Careers in Forensic Science
Also known as Criminalistics

The application of science to the law
Careers

- Forensic Scientists
- Criminologists
- Crime Scene Investigators
- Coroners
- Medical Examiners
- Prosecutors
Common Duties

- Data collection
- Data analysis
- Data interpretation
- Court testimony
Identify and/or compare physical evidence through chemical, physical, and instrumental analysis.
Forensic Scientists: Main Roles

- **Analyze** – unearth factual information, regardless which side the evidence supports
- **Interpret** – evaluate findings, arriving at opinions and conclusions
- **Report** – testify accurately and truthfully
Criminologists

✓ Study criminal and behavioral psychology to aid in criminal investigations
Collect and preserve physical evidence from crime scenes
Medical Examiners

✓ Perform autopsies to identify the causes and manners of death
Coroners

✓ Typically transport corpses from the crime scene to the morgue; some aid in death investigations
Prosecutors

- Initiate arrests, indictments and prosecution of criminals
Disciplines

- **Trace Evidence** (hair, fiber, paint, glass, impressions, etc.)
- **Latent Prints** (fingerprints)
- **Forensic Biology** (Serology/DNA)
- **Toxicology** (blood alcohol, poisons)
- **Controlled substance** (drugs)
- **Questioned documents** (handwriting & typescripts)
- **Firearms** (firearms and ammunition)
- **Others**
Other Disciplines

- Crime Scene Investigation
- Forensic Photography
- Forensic Anthropology
- Forensic Computer Science
- Forensic Engineering
- Forensic Entomology
- Forensic Pathology
- Forensic Psychology & Psychiatry
Employment Opportunities

- Federal Bureau of Investigation (FBI)
- Federal, State, and Local Crime Laboratories
- Drug Enforcement Administration (DEA)
- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
- U.S. Postal Service (USPS)
- U.S. Secret Service
- Central Intelligence Agency (CIA)
- U.S. Fish & Wildlife Services
- Teaching at community colleges and universities.
Employment Qualifications

- **Forensic Scientists** — Bachelor of Science (BS) or higher in natural or physical science
- **Criminologists** — BS or higher in sociology or psychology
- **Crime Scene Investigators** — law enforcement officers with a certification, such as one from the International Association for Identification (IAI)
- **Medical Examiners (ME)** — licensed pathologists possessing a Doctor of Medicine (MD), that have completed several years of internship in pathology
- **Coroners** — equivalent to MEs in some jurisdictions; some are elected county officials who handle corpse and death investigation
- **Prosecutors** — Doctor of Jurisprudence (JD) in criminal law
Training

- College education
- Internship
- In-house training provided by the employing agency
- External training sponsored by federal and state agencies such as:
  - FBI National Academy in Quantico, VA
  - Texas Department of Public Safety (TXDPS)
- Workshops provided by various associations during meetings
Certifications & Accreditations

- American Society of Crime Laboratory Directors – Laboratory Accreditation Board (ASCLD-LAB)
  - Accredits crime laboratories

- International Organization for Standardization (ISO)
  - Certifies crime laboratories (ISO 17025)

- American Society for Testing and Materials (ASTM)
  - Certifies testing materials used in analysis

- American Board of Criminalistics (ABC)
  - Certifies individual forensic scientists
Organizations

- American Academy of Forensic Sciences (AAFS)
- American Board of Criminalistics (ABC)
- Association of Firearm and Tool Mark Examiners (AFTE)
- More available on the AAFS website: http://www.aafs.org/forensic-links