

Procedure for Personnel Training

1.0 Purpose – To establish, define and document a training program to ensure the competency of State Crime Laboratory (Laboratory) personnel.

2.0 Scope –The procedure is applicable to the training of all employees.

3.0 Definitions

- **Assessment tool** – Documentation, usually in measurable form, of the knowledge, skills and abilities to perform assigned duties.
- **Key support personnel** – Those employees who contribute to the processing of casework in a substantive, measurable way, including evidence technicians, toxicology technicians, database analysts, etc.
- **Managerial personnel** – Those employees who administer and oversee Forensic Scientists, technicians and other support personnel.
- **Retraining** – The process required when personnel assessments indicate less than satisfactory performance or when procedures are modified significantly.
- **Technical support staff** – Evidence technicians, forensic technicians, and database personnel who perform casework related duties within the Laboratory at the direction of a Forensic Scientist but who do not issue reports related to the conclusions reached.
- **Training checklist** –The documentation prepared by the training coordinator that reflects the steps necessary for completion of an employee's training, dates of completion and the signatures/initials of the trainee and training coordinator.
- **Training coordinator** – The experienced and qualified employee who oversees the training of others.
- **Training officer** – An experienced and qualified employee that assists the training coordinator in the training of others.
- **Training verification** – The testing used to confirm an employee's training has been successful and that the employee is competent to perform procedures encompassed by the training.

4.0 Procedure

4.1 Overview

- 4.1.1** To ensure the employee has the requisite knowledge, skills, and abilities to perform assigned tasks, all Laboratory personnel shall complete a training program before being assigned independent work. Each training program shall adhere to the Laboratory Procedure for Personnel Training. Training for newly validated technical procedures shall be completed as described in the Procedure for Validation of Technical Procedures.
- 4.1.2** Trainer coordinators shall maintain written objective evidence of an employee's training. Final training records shall be maintained within the Section/Unit at the conclusion of the training progression.
- 4.1.3** The goal of the Laboratory's training program for technical personnel is to produce employees who:
- Possess the necessary knowledge, skills and abilities to perform assigned work.
 - Follow Laboratory and Section policies, procedures, and guidelines.

- Are able to perform accurate examinations.
- Are able to develop scientifically valid conclusions from the results of those examinations.
- Testify in court as to procedures and conclusions.

4.2 Required Basic Training

- 4.2.1** Core Training - All new employees shall be instructed on the administrative policies and procedures of Laboratory, the Department of Justice, and the State of North Carolina.
- 4.2.2** Safety Training – All new employees shall be instructed on the Laboratory Safety Manual.
- 4.2.3** New Forensic Scientist training shall include applicable civil and criminal laws and procedures, general knowledge of forensic science, and application of ethical practices in forensic sciences.
- 4.2.4** Other training shall include:
- Use of Forensic Advantage.
 - Quality Assurance - quality control (QC), the Quality Management System (QS), and related procedures.
 - Accrediting body standards, policies, regulations, procedures, and assessment methods.
 - State Crime Laboratory Policy and Procedure for Evidence Submissions.
 - ***GUIDING PRINCIPLES OF PROFESSIONAL RESPONSIBILITY FOR FORENSIC SCIENCE PROVIDERS AND FORENSIC PERSONNEL.*** This document shall be reviewed annually with all employees of the Laboratory.

4.3 Training of Forensic Scientists

- 4.3.1** The Forensic Scientist Manager shall be responsible for the establishment and maintenance of a formalized technical training program. Each program shall be described in Section training procedures and utilize a training checklist. Each Forensic Scientist Manager shall be responsible for reviewing and updating training procedures as part of the annual management review.
- 4.3.2** Failure to successfully complete any training program required for the employee's position constitutes unsatisfactory job performance and shall be cause for disciplinary action up to and including dismissal.
- 4.3.3** Section training procedures shall address the following:
- 4.3.3.1** Sufficient detail to instruct the trainee in the tasks necessary to accomplish the analysis which the trainee will perform; all aspects of the work performed in the discipline, including sampling procedures and plans.
- 4.3.3.2** The means by which a trainee's understanding of the subject matter is assessed, including verbal discussions, oral or written exams, or examinations of simulated evidence. All written assessments shall have an answer key.

- 4.3.4** Competency Exam - All technical training programs shall culminate in a three-part assessment of the employee's ability to perform independent work. The assessment format may vary from Section to Section, but shall be addressed in Section training procedures and contain the following three elements:
- 4.3.4.1** Written Test - The written test shall test the trainee's technical knowledge. The trainee shall clearly demonstrate sufficient technical knowledge to perform all examinations unaided and to draw accurate conclusions from those examinations. A minimum score of 85 % is required for successful completion of written tests. Trainees shall be allowed one retest attempt per examination. In addition, trainees shall be allowed only two retest attempts during the training program.
- 4.3.4.2** Competency Test - A mock case provided to the trainee to work as a real case, but without assistance or consultation. The case shall simulate an average case in difficulty and complexity. The trainee shall not know the expected outcome of the case. For successful completion, the trainee shall obtain the expected conclusion and generate an associated case file that is in compliance with Section and Laboratory policies.
- 4.3.4.2.1** Competency tests may be manufactured by the Sections or old external proficiency tests may be used. If old external proficiency tests are administered, all test manufacturer identifiers must be removed prior to issuance. Competency tests must be worked in Forensic Advantage and marked confidential as instructed in The Procedure for the Use of Forensic Advantage section 4.17.
- 4.3.4.3** Moot Court - The moot court is a formal simulated court experience at which the trainee shall play the part of an expert witness to testify to all aspects of the practical test. The trainee shall demonstrate the ability to present and explain the practical test results on the stand. Trainees will be allowed two attempts to achieve successful completion of a moot court. At least one member of Laboratory management (Assistant Director or Lab Director) and the Discipline Technical Leader shall be in attendance. The Quality Manager may attend as a substitute for Laboratory management.
- 4.3.4.3.1** The trainee's performance at the mock trial shall be recorded on a Moot Court Evaluation Rating Sheet. The management team member responsible for the employee's training shall complete this form. After the mock trial, the trainee shall be provided constructive feedback on his/her performance; the trainee shall review this form and be presented with a copy. After the Section Forensic Scientist Manager has reviewed this form, it shall be submitted to the QM for review and be retained in the training file. If the trainee's performance is unsatisfactory, the management team member responsible for the employee's training shall determine whether additional training is necessary for the employee. If additional training is recommended, the trainee shall complete that required training and complete an additional moot court that shall be evaluated and documented according to this section.

4.3.4.3.2 Once a Forensic Scientist has been released for casework in a discipline, qualification for any subsequent discipline or sub-discipline may be satisfied by a roundtable discussion, question and answer period, or moot court. Trainees will be allowed two attempts to achieve successful completion.

4.3.5 Assessment/Training of Experienced Personnel – If the Laboratory hires an individual who has previous training and or experience, Section Training Procedures shall provide for the assessment and/or documentation of the employee's knowledge, skills and abilities. The employee's training may be expedited; however, the Section shall ensure that the employee possesses the same body of knowledge as an employee who has completed the entire training process.

4.3.5.1 An attempt shall be made to obtain any written training documents from the Forensic Scientist's previous employer. Any training documents shall be included in the Forensic Scientist's training file.

4.3.5.2 A training plan based upon the trainee's education and experience shall be developed and implemented.

4.3.5.3 Upon completion of training, a written test shall be administered.

4.3.5.4 Upon successful completion of the written test, competency test(s) shall be administered by the training officer. The type and number of tests shall be determined by the Forensic Scientist Manager or training officer.

4.3.5.5 After the Forensic Scientist has successfully completed the written and competency tests, a moot court covering all aspects of the discipline shall be conducted.

4.3.5.6 Upon successful completion of all aspects of training, the Forensic Scientist shall be released for independent work.

4.3.6 Assistance with Casework – Any assistance the trainee provides under the direct supervision of a Forensic Scientist shall be documented in the case file.

4.4 Technical Support Staff

4.4.1 All technical support staff shall receive training. Such training shall be addressed in Section Training Procedures.

4.4.2 Technical support staff training shall include a competency test and a moot court as defined in 4.3.4.

4.4.3 Failure to successfully complete any training program required for the employee's position constitutes unsatisfactory job performance and shall be cause for disciplinary action up to and including dismissal.

4.5 Official Release

- 4.5.1** Upon an employee's successful completion of training, the Forensic Scientist Manager/Unit Supervisor shall forward the employee's complete training file and a memo recommending release for casework to the QM for review.
- 4.5.2** The QM shall assess the training file and, if it is complete, initial the memo recommending that the Lab Director release the employee for casework.
- 4.5.3** The Lab Director shall review the employee's training file. If satisfied as to the competency of the employee, the Lab Director shall initial the memo. If the employee is a DNA Forensic Scientist, the Lab Director shall return the memo to the DNA Technical Leader. The DNA Forensic Scientist shall not be released for casework until the DNA Technical Leader has provided written approval.
- 4.5.4** The QM shall ensure that copies of the memo are distributed to the employee and the training file of the employee.
- 4.5.5** The Forensic Scientist Manager/Supervisor and the DNA Technical Leader are authorized to update the Work Authorization List detailing the approved type of analysis/work and equipment/instrumentation. The Forensic Scientist Manager/Supervisor and the DNA Technical Leader shall approve the Work Authorization List.
- 4.5.6** The Quality Manager shall maintain a Work Authorization List detailing the approved type of analysis/work and equipment/instrumentation for Forensic Scientist Managers/Supervisors. The Laboratory Director shall approve this Work Authorization List.
- 4.5.7** Within three months from release to conduct casework, the employee shall be given an opportunity evaluate the training program. The feedback provided shall be documented on the Evaluation of Personnel Training Form. The QM shall facilitate any necessary follow-up.

4.6 Additional Training

- 4.6.1** Employees shall be notified of changes in policies, procedures, methods and/or equipment or instruments and receive any necessary training.
- 4.6.2** Employees shall be retrained when their performance is unsatisfactory.
 - 4.6.2.1** During retraining, the analyst shall not perform independent casework in the relevant discipline.
 - 4.6.2.2** The steps for retraining shall be documented and signed by the Forensic Scientist Manager, DNA Technical Leader (if applicable), and analyst before the retraining begins. Documentation of retraining shall be completed by the Forensic Scientist Manager or the assigned trainer.
 - 4.6.2.3** Prior to resuming casework, the analyst shall successfully complete a competency and/or proficiency test which shall include the area(s) of deficiency.
 - 4.6.2.4** Upon successful completion, documentation of retraining shall be reviewed and signed by the trainer and/or supervisor, DNA Technical Leader (if applicable), and

Quality Manager indicating completion of all retraining and approval to resume casework. Documentation shall be stored in the analyst's training file.

4.6.3 To maintain competency, employees shall participate in continuing education. Continuing education includes meetings and seminars; participation in study groups and technical working groups; review of the current literature; preparation and submission of journal articles for publication; presentation of papers at technical meetings; and/or participation in college courses and other specialized courses.

4.6.3.1 DNA Forensic Scientists shall complete at least eight hours of continuing education annually as required by QAS guidelines.

4.6.3.2 Upon return from continuing education, the employee shall discuss the value of the training and the material covered during the training. This discussion shall be documented in the meeting minutes.

4.6.4 Employees may receive additional formalized internal training (e.g. conducting reviews and newly validated procedures). When training of this type is received, the trainee shall complete a written test and competency test prior to being authorized to perform this function.

4.6.4.1 Upon an employee's successful completion of training, the Forensic Scientist Manager/Unit Supervisor shall forward the employee's competency test and a memo recommending release for casework to the Quality Manager (QM) for review.

4.6.4.2 The QM shall review the employee's training file. If satisfied as to the competency of the employee, the QM shall initial the memo. If the employee is a DNA Forensic Scientist, the QM shall return the memo to the DNA Technical Leader. The DNA Forensic Scientist shall not be released for casework until the DNA Technical Leader has provided written approval.

4.6.4.3 The Forensic Scientist Manager/Supervisor and the DNA Technical Leader are authorized to update the Work Authorization List detailing the approved type of analysis/work and equipment/instrumentation. The Forensic Scientist Manager/Supervisor and the DNA Technical Leader shall approve the Work Authorization List for DNA Forensic Scientists.

4.7 Training Documentation

4.7.1 Individual discipline training records shall be maintained by the Section/Unit as part of the permanent QA archives. An employee's training record shall include the following:

- Records of the employee's training activities and training checklist.
- Results of the competency exam(s).
- Copy of the moot court evaluation (if applicable).
- Memo for release to independent casework.

4.7.2 Documentation of external training

4.7.2.1 Upon completion of external training, the employee shall enter the course and all supporting documentation into Cornerstone. The following information shall be entered:

- Course Title
- Course Description
- Course Provider
- Training Dates (not including travel)
- Cost
- Training Hours
- Supporting Documentation

4.7.2.2 The supporting documentation shall consist of proof of course completion (e.g., certificate, email from instructor) and a description of the course content (e.g., syllabus, brochure, webpage), which should include all of the above required information.

4.7.2.3 For employees in the Forensic Biology and DNA Database Sections, on-line training must be pre-approved by the DNA Technical Leader to qualify as continuing education per QAS guidelines. Written documentation of the pre-approval shall be maintained in Cornerstone and in the employee's respective Section.

5.0 Records

- Training files and documentation

6.0 Attachments – N/A

Revision History		
Effective Date	Version Number	Reason
09/17/2012	1	Original Document
12/07/2012	2	4.3.2.2 - removed shall be included in the training file; removed 4.2.5; added 4.6.2.1- 4.6.2.4
02/01/2013	3	4.3.3.3.1 - addressed unsatisfactory mock trial; 4.5.3, 4.6.2.2, 4.6.2.4 - added wording to include DNA Technical Leader
05/30/2013	4	4.5.4 - revised to remove Laboratory intranet; 4.5.5 - edited to authorize Forensic Scientist Manager/Supervisor and DNA Technical Leader to update and approve work authorization lists; added 4.5.6 requiring DAD/Quality Manager to maintain work authorization lists for Forensic Scientist Managers/Supervisors that are approved by the Laboratory Director
10/31/2013	5	Added issuing authority to header; 4.2.1 – removed SBI
10/31/2014	6	4.6.3.1 – changed DAB to QAS; 4.7.1 - added discipline; 4.7.2 - reworded; added 4.7.2.1-4.7.2.3
12/19/2014	7	Throughout document replaced Deputy Assistant Director/QM with QM; 4.3.3.3 - removed Deputy; 4.3.3.3.1 - changed storage location of moot court evaluation forms to training file
10/19/2015	8	4.1.1 – added training requirements for newly validated procedures; 4.1.3 - removed evidence from third bullet point; 4.3.3.3 – added that QM may substitute for Lab Management; 4.5.3 – replaced forward with return; 4.5.7 – edited review of training program
03/09/2016	9	4.3.2, 4.4.3 – added consequences for failure to complete training program; 4.3.4 – clarified retesting allowance; 4.4.2 – referenced 4.3.4
04/28/2017	10	4.2.4 – updated titles; 4.3.4.3 – added technical leader; 4.6.4 – added requirements for additional formalized training programs.
01/18/2019	11	3.0 – added “Training Officer” and appropriate definition; 4.3.4.2.1 – added parameters for generating competency tests and the requirement to remove all manufacturer markings/identifiers to old PTs utilized as competency tests.