

SENIOR CRIMINALIST

POSITION DESCRIPTION

Classification Responsibilities: A Senior Criminalist performs highly specialized criminalistics evaluations in connection with the identification and comparison of physical evidence submitted to the Forensic Services Section. The scientific analyses performed involve utilizing chemical, microscopic, and chromatographic techniques and instrumentations to examine, identify, and evaluate physical evidence which may include: hair, fibers, fabrics, firearms, bullets, cartridge cases, suspected drug-containing substances, fire debris, paint, glass, soil, blood, urine, and other biological substances. An incumbent may perform serological testing in order to identify biological evidence; compare silicone casts and photographs of impressions and marks with shoes, tires, instruments, and other objects; interpret comparative data from highly technical DNA examinations to determine the identity and source of submitted specimens; make gas chromatographic comparisons of substances from different sources for similarities and possible origin; perform immunoassay techniques for screening of drugs in blood and/or urine specimens; or enter and search data into the Combined DNA Index System (CODIS) or the National Integrated Ballistics Information Network (NIBIN).

A Senior Criminalist operates, maintains, programs, and interprets data from highly technical and/or computerized instrumentation such as an automated blood alcohol analysis system, a gas chromatograph/mass spectrometer, or DNA related equipment. Further responsibilities include: preparing and conducting officer training; assisting with the development and monitoring of a quality assurance program; conducting field investigations at crime scenes; troubleshooting; maintenance and validation of instrumentation; method development and validation; consulting and coordinating with experts, police officers, and attorneys; writing technical, scientific reports; and providing expert testimony in court. This class is responsible for performing related duties as required.

Distinguishing Features: Senior Criminalist is a professional class which involves work in specialized areas of criminalistics such as arson, drug identification, firearms, tool-mark analysis, toxicology, blood alcohol, breath alcohol, serology, DNA testing, and/or trace evidence analyses. Incumbents in this class have progressed by noncompetitive promotion through successful completion of all stipulated requirements in the criteria-based promotion plan or meet the education and experience requirements prior to being hired by the City of Mesa Police Department. An employee in this class may conduct field investigations at crime scenes to search for, collect, and preserve evidence for laboratory analysis, and reconstruct situations and physical evidence of a crime in the demonstration of proof of the connection of persons, instruments or materials with the crime. Supervision is received from a Supervisory Criminalist and work is reviewed through meetings, reports, and results achieved. This position involves working with chemicals and other hazardous materials. This class is FLSA exempt-professional.

QUALIFICATIONS

Education and Experience: Requires a Bachelor's Degree from an accredited college or university in Biology/Biochemistry, Chemistry, Forensic Science, or closely related physical or natural science; at least seven years experience as a Criminalist in a recognized laboratory actively engaged in the forensic sciences; experience testifying in court as an expert witness; and state of the art expertise in a specialized area of criminalistics described in the Distinguishing Features section, or successful

completion of all requirements stipulated in the criteria-based promotion plan for this classification. In addition, the following disciplines have specific minimum educational requirements:

Controlled Substances: 24 semester hours of chemistry preferred.

Blood Alcohol/Toxicology: 24 semester hours of chemistry required.

DNA: College coursework covering biochemistry, genetics, and molecular biology (molecular genetics, recombinant DNA technology) required.

Special Requirements: Because of the confidential, sensitive nature of information handled, successful completion of a background investigation and polygraph examination is required. Must possess a valid Arizona Driver's License by hire date.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public, other City employees, management, public officials, sworn officers, attorneys, officers of the court and vendors. Communicates with other experts in the field to exchange information on all types of criminalistics methodologies. Consults and coordinates latent print examiners, police officers, attorneys, private experts, and others regarding the analysis, comparison, and identification of physical evidence. Instructs and trains law enforcement officers in a classroom setting regarding the collection of evidence and criminalistics methodologies. Prepares written scientific examination reports with clearly organized thoughts using scientific nomenclature, proper sentence structure, punctuation, and grammar in order to represent laboratory results. Assists the Supervisory Criminalist with instruction and training of laboratory personnel, quality assurance implementation and monitoring, case review, laboratory safety, and expediting day-to-day workflow within the unit.

Manual/Physical: Inspects and evaluates equipment, objects, information, and work-related conditions to determine compliance with prescribed operating and safety standards, regulations, and guidelines including manufacturer's specifications on computerized scientific equipment and national laboratory accreditation standards. Distinguishes colors to determine results of drug test/analyses. Uses common hand tools such as a screwdriver and various instrument maintenance tools to maintain, set up, and clean the laboratory instruments. Installs and replaces computer software and scientific instrument parts to maintain and update laboratory equipment. Enters data or information into a personal or laboratory computer in order to complete and analyze scientific examinations. Operates a motor vehicle requiring a standard Driver's License for investigation of crime scenes and collection of evidence. Conducts field investigations at crime scenes and other pertinent locations to search for, collect, and preserve evidence for laboratory analysis, and reconstruct situations and physical evidence of a crime. Prepares graphs to perform scientific examinations. Works with chemicals using specialized non-routine, protective equipment to perform laboratory analyses.

Mental: Conducts research and analyzes data to perform scientific examinations. Develops laboratory analytical procedures. Performs mathematical and statistical computations in order to complete scientific examinations. Interprets graphs, charts, and mathematical formulas to check scientific reports. Comprehends and makes inferences from written material such as laboratory reports, scientific journals/literature and testimony transcripts to maintain current expertise in the criminalistics field. Prioritizes own casework. Learns job-related material through on-the-job training and in a classroom setting regarding updated and new forensic laboratory techniques.

Knowledge/Skill/Abilities:

Knowledge of:

the principles, methods, materials, equipment, and techniques of criminalistics;
the principles of chemistry, physics, biology/biochemistry, and mathematics/statistics as related to criminalistics;
crime scene procedures;
recent developments, current literature and sources of information in the field of criminalistics; and
state and federal statutes and case law covering contraband, drugs and the use of physical evidence in court, the rules of criminal procedures concerning time limits, discovery, evidence, and expert witnesses.

Skill in the use of specialized forensic laboratory equipment and in demonstrating tests and examinations to others.

Ability to:

carefully follow verbal and written instructions;
secure the cooperation of others in difficult work situations;
withstand intense examination in court as an expert on the laboratory analysis evidence;
make accurate observations and records of test results;
assist other laboratory personnel with the analysis of critical evidence and interpretation of results;
supervise a section of the laboratory in the absence of the section's Supervisory Criminalist; and
establish and maintain effective working relationships with department personnel and outside agencies.

Revised 7/04

KB/cjh

CS4905.DOC

EEO-Prof

NIDA-None

RESP-None

PAY RANGE: 51

SH-08

CDL-None