# BASIC MOLECULAR BIOLOGY MODULE 3: NUCLEIC ACID EXTRACTION

AN ONLINE LEARNING COURSE AVAILABLE ON <u>WWW.CDC.TRAIN.ORG</u>

Sponsored by the Division of Laboratory Systems, Center for Surveillance, Epidemiology and Laboratory Services, Centers for Disease Control and Prevention



#### **DESCRIPTION**

Molecular techniques have been widely used in clinical diagnosis, e.g., diagnosing disease, predicting disease course, and identifying infectious agents. This basic Molecular Biology course series will introduce the scientific background for molecular diagnosis, the principles of laboratory settings, and common methods.

This basic-level eLearning course, Module 3, provides information on nucleic acid extraction. Topics covered include extraction method selection, basic extraction steps, and nucleic acid analysis.

#### **AUDIENCE**

This online course is designed for public health and clinical laboratory staff, and persons interested in nucleic acid extraction.

### **SPECIAL NEEDS**

Course content is closed captioned, where applicable, and optimized for a screen reader.

#### **FREE REGISTRATION**

- Locate the course online at www.cdc.gov/labtraining
- · Follow the link to register for the course in TRAIN
- · If you have difficulty with the online registration process, please email <a href="mailto:labtraining@cdc.gov">labtraining@cdc.gov</a>



## **OBJECTIVES**

At the conclusion of this course, the participant will be able to:

- Identify the four major factors used in selection of the nucleic acid extraction method
- Outline the three basic steps in nucleic acid extraction
- Explain how to analyze nucleic acid quantity and purity by spectrophotometry and gel electrophoresis
- Identify common problems in nucleic acid extraction

#### **CONTINUING EDUCATION**

The Centers for Disease Control and Prevention,
Division of Laboratory Systems is approved as a
provider of continuing education programs in the
clinical laboratory sciences by the ASCLS P.A.C.E.®
Program. This course is approved for 1.5 contact hours.
P.A.C.E.® course number: 288-003-19

For a complete list of courses, visit www.cdc.gov/labtraining.