UNIVERSITY OF RHODE ISLAND

Position Description

TITLE: Criminalist II (Trace Examiner)

DIVISION: Academic Affairs (State Crime Laboratory)

REPORTS TO: Director/Professor, Criminalist III

GRADE: 12

SUPERVISES:

Professional, technical and other support staff; secretarial staff in the preparation of reports pertinent to their specialty area of the Laboratory; graduate and undergraduate students working in the Laboratory as paid assistants or as interns; uniformed and non-uniformed law enforcement officers in the proper processing, collection and packaging of physical evidence involving trace evidence at a crime scene.

BASIC FUNCTION:

Depending on field(s) of expertise, use instrumental, physical and/or chemical techniques to examine a large variety of physical evidence submitted to the State Crime Laboratory by municipal, state and federal law enforcement agencies. Interpret results of analyses, prepare written reports and provide expert court testimony in the area of trace evidence examinations.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Receive physical evidence; review background materials submitted with evidence and pertinent agency regulations and other relevant material.

Consider the type of evidence received, time available for analysis, circumstances surrounding the crime, the requirements established by laboratory and police policy and general law, and determine the general approach necessary for effective examination of the physical evidence.

Research established methodologies and relevant literature to determine applicable methods to be used in all areas of evidence processing, including microscopic, chemical, and instrumental analysis, and the use of an alternative light source.
Provide and/or seek advice concerning methodology problems in the specialty area to/from examiners in other state, local or federal law enforcement agencies.

Perform complex examinations of evidence utilizing appropriate techniques such as: microscopes, chemicals, chromatography, spectroscopy, alternate light sources, cameras, and other lab equipment. Such examinations include hair, fiber, glass, soil, paint, gunshot residue and fire debris analysis; impression pattern development and enhancement, pattern impression comparison and identification; verifying and photographing evidence, including the use of digital imaging equipment, computer software and printing digital images.

Interpret and evaluate examination results to determine their validity, scientific significance and evidentiary value to provide the most information possible.

Maintain instrumentation and equipment used for analysis of evidence. Determine analytical equipment needs for the Laboratory; evaluate new instrumentation and changes in existing instrumentation; recommend repair or purchase of new instruments and/or equipment.

Prepare written reports that state the results of examinations. Testify, when required, as an expert in their specialty area(s): trace analysis and pattern comparisons.

**OTHER DUTIES AND RESPONSIBILITIES:**

Participate in crime scene processing when requested; work with law enforcement and Laboratory personnel with regard to evidence procedures.

Communicate the importance of the examinations performed to law enforcement and Laboratory personnel and other interested individuals or groups.

Train and supervise interns and other Laboratory personnel on analytical techniques used for the examination of evidence in their specialty area.

Prepare and present lectures and/or laboratory tours on the functions of the Crime Laboratory for specific groups upon request.

Maintain routine records pertaining to their specialty section of the Laboratory. Prepare periodic statistics on trace evidence examinations and related casework.
LICENSES, TOOLS AND EQUIPMENT:

Must have a valid driver's license. Must be eligible for membership in an appropriate professional organization (e.g., AAFS, NEAFS, IAI, NED/IAI). Certification by a nationally-recognized agency in the specialty area is desirable.

ENVIRONMENTAL CONDITIONS:

This position is subject to inside and outside work and extreme cold and hot temperatures can be encountered. The potential exists where noise and vibrations may be encountered. The wearing of protective ear and eye devices may be required. May be exposed to organic and inorganic chemicals related to the examination, development and enhancement of trace evidence and impression patterns. May be exposed to low-level radioactive material. May come in contact with biological fluids and associated biological pathogens, such as hepatitis B and HIV viruses.

QUALIFICATIONS:

REQUIRED: Bachelor’s degree in a chemical, physical, or biological science or forensic science plus a minimum of five years of professional experience required; or an advanced degree in a chemical, physical, or biological science or forensic science plus two years of professional experience required. (Professional experience: performance of independent casework in a forensic crime laboratory. Certification in this specialty may be substituted for three years of professional experience.) Thorough knowledge of the following required: mechanical techniques used to collect and preserve trace evidence; instrumentation, such as microscopes, chromatography and spectroscopy, used in the examination and comparison of trace evidence; principles of photography, and the ability to operate photographic equipment. Also required: demonstrated knowledge of federal, state and municipal laws governing rules of evidence and courtroom procedures. Must be capable of being court-qualified as a trace evidence analyst, and of providing testimony in the Court System of the State of Rhode Island. Must be able to communicate effectively, orally and in writing, and to organize, coordinate and supervise support staff, and to use computer applications, such as Windows Operating System, as they relate to laboratory procedures. Must be able to work with diverse groups.

ALL REQUIREMENTS ARE SUBJECT TO POSSIBLE MODIFICATION TO REASONABLY ACCOMMODATE INDIVIDUALS WITH DISABILITIES.