

NATURE OF WORK IN THIS CLASS:

This is complex technical and professional work involved in providing leadership, expertise and technical oversight for all DNA-related forensic casework performed within the Guam Police Department's Forensic Science Division.

Employees in this class oversee aspects of forensic DNA analysis and highly specialized forensic evaluations, including screening, evidence handling, data interpretation, scientific validity, case reporting and expert testimony while maintaining regulatory compliance and quality assurance.

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.)

May serve as DNA Technical Leader. Provides technical oversight and leads forensic DNA analysts in the application of accepted DNA methodologies, including but not limited to STR, Y-STR, mitochondrial DNA, probabilistic genotyping and next-generation sequencing (NGS).

Conducts technical and administrative review of DNA casework reports; provides guidance and assistance on discrepancies and errors identified; approves DNA casework reports for submission to law enforcement agencies for further investigations.

May supervise the work of lower-level analysts.

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

Operates and maintains complex laboratory equipment used in DNA analysis.

Conducts internal and external audits, proficiency testing and method validation to ensure laboratory compliance with FBI Quality Assurance Standards and other applicable accreditation guidelines.

Monitors, reports, and resolve potential quality assurance issues with forensic testing; recommends preventive measures to maintain sample integrity and reduce the risk of sample contamination.

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.

Participates in the development and implementation of laboratory training programs; evaluates new technologies and conducts validation studies; tracks effectiveness of program and provides recommendations for improvement.

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

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.

Evaluates competency and annual proficiency testing of lower-level analysts in accordance with the QAS requirements.

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 advanced techniques in forensic DNA analysis, including but not limited to STR, Y-STR, mtDNA, probabilistic genotyping and next-generation sequencing (NGS).

Knowledge of regulatory and accreditation standards and applicable accreditation guidelines set by recognized accreditation bodies.

Knowledge of molecular biology, human genetics and population genetics.

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.

Knowledge of chain-of-custody requirements, evidence handling, court testimony procedures and the legal implications of forensic DNA results.

Ability to supervise and oversee a team of forensic scientists, ensuring high-quality work and adherence to deadlines and safety protocols.

Ability to analyze and interpret complex data.

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 based on complex forensic evidence and the application of advanced statistical tools and DNA profiling techniques.

Ability to ensure quality control by enforcing quality assurance and control measures.

Ability to multitask and manage multiple cases simultaneously in high-stress situations without compromising quality of work

Ability to pass periodic proficiency tests and keep abreast of advances in forensic DNA technologies; ability to implement new methods and procedures.

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.

Ability to create training programs and mentor junior staff.

Skill in the operation, maintenance and troubleshooting of forensic laboratory instruments, tools and equipment used in DNA analysis.

Skill in conducting complex DNA tests, interpreting results and drawing conclusions based on statistical analysis.

Skill in communicating effectively orally and in writing; maintaining records and preparing comprehensive forensic reports and presenting scientific findings to scientific experts and non-technical stakeholders.

Skill in creating training programs and mentoring junior staff

Skill in the safe operation of a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING:

- A. Three (3) years of professional experience in a forensic science laboratory, including the use of laboratory tools and equipment, with a focus on DNA analysis, with at least one (1) year in a supervisory role, and graduation from a recognized college or university with a master's degree in Forensic Science, Biology, Chemistry, or closely related field, with at least 9 (nine) semester hours from a combination of undergraduate and graduate course work 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 master'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.
- c. Must meet and maintain the applicable requirements of the Federal Bureau of Investigation (FBI) Quality Assurance Standards (QAS).

ESTABLISHED: MAY 2026

PAYGRADE: O (GPP)

HAY EVALUATION:	KNOW-HOW:	E I 3	264
	PROBLEM SOLVING:	E 3 (38%)	100
	ACCOUNTABILITY:	E 2 C	115
	TOTAL POINTS:		479


EDWARD M. BIRN
Director of Administration


LOURDES A. LEON GUERRERO
Governor of Guam