Chapter 943, Florida Statutes, establishes a statewide criminal laboratory system to provide services upon request to law enforcement agencies in the state of Florida. The FDLE crime lab provides timely, expert and professional examination of evidentiary materials to aid in the investigation, prosecution and/or exclusion of criminal offenses by utilizing sophisticated scientific equipment and proven techniques. Crime lab analysts are called on a continual basis to provide expert witness testimony in court cases.

FDLE has six internationally accredited laboratories which are located in Ft. Myers, Jacksonville, Orlando, Pensacola, Tallahassee and Tampa Bay. The FDLE crime laboratory system provides evidentiary analysis in ten forensic disciplines: Biology/DNA, Chemistry, Crime Scene, Digital Evidence, DNA Database, Firearms, Latent Prints/Impression Evidence, Questioned Documents, Toxicology, and Trace Evidence.

**Biology/DNA**
Analysts in this section examine items of evidence to identify the presence or absence of body fluids such as blood, semen and saliva. Stains, once identified, can provide DNA evidence of the donor(s). DNA (Deoxyribonucleic acid) is the genetic blueprint that makes all organisms unique. A person’s DNA is the same throughout the body and no two people have the same DNA, except identical twins. Analysts compare DNA patterns obtained from the evidence to DNA patterns from subjects and victims to statistically link these individuals to each other, a crime scene or to any item of evidence. Equally important is the capability to exclude individuals based upon his or her DNA profile.

**Chemistry**
Chemists utilize various scientific methodologies and instrumentation to examine evidence for the presence or absence of controlled substances. Evidence submitted may include plant material, powders, tablets, capsules, liquids, and smoking devices. Some of the most commonly identified drugs include cocaine, marijuana, heroin, and methamphetamine. The largest percentage of all cases received in the lab are chemistry cases.

**Crime Scene**
Crime laboratory analysts are on-call 24/7 and respond to requests for examination of major crime scenes. A critical part of a criminal investigation is the documentation, collection, and preservation of physical evidence. This evidence is later analyzed at the crime laboratory. The types of services offered are photography, video recording, measuring, sketching, general evidence collection, bloodstain and trajectory determination. Analysts also conduct training in crime scene procedures and evidence handling for law enforcement agencies.

**Digital Evidence**
Digital Evidence was created to assist law enforcement officials investigating crimes involving computers and the Internet. The analysts in this section utilize their skills to open computers and other digital media in order to recover data and deleted files. Through these efforts investigators are provided with valuable clues that help catch criminals specializing in an ever-growing array of computer-related offenses.

**DNA Database**
The DNA Database accepts oral swab samples from individuals convicted of a multitude of crimes as mandated under 943.325, Florida Statutes, including, but not limited to sexual assault, lewdness / indecent exposure, murder, robberies, kidnappings, forcible felonies, burglary, felony firearm violations, and thefts. The law requires individuals convicted of these offenses to submit a biological specimen (oral swabbing) to the FDLE DNA Database for analysis. The analysis results allow for the comparison of DNA from unresolved cases to the DNA of both known offenders and that from other unresolved cases in an attempt to identify the perpetrator.

Florida currently leads the nation in DNA matches averaging more than 3000 hits per year.

**Firearms**
Many crimes of violence involve the use of firearms whose value as evidence depends to a significant degree on the recovery and submission techniques of the law enforcement agency. Analysts in this section perform examinations which include the identification or elimination of bullets, cartridge cases, and shot shells with suspect weapons; the identification or elimination of tool marks with a suspect tool; weapon function and mechanical...
condition testing; distance determinations from the examination of clothing and/or tissue; restoration of obliterated serial numbers; and imaging of cartridge cases and searching in the National Integrated Ballistics Information Network database (NIBIN).

Latent Prints/Impression Evidence
Latent prints are among the most valuable types of physical evidence examined by a laboratory. All objects at the scene of a crime are considered as possible sources of fingerprints that may lead to identification of the offender. By examining the evidence submitted, the laboratory may be able to determine the presence of latent prints. If they are identifiable, the analysts can compare and identify latent prints with known prints of individuals, establish the identity of unknown deceased persons, identify a latent fingerprint or palm prints via the Automated Fingerprint Identification System/Biometric Identification System (AFIS/BIS) or through the FBI’s Integrated AFIS. The latents section also examines tire and shoe track evidence, and determines whether an impression collected at a crime scene matches a submitted tire or shoe.

Questioned Documents
Analysts examine questioned documents to compare handwritings of known origin to identify authorship of questioned writing, identify office machines, copying and printing processes to determine source and/or internal consistency, and restore erased, obliterated, and indented writing to establish the estimated date of preparation of documents.

Toxicology
Toxicologists analyze samples of blood and urine for the presence, or absence, of alcohol and other drugs of abuse. For example, a person who is arrested for “driving under the influence” may be required to give a blood sample for analysis. A series of test procedures is then completed on the sample to determine the type of any intoxicating chemicals present. Toxicologists conduct presumptive and confirmatory testing. Drugs commonly found in DUI cases include ethyl alcohol, cocaine, cannabinoids and depressants.

Trace Evidence
Analysts in the Trace Evidence section typically examine small microscopic items of evidence sometimes no larger than a grain of sand. These examinations include paint/polymers, glass, fibers, fracture match, and bulb filaments. Comparisons may include: paint found on a hit and run victim compared to a suspect’s vehicle; glass from suspect’s clothes compared with broken glass from a crime scene; or fibers recovered from a person or scene compared to the clothing from a suspect or victim. Analysts also examine cut, broken or torn objects to determine if they were at one time part of the same object.