

NATURE OF WORK IN THIS CLASS:

This is moderately complex technical and professional work involved in the examination of biological evidence with the use of scientific principles and laboratory techniques for criminal investigations.

Employees in this class perform moderately complex duties involving forensic examination of biological evidence through DNA analysis in support of law enforcement and criminal investigations. Incumbents perform independent analysis, interpret results, communicates findings both in technical and legal contexts, and provides expert witness testimony while adhering to accepted forensic science standards and accrediting body requirements.

ILLUSTRATIVE EXAMPLES OF WORK: (Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)

Conducts forensic DNA analysis including screening, extraction, quantification, amplification, separation and profile interpretation from crime scene and reference samples using various chemicals and reagents.

Analyzes forensic biological evidence using accepted DNA methodologies, including but not limited to STR, Y-STR and mitochondrial DNA analysis.

Operates and maintains complex laboratory equipment used in DNA analysis.

Maintains chain of custody procedures according to established protocols and ensures evidence integrity in handling, analysis and preservation of evidence and/or reference samples.

Documents all analytical procedures in case files.

Evaluates, interprets and compares DNA profiles, complex DNA mixtures; performs statistical calculations related to DNA match probabilities and/or likelihood ratios using approved methods and software.

Interprets data and prepares written technical reports on findings and conclusions of DNA evidence for law enforcement and prosecuting authorities

Participate in internal and external audits, proficiency testing, method validations and accreditation activities.

Provides expert witness testimony in court regarding examination findings, conclusions and methodology of DNA analysis.

Assists in the training of new analysts and in the development of laboratory procedures.

Assists in the training and mentoring of laboratory personnel, law enforcement personnel and students on forensic DNA topics.

Complies with all federal, state and local regulations and the Guam Police Department's policies and procedures.

Adheres to standard operating procedures and safety protocols during evidence collection, examinations and laboratory analysis.

Keeps abreast with current developments in forensic science, laws and best practices through continuing education.

Participates in ongoing training and development to advance technological knowledge and skills in DNA testing and analysis as required.

Perform related duties as assigned.

MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:

Knowledge of the principles of chemical, biochemical, physical and analytical methodologies used in forensic DNA analysis.

Knowledge of molecular biology, human genetics and population genetics.

Knowledge of scientific principles and analytical techniques in a crime laboratory setting to support criminal investigations.

Knowledge of laboratory software programs such as GeneMapper, STRmix, CODIS, and LIMS for DNA data analysis, documentation and case tracking.

Knowledge of safety practices including the handling and disposal of hazardous chemicals and potentially infectious biological samples.

Ability to meet and maintain the Federal Bureau of Investigations (FBI) Quality Assurance Standards (QAS).

Ability to apply scientific methods and critical thinking to solve forensic issues related to forensic DNA analysis.

Ability to apply statistical methods to calculate match probabilities or likelihood ratios.

Ability to apply the methods and procedures of evidence collection and preservation.

Ability to follow oral and written technical instructions, standard operating procedures, make accurate observations and work in a safe and prudent manner.

Ability to pass periodic proficiency tests in forensic DNA analysis as required.

Ability to communicate effectively orally and in writing; and maintain records and prepare comprehensive forensic reports and present scientific findings.

Ability to testify as an expert witness in court.

Ability to maintain confidentiality and professional ethics in handling sensitive case information.

Ability to read, understand and follow departmental policies, rules, instructions, laws and ordinances, including the Guam Police Department's General Orders, Special Orders and Unit Directives.

Ability to establish and maintain effective working relationships with coworkers, police personnel, other forensic laboratories or law enforcement agencies, and the general public.

Skill in the operation of forensic laboratory tools and equipment used in DNA analysis.

Skill in the safe operation of a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING:

- A. Two (2) years of experience in a forensic DNA laboratory performing forensic human DNA analysis and graduation from a recognized college or university with a bachelor's degree in forensic science, Chemistry, Biology, or closely related field, with at least nine (9) semester hours in biology or chemistry related areas that provide an understanding of the foundation of DNA analysis, and three (3) semester hours in statistics or population genetics; **or**
- B. Any equivalent combination of experience and training beyond a bachelor's degree which provides the minimum knowledge, abilities and skills.

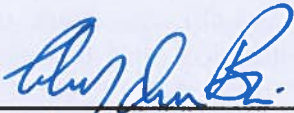
NECESSARY SPECIAL QUALIFICATIONS

- a. Must possess a valid Guam Driver's License.
- b. Must submit to fingerprinting and pass a background investigation

ESTABLISHED: AUGUST 2026

PAYGRADE: N (GPP)

HAY EVALUATION:	KNOW-HOW:	E I 2	230
	PROBLEM SOLVING:	E 3 (33%)	76
	ACCOUNTABILITY:	E 1 C	87
	TOTAL POINTS:		393


EDWARD M. BIRN
Director of Administration


LOURDES A. LEON GUERRERO
Governor of Guam