



Classification: Criminalist I (Trace Evidence)

Title Code: V00517

Pay Range: 20

POSITION SUMMARY: This is an entry-level position where the employee receives training and performs technical work in the scientific analysis of trace evidence. An employee in this position participates in a formal and on-the-job training program. Work is performed under immediate supervision.

DESCRIPTION OF DUTIES PERFORMED: (Any one position may not include all of the duties listed nor do the listed examples include all tasks which may be found in positions of this class.)

Under close supervision an employee:

Participates in formal and on-the-job training in various sub-disciplines of trace evidence.

Participates in, and successfully passes practical competency and/or written test(s) prior to assuming casework.

Learns about and participates in the proficiency testing program for the disciplines in which the employee has been competency tested.

Studies standard operating procedures, training, quality control, and safety manuals, etc., within the trace discipline.

Testifies as an expert witness in a court of law while maintaining composure and objectivity under intense cross-examination.

Regularly works with a variety of potentially hazardous materials (e.g. HIV or hepatitis contaminated biological evidence).

Maintains report files; issues periodic and special reports as assigned.

Operates standard office equipment (i.e. personal computer, telephone, fax machine, copier, calculator, etc.).

Performs job-related travel as needed.

Performs other related duties as assigned.

Performs basic photography as needed.

Regularly processes, compares and examines trace evidence (e.g. hair and fiber, gunshot residue, fire debris, explosives, paint, glass, soil, lamp filament, fracture match and foreign substances) submitted from crime scenes or parties involved in criminal activity.

Observes other criminalists collecting evidence at crime scenes.

Confers with supervisor regarding the appropriate test methodology based on the quantity and quality of the submitted sample.

Confers with supervisor to determine which items are most likely to associate or disassociate the victim or suspect with a crime scene.

Analyzes samples using chemical testing, polarized light microscopy, and chemical instrumentation including gas chromatography/mass spectrometry, infrared & Raman spectroscopy, scanning electron microscopy/energy dispersive x-ray spectroscopy and x-ray fluorescence.

Interprets test results obtained from the proper microscopic, chemical and instrumental methods.

Learns and performs proper instrument maintenance and repair procedures.

Learns and performs proper reagent and standard preparation.

Stays updated on technical trends through attendance of workshops/seminars and reading forensic science literature.

Becomes competent in at least two sub-disciplines.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES: Ability to participate in formal and on-the-job training program.

Ability to read English effectively.

Ability to communicate in English clearly and concisely, both orally and in writing.

Ability to learn and practice safety rules and procedures associated with laboratory equipment and chemicals.

Ability to perform work in accordance with prescribed procedures, make accurate observations of test results and prepare accurate records and reports.

Ability to compile and prepare information for presentations (e.g. mock trials, courtroom testimony, depositions, pretrial conferences, meetings, etc.).

Ability to maintain composure while under cross-examination in regards to personal and scientific qualifications and defend laboratory findings in court.

Ability to work with restricted, highly sensitive information in a confidential and professional manner.

Ability to establish and maintain effective working relations with others.

Ability to properly use or learn to use laboratory equipment, computer and photography equipment, and chemicals.

Ability to work with material that may be biohazardous or of a sexual nature relating to criminal activity (e.g. written material, photographs, and/or verbal language, etc.).

Ability to work hours as assigned.

Possess or ability to obtain a valid Missouri Driver license.

Ability to perform job-related travel (e.g. appearing in court, observing crime scene investigations, attending training meetings and seminars, etc.).

Ability to learn about the collection, examination and preparation of evidence.

Ability to perform microscopic work for extended periods.

Ability to distinguish colors necessary to perform laboratory tests.

Ability to transport tools and equipment necessary to facilitate crime scene investigations.

MINIMUM EXPERIENCE AND EDUCATION REQUIRED: (The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution may be permitted in case of deficiencies in either experience or education.)

Possess a baccalaureate degree from an accredited college or university in chemistry or one of the natural sciences. College coursework must include two semesters of general chemistry with laboratory, two semesters of organic chemistry with laboratory, and one semester of quantitative analysis, analytical chemistry, instrumental analysis or equivalent. Applicants should have at least 25 earned credit hours in chemistry. Survey or introductory coursework intended for non-chemistry majors will not satisfy the above requirements. Both overall academic record and applicable job experience will be factors for consideration; however, prior job experience will not replace these minimum academic requirements.

NECESSARY SPECIAL REQUIREMENTS: Must provide a DNA sample to be used only for forensic identification as required at the time of appointment.

Must be able to pass a polygraph examination after conditional offer of employment.

Must successfully complete a twelve-month probationary period upon employment.

FLSA STATUS: Non-Exempt

WORK SCHEDULE: An employee in this position works an eight-hour shift as directed; however, working hours are subject to change at the discretion of the commanding authority.