DEPARTMENT: CLASSIFICATION: APPROVED:

NIAGARA COUNTY NON-COMPETITIVE APPROVED NYSCSC 12/13/2023 FEBRUARY 4, 2021

FORENSIC SCIENTIST I (BIOLOGY)

DISTINGUISHING FEATURES OF THE CLASS: The work involves responsibility for collecting evidence, performing scientific testing and analyses of unknown biological substances and evidentiary material required in criminal and civil investigations and autopsies, preparation and presentation of findings in written reports and serving as an expert witness in court. Under the direct supervision of the Senior Forensic Criminalist, the Forensic Scientist I (Biology) will receive extensive on the job training in the specialized areas of forensic biology and DNA analysis. All work is performed in accordance with federal and state accreditation requirements and departmental procedure manuals and guidelines. Does related work as required.

TYPICAL WORK ACTIVITIES:

- 1. Performs qualitative and physical analyses involving chemical, microscopic comparison, photography, DNA extraction and amplification, electrophoresis, computer and statistical analysis, and similar and related techniques;
- 2. Performs biological fluid analysis and forensic DNA comparisons on evidentiary materials and known biological samples;
- 3. Examines and preserves evidence, handles materials and samples before and after analysis in order to maintain them for the chain of custody and evidence control procedures;
- 4. Performs and ensures routine prevention maintenance and calibration of laboratory equipment and analytical instruments; participates in the quality control program within the laboratory; ensures maintenance of proper supplies, equipment, solutions and reagents;
- 5. Performs quality control and quality audit related tasks including technical and peer review of casework;
- 6. Implements and monitors laboratory health and safety policies and procedures;
- 7. Researches technical journals, textbooks, chemical manuals and other source materials to determine the best methods of performing analytical testing and to remain abreast of scientific trends;
- 8. May appear in court litigation as an expert witness regarding forensic analysis;
- 9. May participate in educational training sessions to client agencies;
- 10. May attend meetings on and off-site;
- 11. Participates in public health preparedness activities as trained and assigned.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL

<u>CHARACTERISTICS</u>: Good knowledge of the scientific principles of molecular biology, biochemistry, and genetics as they relate to forensic DNA analysis. Working knowledge of the theory, procedures, and techniques necessary to produce reliable results and conclusions relative to the areas of biological fluid analysis and forensic DNA analysis as they relate to criminal and civil investigations and autopsies. Working knowledge of modern laboratory techniques, procedures, instrumentation, and safety precautions used in the fields of biological fluid analysis and forensic DNA analysis. Ability to record, organize, analyze and present data with scientific accuracy and thoroughness. Ability to demonstrate initiative, motivation, and dependability. Ability to make sound judgments. Physical condition commensurate with the demands of the position. Resourcefulness and integrity; physical condition commensurate with the demands of the position.

CONTINUED

FORENSIC SCIENTIST I (BIOLOGY) CONTINUED

MINIMUM QUALIFICATIONS: Graduation from high school or possession of an equivalency diploma and graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelor's Degree or higher in a natural science, forensic science, criminalistics or a closely related field which must include or be supplemented by a minimum of nine (9) semester or equivalent hours of coursework* (graduate/undergraduate) covering the following subject areas: biochemistry, genetics, and molecular biology, or other subjects which provide a basic understanding of the foundation of forensic DNA analysis **and one (1) of the following**:

- 1. Successful completion of an internship with a minimum of one-hundred (100) hours in a Forensic Laboratory; **OR**
- 2. Employment in a technical position in a Forensic Laboratory for six (6) months within the last five (5) years.

*<u>Note</u>: Biochemistry, genetics and molecular biology must be the primary component of the classes or courses; coursework completed with titles other than those listed may demonstrate compliance through submission of a student transcript, letter from university professor verifying course content, or a course syllabus The DNA training program previously offered by the FBI Laboratory, with graduate credit hours from the University of Virginia, may be applied toward the molecular biology coursework requirement associated with this standard. Statistics/population genetics training or coursework may be satisfied through internal or external mechanisms.

SPECIAL REQUIREMENT: Applicants will be required to undergo a state and national criminal history background investigation which will include a fingerprint check to determine suitability for appointment. Failure to meet the standards for the background investigation may result in disqualification.