DEPARTMENT: <u>NIAGARA COUNTY</u>

CLASSIFICATION: NON-COMPETITIVE /PENDING NYSCSC APPROVAL

APPROVED: OCTOBER 13, 2023

## FORENSIC SCIENTIST II (BIOLOGY)

**DISTINGUISING FEATURES OF THE CLASS:** This is the second level of the Forensic Scientist (Biology) series. The work involves responsibility for collecting and analyzing unknown substances and evidentiary material using deoxyribonucleic acid (DNA) and other related techniques. This position differs from Forensic Scientist I (Biology) by virtue of the incumbents' ability to handle complex examinations and cases independently. Incumbents in this class may be required to serve as Combined DNA Index System (CODIS) administrator. All work is performed in accordance with federal and state accreditation requirements and departmental procedure manuals and guidelines under direct supervision from higher level employees in this series. General supervision is received from the Director of Laboratories. Does related work as required.

# TYPICAL WORK ACTIVITIES:

- 1. Performs qualitative and physical analyses involving chemical, microscopic comparison, photography, DNA extraction and amplification, electrophoresis, PCR, computer and statistical analysis and other related techniques on evidence;
- 2. Performs biological fluid analysis and forensic DNA comparisons on evidentiary materials and known biological samples;
- 3. Meets with attorneys, investigators and other related personnel regarding approaches to analysis and results in pretrial conferences:
- 4. Participates in, scientific meetings, seminars, and other training as assigned;
- 5. Keeps records of observations and notes and issues reports of test results upon authorization by higher level Forensic Scientists in this series;
- 6. Testifies in court regarding laboratory analyses and the significance of the results as required;
- 7. Performs housekeeping tasks as required, including maintaining laboratory supplies and reference materials;
- 8. Participates in internal and external proficiency testing programs;
- 9. Assists in the inventory, maintenance, storage, and disposition of evidence;
- 10. May respond to crime scenes as a consultant and work with crime scene technicians to make recommendations in their collection of evidence;
- 11. Once authorized to do so, may review case files, reports and findings of other analysts for technical compliance to preestablished laboratory criteria;
- 12. May assist in conducting research, method development, and validation of new technical procedures;
- 13. May assist in training of subordinate laboratory personnel;
- 14. May assist in investigating potential issues and suggesting remedial action;
- 15. May assist in maintaining and updating all section procedures, protocols, forms, training manuals and the quality manual.

#### If serving as CODIS Administrator:

- 16. Administers the laboratory's local CODIS network, and assures that security and quality of data stored in CODIS is in accordance with state/federal law and NDIS operational procedures;
- 17. Schedules and documents CODIS computer training of casework analysts.

FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES: Good knowledge of the principles and practices of molecular biology, biochemistry, and genetics as they relate to the fields of DNA analysis, biological fluid analysis and forensic science; good knowledge of the principles, practices, instruments, and methods used in biological and DNA analysis as applied to the collection and analysis of biological samples and criminal evidence; good knowledge of laboratory techniques, analysis, equipment and procedures, including electrophoresis, DNA extraction and amplification, and microscopic comparison; good knowledge of the penal law and rules of evidence as they relate to the technical analysis and handling of evidence; good knowledge of current developments and trends in crime detection and investigative techniques; skill in the use of laboratory equipment related to biological and DNA analysis; skill in the application of laboratory and scientific research practices and techniques to biological and DNA analysis; ability to apply scientific procedures, methodology, and formulas to assigned work; ability to analyze and evaluate information and observations, and to arrive at and construct logical and sound conclusions; ability to explain laboratory analysis techniques, procedures and theories in a clear and concise manner to so that non-scientists may understand the significance of the results obtained using these procedures; ability to operate and perform routine maintenance on complex laboratory equipment; ability to manage data base records and maintain accurate records; ability to communicate effectively, both orally and in writing; ability to prepare and deliver legal testimony accurately and be cross-examined and remain composed in court; ability to establish and maintain effective professional relationships; sound professional judgment; physical condition commensurate with the demands of the position.

### FORENSIC SCIENTIST II (BIOLOGY) CONTINUED

### **MINIMUM QUALIFICATIONS:**

- 1. Graduation with a Master's Degree in a natural science, a forensic science, an engineering science, or criminalistics including or supplemented by at least nine (9) credit hours in coursework consisting of statistics/population genetics, biochemistry, genetics, and molecular biology as primary content,\* and one (1) year of full-time or its part-time equivalent experience in a forensic laboratory performing biological and DNA analysis; **OR**
- 2. Graduation from a New York State or regionally accredited college or university with a Bachelor's Degree in a natural science, a forensic science, an engineering science, or criminalistics including or supplemented by at least nine (9) credit hours in coursework consisting of statistics/population genetics, biochemistry, genetics, and molecular biology as primary content,\* and two (2) years of full-time or its part-time equivalent experience in a forensic laboratory performing biological and DNA analysis; **OR**
- 3. An equivalent combination of training and experience that is defined by the limits of (1) and (2) above.

\*Statistics/population genetics, biochemistry, genetics and molecular biology must be the primary component of the classes or courses; coursework completed with titles other than those listed may demonstrate compliance through submission of a student transcript, letter from university professor verifying course content, or a course syllabus. The DNA training program previously offered by the FBI Laboratory, with graduate credit hours from the University of Virginia, may be applied toward the molecular biology coursework requirement associated with this standard. Statistics/population genetics training or coursework may be satisfied through internal or external mechanisms.

### NOTE:

Degrees must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education.

## **SPECIAL REQUIREMENTS:**

- 1. Possession of a valid New York State driver's license at time of appointment and for the duration of employment;
- 2. Applicants will be required to undergo a state and national criminal history background investigation which will include a fingerprint check to determine suitability for appointment. Failure to meet the standards for the background investigation may result in disqualification;
- 3. Incumbents must pass a competency test prior to assuming casework responsibility, and must pass TWO proficiency tests annually, in accordance with accreditation requirements;
- 4. Eight (8) hours of continuing education and training annually is required as condition of employment; additional training and education may be required.

<u>If serving as CODIS Administrator</u>: Completion of FBI sponsored auditor training is required within one year of appointment; completion of FBI sponsored CODIS software training is required within six (6) months of appointment.