DEPARTMENT: <u>NIAGARA COUNTY</u>

CLASSIFICATION: NON-COMPETITIVE APPROVED NYSCSC 12/13/2023

APPROVED: <u>JULY 15, 2021</u>

FORENSIC SCIENTIST I (TOXICOLOGY)

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: The work involves responsibility for conducting routine laboratory tests and procedures for the examination and analysis of blood, tissue and related evidence to detect the presence and nature of toxic substances. Under the direct supervision of the Senior Forensic Criminalist, the Forensic Scientist I (Toxicology) the incumbent will receive extensive on the job training in the specialized areas of forensic toxicology and 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. Prepares tissues and body fluids for routine analysis by appropriate extraction or other processes;
- 2. Analyzes and performs routine chemical, physical, microscopic and instrumental examinations of tissues, fluids, and other evidence to detect and quantify gases, volatile compounds, heavy metals, drugs, and other chemical substances using techniques such as (but not limited to) gas, thin-layer and liquid chromatography, mass spectrometry, immunoassay, flourometry, and infrared, visible and ultraviolet spectrophotometry;
- 3. Meets with attorneys, investigators and other related personnel regarding approaches to analysis and results in pretrial conferences;
- **4.** Participates in public health preparedness activities, scientific meetings, seminars, and other training as assigned;
- 5. Keeps records of observations and notes, and issues reports of test results upon consultation with higher level Forensic Scientists in this series;
- 6. Testifies in court regarding laboratory analyses and the significance of the results as required;
- 7. Performs housekeeping tasks as required, including maintaining laboratory supplies and reference materials;
- 8. Participates in internal and external proficiency testing programs;
- 9. May assist in the inventory, maintenance, storage, and disposition of evidence;
- 10. May respond to crime scenes and assist in field examination and the documentation and collection of evidence.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Working knowledge of the principles and practices of analytical chemistry as it applies to the field of forensic toxicology; working knowledge of the principles, practices, instruments, and methods used in chemical and toxic substance analysis as applied to the collection and analysis of biological samples and criminal evidence; working knowledge of laboratory techniques, analysis and procedures, including various types of spectroscopy, chromatography, mass spectrometry, and spectrophotometry; working knowledge of use of standard laboratory equipment, including microscopes, spectrophotometers, spectrographs, chromatographs, mass spectrometers and computer-based data systems; working knowledge of techniques used to isolate drugs/chemicals from biologic samples including liquid/liquid and solid phase extraction; working knowledge of the penal law and rules of evidence as they relate to the technical analysis and handling of evidence; working knowledge of current developments and trends in crime detection and investigative techniques; skill in the use of laboratory equipment related to toxicological analysis; skill in the application of laboratory and scientific research practices and techniques to toxicological analysis; ability to apply scientific procedures, methodology, and formulas to assigned work; ability to analyze and evaluate information and observations, and to arrive at and construct logical and sound conclusions; ability to explain laboratory analysis techniques, procedures and theories in a clear and concise manner to so that non-scientists may understand the significance of the results obtained using these procedures; ability to operate and perform routine maintenance on complex laboratory equipment; ability to manage data base records and maintain accurate records; ability to communicate effectively, both orally and in writing; ability to prepare and deliver legal testimony accurately and be cross-examined and remain composed in court; ability to establish and maintain effective professional relationships; sound professional judgment; resourcefulness and integrity; physical condition commensurate with the demands of the position.

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FORENSIC SCIENTIST I (TOXICOLOGY) CONTINUED

MINIMUM QUALIFICATIONS:

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, an engineering science, biomedical technology, pharmacology, criminalistics or toxicology, including or supplemented by at least twelve (12) credit hours in chemistry **and one (1) of the following:**

- 1. One (1) year of full-time or its part-time equivalent experience in a forensic laboratory conducting toxicological analysis; **OR**
- 2. Successful completion of an internship with a minimum of one-hundred (100) hours in a Forensic Laboratory; **OR**
- 3. Employment in a technical position in a Forensic Laboratory for six (6) months within the last five (5) years.

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.

NOTE:

Incumbents must pass a competency test prior to assuming casework responsibility, and must pass a proficiency test annually, in accordance with accreditation requirements.

Additional continuing education and training may be required as condition of employment.