

Forensics lab series for Honors Scholars

At the DNA Learning Center – Pearl Second Floor (entry at 62 Tillary St)

Dusting for Fingerprints

Thursday, September 17 – 1:00-2:00 PM

In the late 1800's, anthropologist Francis Galton established that the microscopic ridges and valleys on the pads of our fingers make uniquely identifiable patterns. In the early 1900's, scientists and criminologists began to realize that fingerprints could be used in criminal investigation, linking evidence to suspects. We will explore the general classifications of different patent (visible) prints, analyze fingerprint minutiae, learn to lift fingerprints from surfaces.

DNA Fingerprinting

Thursday, October 15 – 1:00-2:00 PM

Human DNA is more alike than different, so how do we find the differences? Restriction enzymes are proteins that recognize specific DNA sequences and can be used to determine whether a particular DNA sequence is present. In this lab, DNA from "evidence" and "suspects" will be compared using restriction enzyme digest and agarose gel electrophoresis. DNA analysis will then be combined with crime scene data to "solve" a crime.

Forensic DNA Profiling

Thursday, November 12 – 1:00-2:00 PM

While early DNA analysis involved digesting DNA with restriction enzymes, modern forensics analysis involves amplifying hypervariable regions of DNA using the polymerase chain reaction (PCR). This amplification of specific regions helps investigators capture a large amount of genetic variability from a very small sample of DNA. In this lesson, we will analyze results from an agarose gel and quantitative DNA chip to identify genotypes and determine how likely it is that there is a match between the evidence at a crime scene and a suspect.

LOCATIONS

BROOKLYN

DNALC NYC at City Tech

62 Tillary Street
Brooklyn, NY 11201

Mail:
300 Jay Street
Brooklyn, NY 11201
718-285-0389

MANHATTAN

Harlem DNA Lab

2351 First Ave at 120th Street
East Harlem, NY 10035

516-367-5170

LONG ISLAND

Dolan DNA Learning Center

334 Main Street
Cold Spring Harbor, NY 11724

Mail:
1 Bungtown Road
Cold Spring Harbor, NY 11724

516-367-5170

WESTCHESTER

Regeneron DNALC

1 Rockwood Road
Sleepy Hollow, NY 10591

914-800-9991

NEW JERSEY

DNALC at Passaic County Biotechnology Innovation Center

45 Reinhardt Road
Wayne, NJ 07470

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