

DESCRIPTION: Under close to limited supervision, performs scientific work in the analysis, assessment, and preservation of evidence processed. Learns laboratory procedures, protocols, and policies, and develops full proficiency and competence in one or more forensic science fields such as serology, DNA analysis/profiling, toxicology, drug/narcotic analysis, trace evidence, firearms/tool marks, questioned documents, or latent prints. Performs chemical and scientific analyses of evidence as part of the investigation of crimes, and testifies in court as an expert witness to the results of analyses performed. May assist in the training of others in the performance of similar work; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is a single entry and full performance classification level of the State Patrol Forensic Scientist class series. Positions at this level are assigned professional level scientific work examining evidence and specimens within a forensic-criminal laboratory, and may assist or train others in examination work. Contacts typically involve employees and sworn officers inside and outside the employing agency, and representatives of the criminal justice community and defendants. This level is distinguished from the State Patrol Forensic Supervisor class, which directs assigned laboratory analysis staff and their case activities as well as handles assigned cases.

Each position perform work at both the developmental and fully functioning levels where incumbents learn to perform and then perform examinations of varying complexity involving diverse types of evidence and specimens to make qualified and valid identifications and assessments. Incumbents, under close supervision initially, develop and apply knowledge of and skill to apply scientific protocols and work procedures and techniques, use technical equipment and instruments, chemicals and materials, and computer software, and prepare technical reports, testimony, and records, pertinent to evaluations made. Initial assignments are well defined where scientific protocols, work directives, and technical guidance are readily available from supervisors or co-workers. As the requisite knowledge, skills, and proficiency are developed, incumbents typically progress onto more advanced assignments and greater independence.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Examines, analyzes, and compares physiological stains and hair to identify their origin or species and/or answer other questions related to DNA and serology.

Examines and analyzes body fluids, postmortem human organs, beverages and food items to determine if alcohol, drugs, and/or poisons are present and/or answer other questions related to toxicology.

Examines, analyzes, and weighs suspected drugs to determine if they are controlled substances under State statutes, to quantify the drug present and/or answer other questions related to drugs.

Examines, analyzes, and compares trace evidence materials such as fibers, glass, paint, soil, and flammable materials to ascertain if they came from a common source, determine the identity of the item, and/or answer other questions related to trace evidence.

E53851 – STATE PATROL FORENSIC SCIENTIST (continued)

Examines, analyzes, and compares firearms evidence, tool marks, shoeprints, tire tread prints, and vehicle lamps to identify a common source, to determine functionality, and to answer questions related to firearms/tool marks.

Examines, analyzes, and compares documents to determine authenticity, identify a common source, restore text and/or answer other questions related to questioned documents.

Examines, analyzes, and compares evidence to develop latent prints and identify their source and/or answer other questions related to latent prints.

Writes reports and constructs charts/data summaries of forensic examinations to document test procedures and results and provide conclusions.

Testifies at grand jury hearings, preliminary hearings, depositions, or court trials to explain the examination process and to interpret and defend test results.

Attends symposiums, workshops, in-service training programs, and staff meetings; reviews journals and books; consults with workers of other laboratories to learn new standards, procedures, and techniques in laboratory analysis.

Conducts, as assigned, the orientation and training of new laboratory employees to introduce them to the laboratory and its procedures, policies, and methods and to develop their knowledge and expertise in the forensic science field.

Performs other responsibilities, as assigned, such as recommends procedure changes, implements quality assurance and safety procedures, assists with laboratory audits, gives general laboratory tours, performs late duty laboratory closing tasks, and makes backlog reductions calls.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: the principles of chemistry, biochemistry, toxicology, genetics, biology, physics, physical, natural and/or other sciences related to the work assigned; laboratory procedures, analysis methods, and material/substances used; the methods to illustrate information and support court testimony; the practices and protocols of the forensic science work assigned.

Skill in: the selection, use, and care of laboratory equipment/instrumentation and material/chemicals used in conducting analyses of substances/items submitted as a part of the investigation of a criminal case.

Ability to: follow laboratory procedures and conduct tests using laboratory equipment/instrumentation and material/chemicals to obtain results; observe and compare size, shape, quantity, color, small details, and reactions; interpret observations and record results of analysis of items/substances submitted for examination and arrive at conclusions; communicate technical explanations and information to others in person and by telephone, email and correspondence; comprehend and apply knowledge from scientific and technical journals and textbooks; relay knowledge gained to co-workers to recognize and solve problems; formulate legally valid interpretations and conclusions on the basis of tests made and testify and defend these in courts as an expert witness; pass moot court/proficiency tests in the assigned forensic science field.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Bachelor's or post-baccalaureate degree in the fields of physical science, natural science, forensic science, criminalistics, or other fields, where specific scientific coursework in job related specialties have been completed.

SPECIAL NOTES:

Individual Forensic Scientist positions may require coursework in more specialized scientific and related disciplines, the possession of which would be asked of applicants during the selection process. For example, a position may require applicants to satisfy the requirements for a DNA analyst as listed in the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories. This would include completion of coursework in genetics, molecular biology, biochemistry, and statistics and/or population genetics.

Applicants for positions within the State Patrol must successfully complete an extensive background screening prior to being employed, which may include completion of a Personal History Questionnaire. Applicants will be screened for a record of criminal activity and criminal history using a fingerprint-based check employment or assignment and before unconditional employment is offered. Applicants must be free of felony convictions, and cannot maintain continuous association or dealings with persons, groups, or organizations whom they know, or should know, are persons or groups or organizations under criminal investigation or indictment or who have a reputation for present involvement in felonious or criminal behavior

Possession of a valid driver's license may be required.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).