

DEPARTMENT: NIAGARA COUNTY
CLASSIFICATION: NON-COMPETITIVE /PENDING NYSCSC APPROVAL
APPROVED: OCTOBER 13, 2023

FORENSIC SCIENTIST III (TOXICOLOGY)

DISTINGUISHING FEATURES OF THE CLASS: This is the third level of the Forensic Scientist (Toxicology) series and serves as the Section Supervisor. The work involves using analytical techniques and knowledge of pharmacology to aid medical or legal investigations of death, poisoning, or drug use. This position differs from Forensic Scientist II (Toxicology) by virtue of the incumbents' ability to handle more complex examinations and cases, increased level of independence, and responsibility for section oversight. All work is performed in accordance with federal and state accreditation requirements and departmental procedure manuals and guidelines. General supervision is received from the Director of Forensic Laboratories. Does related work as required.

TYPICAL WORK ACTIVITIES:

1. Analyzes and performs complex chemical, physical, and instrumental examinations and analysis of tissues, fluids, and other samples to detect and quantify gases, volatile compounds, drugs, and other substances using techniques such as (but not limited to) gas chromatography, liquid chromatography, mass spectrometry, and immunoassay.
2. Evaluates non-routine casework and recommends analytical techniques to obtain relevant results.
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. Interprets analytical data, keeps records of observations and notes, and issues reports of final test results;
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. Responsible for the inventory, maintenance, storage, and disposition of samples;
9. Oversees and/or conducts research, method development, and validation of new technical procedures;
10. Participates in internal and external proficiency testing programs; evaluates the results and suggests remedial action, if necessary;
11. Reviews analytical batch data, case files, and reports of other Toxicology personnel for technical compliance to pre-established laboratory criteria.
12. Oversees training for subordinate laboratory personnel and suggests improvements to training program;
13. Works with Quality Assurance Manager to initiate, suspend, and resume analysis for the section and/or an individual should problems arise;
14. Maintains and updates all section procedures, protocols, forms, training manuals and may assist in updating the quality manual.

FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES: Thorough knowledge of the principles and practices of analytical chemistry and pharmacology as it applies to the field of forensic toxicology; thorough knowledge of the principles, practices, instruments, and methods used in drug and toxic/impairing substance analysis as applied to the collection and analysis of biological and legal samples; thorough knowledge of laboratory techniques, analysis and procedures, including various types of color tests (such as for cyanide), chromatography, mass spectrometry, and immunoassay; thorough knowledge of use of standard laboratory equipment, including chromatographs, mass spectrometers (including triple-quadrupole) and computer-based data systems; thorough knowledge of techniques used to isolate drugs/chemicals from biologic samples including liquid/liquid, solid-supported liquid and solid phase extraction; thorough knowledge of the penal law and rules of evidence as they relate to the technical analysis and handling of samples; working knowledge of current developments and trends in the field of forensic toxicology; 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 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; physical condition commensurate with the demands of the position.

FORENSIC SCIENTIST III (TOXICOLOGY) CONTINUED

MINIMUM QUALIFICATIONS:

1. Graduation with a Master's Degree in a natural science, a forensic science, biomedical technology, pharmacology, or toxicology including or supplemented by at least twelve (12) credit hours in chemistry at the graduate or undergraduate level, and four (4) years of full-time or its part-time equivalent experience in a forensic laboratory conducting toxicological analysis; **OR**
2. Graduation with a Bachelor's Degree in a natural science, a forensic science, biomedical technology, pharmacology, or toxicology, including or supplemented by at least twelve (12) credit hours in chemistry, and five (5) years of full-time or its part-time equivalent experience in a forensic laboratory conducting toxicological analysis; **OR**
3. An equivalent combination of training and experience that is defined by the limits of (1) and (2) above.

NOTE:

Degrees must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education.

SPECIAL REQUIREMENTS:

1. Possession of a valid New York State driver's license at time of appointment and for the duration of employment;
2. 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;
3. Incumbents must pass a competency test prior to assuming casework responsibility, and must pass a proficiency test annually, in accordance with accreditation requirements;
4. Additional continuing education and training may be required as condition of employment.