SENIOR FORENSIC SCIENTIST

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: Under general supervision, an incumbent of this class supervises and performs complex chemical, physical, microscopic and instrumental analyses of physical evidence and controlled substances. This position either supervises crime scene processing and schedules, coordinates and supervises the work assignments of technical personnel, or functions as the quality assurance/quality control manager for the Forensics and Toxicology division. This position is also responsible for the technical training of lower level personnel and conducting research and development projects. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

General:

Analyzes samples from cases submitted to the laboratory, and analyzes proficiency testing program samples generated from inside and outside the laboratory;

Analyzes control specimens concomitantly with case specimens on a routine basis;

Performs complex chemical, physical, microscopic, and instrumental analyses of physical evidence and controlled substances;

Performs complex qualitative and quantitative analysis where required;

Trains Forensic Science personnel in procedures and methods of analysis;

Participates in internal and external proficiency testing programs;

Ensures the development and maintenance of procedure manuals, quality control manuals and instrument manuals;

Participates in the laboratories quality assurance program;

Conducts research and method development;

Responsible for maintaining assigned areas, instrumentation, supplies, solutions, reagents, and equipment in a clean and safe manner and at operational readiness;

Assists in preparing forensic budget requests by identifying needs, gathering and compiling appropriate justification, and evaluating new instrumentation and equipment as to its applicability for forensic science work;

Participates in the teaching programs of the Department;

Testifies in court regarding laboratory analyses and the significance of the results;

Responsible for the operation of the evidence receiving area and supervision of subordinate personnel assigned to that section where required;

SENIOR FORENSIC SCIENTIST

EXAMPLES OF WORK: (Illustrative Only) (Continued)

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and Forensic Laboratory information management systems software in performing work assignments;

May perform other incidental tasks, as needed.

When assigned to supervise one or more labs:

Schedules and supervises the work assignments of subordinates by determining relative priorities of cases;

Coordinates case work activities involving the efforts of several Forensic Scientist(s), Forensic Scientist Specialist(s), Assistant Forensic Scientist(s), Forensic Science Trainees and Senior Laboratory Technician(s) (II-Forensic Science);

Monitors the casework process and reviews results;

Supervises crime scene processing and reconstruction;

Ensures the compilation and maintenance of statistical data in a manner that will facilitate orderly storage and retrieval;

Attends training sessions to keep abreast of new laboratory procedures, techniques and equipment;

When assigned as Quality Assurance/Quality Control Manager:

Directs and participates in the analysis of quality assurance samples as mandated by federal and state guidelines to maintain laboratory certification;

Supervises quality control functions for the Forensic Science/Toxicology division;

Conducts laboratory audits to ensure compliance with mandated standards, suspending operation of units not in compliance, until standards are met;

Coordinates, monitors and evaluates the proficiency testing program;

Evaluates and recommends remediation of problem proficiency tests using statistical models;

Schedules, coordinates and supervises the quality control work assignments of technical personnel in the division;

Assists in the design and assessment of validation studies of new laboratory procedures;

SENIOR FORENSIC SCIENTIST

EXAMPLES OF WORK: (Illustrative Only) (Continued)

Attends training sessions to keep abreast of new laboratory procedures, techniques and equipment, especially those relating to quality control/quality assurance;

When assigned as a Forensic Laboratory Information Management System(LIMS) Manager:

Oversees the daily operation of the laboratory's Forensic Information Management System

Trouble shoots issues related to computers used to operate analytical instruments in the laboratory and their interaction with the Division's Forensic LIMS

Generates queries and reports as required by the Division's administration that relate to laboratory output, backlogs, turnaround time, grant reporting metrics and other related information

Tests instrument and Forensic LIMS related software before implementation in casework

Interacts with user agencies in providing access to the Division's Forensic LIMS such as remote logging in of evidence (pre-log) or accessibility to receive reports ..

Suggests, recommends and researches instrument software and hardware improvements as they relate to operation of the Forensic LIMS

Works with the Forensic LIMS vendor to trouble shoot software issues.

Biology:

Performs complex biological examinations of blood, body fluids and other related physical evidence.

Chemistry:

Performs complex chemical, physical, microscopic and instrumental procedures for the qualitative and quantitative analysis of controlled and other substances.

Criminalistics:

Performs complex chemical, physical, microscopic and instrumental procedures for the analysis of physical evidence (i.e., hairs, fibers, glass, paint, arson materials, gunshot residue, etc.).

<u>FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES</u>: Thorough knowledge of modern laboratory principles, practices, techniques, procedures, instrumentation, statistics and safety precautions used in the field of Forensic Science; good knowledge of federal, state and local laws, rules, regulations and policies as they

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES (cont'd):

apply to the operation of a forensic science laboratory; skill in the operation, calibration, troubleshooting and maintenance of modern laboratory equipment; ability to plan and conduct independent professional scientific research to improve laboratory methods and procedures and prepare comprehensive reports of findings and recommendations; ability to develop, implement and monitor quality control standards; ability to establish and maintain effective working relationships; ability to plan, organize and supervise the utilization and work assigned professional and technical laboratory personnel; ability to train subordinate technical personnel; ability to communicate effectively both orally and in writing; ability to use computer applications such as spreadsheets, word processing, calendar, e-mail and database software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential tasks of the position; tact; accuracy; initiative; sound judgment; resourcefulness; thoroughness; integrity; dependability; physical condition commensurate with the demands of the position.

<u>MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE</u>: A Bachelor's Degree* in Forensic Science, Chemistry, Biology, Biochemistry or Medical Technology, or closely related field, which must have included or been supplemented by twenty credit hours** in chemistry and six years of progressively responsible experience in a Forensic Science Laboratory gained within the last seven years.

<u>SUBSTITUTION</u>: Satisfactory completion of a Master's Degree* in one of the above stated fields may be substituted for one year of the required experience. Satisfactory completion of a Ph.D. Degree* in one of the above stated fields may be substituted for two years of the required experience.

<u>**NOTE:</u> The twenty credit hours of chemistry may be obtained at the undergraduate or graduate level or in any combination of undergraduate or graduate level credit hours.

<u>*SPECIAL NOTE</u>: Education beyond the secondary level must be from an institution accredited or recognized by the Board of Regents of the New York Education Department as a post-secondary, degree-granting institution.

<u>SPECIAL REQUIREMENT</u>: Possession of a valid license to operate a motor vehicle in the State of New York will be required at the time of appointment and maintain same while in the title.

West. Co. J.C.: Non-competitive MQT5 1 Job Class Code: C2055 Job Group: XIII