

## Standard for Training in Forensic DNA Isolation and Purification Methods



### WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

### WHAT IS THE PURPOSE OF THIS STANDARD?

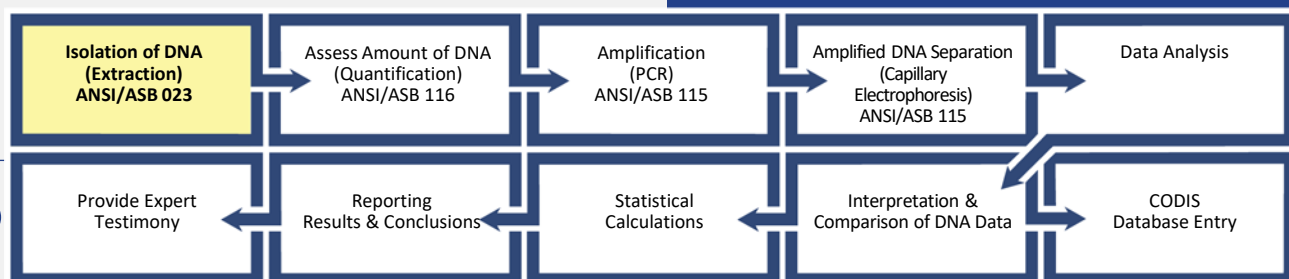
Testing of evidence containing DNA (e.g., blood, semen, saliva, tissue) is routinely performed to exclude or potentially link an individual to a crime scene. DNA testing involves a sequential series of required steps specific to each type of DNA testing performed. The general steps are outlined in the diagram below.

Comprehensive and documented training of DNA personnel prior to conducting any testing on evidence in a case is required to ensure quality and consistency in the testing and communication of the DNA test results and the conclusions derived from the DNA results.

### WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This standard provides requirements for the training program for the proper training of forensic DNA personnel in the methods of DNA isolation and purification. The isolation and purification of DNA from a biological sample is the first step of the DNA testing process.

The recovery of DNA from a biological sample (e.g., evidence from a crime scene) ensures that testing can proceed through to the required next steps of the DNA testing process to generate quality DNA test results.



### HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

The standard details requirements for the training of forensic DNA personnel in the isolation and purification of DNA present in various types of biological samples routinely tested by FSSPs and includes: 1) specific knowledge-based training regarding the fundamental scientific principles and methods, including any limitations; 2) practical training; and 3) knowledge-based and practical competency assessment of that training.

This standard is intended to be used in conjunction with [ANSI/ASB 022, 1st Ed. 2019](#), which provides the overall scope and framework for the testing training program and includes the requirement that all training is documented and retained by the FSSP. This standard is one in a series of standards that span all aspects of training for DNA testing and communication (see the individual boxes in the diagram).

This is a standard practice. Additional training beyond that required in the standard may be necessary depending on the testing assays used and the types of evidence tested.