

**TITLE OF GROUP OF CLASSES:**  
**TITLE OF CLASSES IN GROUP:**

**PRINCIPAL FORENSIC SCIENTIST**

**BIOLOGY**  
**TOXICOLOGY**  
**CHEMISTRY**

**Class Code:**  
**02729401**  
**02729402**  
**02729403**

**Pay Grade: 32A**  
**EO: B**

**CLASS DEFINITION:**

**GENERAL STATEMENT OF DUTIES:** To be responsible for the technical operation of a forensic laboratory in the area of specialization indicated by the title of the class of position; to perform the most complex examinations and analyses in the area of specialization; and to do related work as required.

**SUPERVISION RECEIVED:** Works under the general direction of a superior with considerable latitude for the exercise of independent judgement and initiative; work is subject to review and consultation upon completion for conformance to accepted practices and policies.

**SUPERVISION EXERCISED:** As required, may oversee, assign, instruct, train, and review the work of other laboratory staff members.

**ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:**

To be responsible for the technical operations of a forensic laboratory in the area of specialization indicated by the title of the class of position:

**Biology** - the systematic analysis and interpretation of sexual assault evidence including body fluids and stains; DNA profiling, and other forensic biology examinations as required; or,

**Toxicology** - the analysis of post-mortem biological specimens for drugs and poisons contributing to cause of death; analysis of biological specimens for levels of alcohol and drugs capable of impairing motor vehicle operation; and other forensic toxicological examinations as required; or,

**Chemistry** - the identification of drugs and chemical contraband in confiscated pills, powders, paraphernalia, pharmaceuticals, foods and beverages and other specimens as required.

**As it applies to all classes:**

To perform the most complex qualitative and quantitative chemical tests and biological analyses.

To oversee the effective utilization and adjustment of instruments and equipment.

To assist in the implementation of an in-service and continuing education program.

To seek solutions to testing difficulties or problems that arise in the laboratory or field by conducting original experimental work and library research or through discussion with authorities in the field.

To oversee and conduct experimental laboratory work to devise, where possible, more effective testing methods and techniques. To perform method development and validation in keeping with current technology.

To initiate research projects by coordinating with other federal, independent and national health agencies; to design and initiate independent research projects.

To coordinate and integrate the efforts of the laboratory unit with other units and personnel in the institution or department.

To be responsible for instructing laboratory personnel in the application of proper and effective laboratory methods and techniques.

To prepare analytical reports of analyses, findings, conclusions and recommendations.

To perform technical and administrative reviews of analytical reports.

To evaluate laboratory activities and make recommendations to superiors.

To organize and participate in quality assessment and improvement programs. To direct and conduct quality control programs.

To prepare and present scientific papers and lectures. To represent the unit at meetings, conferences, and to the public.

To prepare periodic and special narrative statistical reports.

To organize and maintain literature resources.

To make recommendations regarding prospective plans, policies and procedures pertaining to a laboratory.

To appear in court or at hearings as an expert witness. To provide technical assistance to attorneys, medical examiners, and law enforcement personnel to explain the capabilities and limitations of scientific analyses

To review laboratory activities to insure compliance with laws, regulations and standards.

To assist in establishing and to enforce all applicable institutional policies and procedures to assure that legal requirements relating to the provision of laboratory services are met.

To assist in establishing procedures and to monitor and enforce compliance with regulations, policies, and procedures relating to laboratory safety.

To be responsible for ensuring and maintaining a secure chain of custody of evidence.

To do related work as required.

## **REQUIRED QUALIFICATIONS FOR APPOINTMENT:**

**KNOWLEDGE, SKILLS AND CAPACITIES:** A thorough knowledge of the principles and practices and laboratory techniques as applied in the area of specialization; the ability to apply such principles, practices and techniques in the making of the most complex and difficult technical tests and analyses for forensic purposes; a thorough knowledge of the Rhode Island criminal justice system; the ability to oversee, assign, instruct, train, and review the work of other laboratory staff; the ability to appear and testify in court as an expert witness; the ability to maintain a secure chain of custody of evidence; the ability to establish and maintain effective working relationships with criminal justice agencies; and related capacities and abilities.

## **EDUCATION AND EXPERIENCE:**

**Education:** Such as may have been gained through: graduation from a college of recognized standing with a Bachelor's degree with specialization in Forensic Chemistry, or a related science in the area of specialization indicated by the title of the class of position or a related field; and

**Experience:** Such as may have been gained through: employment in a responsible capacity involving the making of complex forensic examinations in the area of specialization, as well as responsibility for the supervision of technical subordinate laboratory staff.

Class Created: February 28, 1988

Editorial Review: 3/15/03

Class Revised: September 16, 2018