

Lab RAT**Definitions of Investigation Areas**

Accident Investigation	All non-traffic accident investigations, such as work-related accidents.
Biology (Non-DNA)	The detection, collection, and non-DNA analysis of biological fluids.
Blood Alcohol	The analysis of blood or breath samples to detect the presence of and quantify the amount of alcohol.
Computer Analysis	The analysis of computers, computerized consumer goods, and associated hardware for data retrieval and sourcing.
Crime Scene Investigation	The collection, analysis, and processing of locations for evidence relating to a criminal incident.
Digital evidence - Audio & Video	The analysis of multimedia audio, video, and still image materials, such as surveillance recordings and video enhancement.
DNA Casework	Analysis of biological evidence for DNA in criminal cases.
DNA Database	Analysis and entry of DNA samples from individuals for database purposes.
Document Examination	The analysis of legal, counterfeit, and questioned documents, excluding handwriting analysis.
Drugs - Controlled Substances	The analysis of solid dosage licit and illicit drugs, including pre-cursor materials.
Entomology	Forensic entomology is the application of the study of arthropods, including insects, to criminal or legal cases.
Evidence Screening & Processing	The detection, collection, and processing of physical evidence in the laboratory for potential additional analysis.
Environmental analysis	The analysis of naturally occurring materials, such as soil or water, for foreign substances with criminal implications.
Explosives	The analysis of energetic materials in pre- and post-blast incidents.
Fingerprints	The development and analysis of friction ridge patterns.
Fire analysis	The analysis of materials from suspicious fires to include ignitable liquid residue analysis.
Firearms and Ballistics	The analysis of firearms and ammunition, to include distance determinations, shooting reconstructions, NIBIN, and toolmarks.
Forensic engineering and material science	Failure and performance analysis of materials and constructions.

Forensic Pathology	Forensic pathology is a branch of medicine that deals with the determination of the cause and manner of death in cases in which death occurred under suspicious or unknown circumstances.
Gun Shot Residue (GSR)	The analysis of primer residues from discharged firearms (not distance determinations).
Hairs & Fibers	The analysis of human and animal hairs (non-DNA) and textile fibers as trace evidence.
Handwriting	The evaluation of hand written materials to categorize or identify a writer.
Marks and Impressions	The analysis of physical patterns received and retained through the interaction of objects of various hardness, including shoeprints and tire tracks.
Odontology	The identification of human remains through dental materials, for example by postmortem X-rays of the teeth compared to antemortem X-rays. Some forensic odontologists also analyze and compare bitemarks.
Paint & Glass	The analysis of paints—generically, coatings—and glass as trace evidence.
Road accident reconstruction	Analysis of criminal incidents involving vehicles and accidents (hit and run, for example).
Speech & Audio	The analysis of live and recorded vocalizations in criminal investigations.
Toxicology, ante-mortem	Toxicology involves the chemical analysis of body fluids and tissues to determine if a drug or poison is present in a living individual, to include blood alcohol analysis (BAC). Toxicologists are then able to determine how much and what effect, if any, the substance might have had on the person.
Toxicology, post-mortem	Toxicology involves the chemical analysis of body fluids and tissues to determine if a drug or poison is present in a deceased individual. Toxicologists are then able to determine how much and what effect, if any, the substance might have had on the person.
Trace Evidence	The analysis of materials that, because of their size or texture, transfer from one location to another and persist there for some period of time. Microscopy, either directly or as an adjunct to another instrument, is involved.
Other Specialties	Other forensic science applications not covered by the other categories.