials, chemicals, narcotics, and blood borne pathogens; safeguards provided. This position has been determined to be an extreme exposure risk to “Bio-hazards” associated with blood-borne pathogens; HIV (aids), HBV (hepatitis B), and air-borne transmissions of TB (tuberculosis). Members are required to use protective equipment and clothing.

Shift Preparation: Possess and maintain ability to work and function effectively in a twenty-four hour on-call environment, to include rotating shifts.

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

Vehicle Operation: Performs vehicle inspections. Operates vehicles during routine operations under varying road, weather and lighting conditions.

Verbal Skills: Speaks English clearly. Ability to communicate professionally with law enforcement officers, attorneys and peers.

Written Communication and Data Entry: 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.

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.

Consequence of Error:

Work involves a multitude of responsibilities, which include, but are not limited to: 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 that 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.