

# CURRICULUM VITAE

## **Blaine M. Kern**

**President/Laboratory Director  
Human Identification Technologies  
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## PROFESSIONAL EXPERIENCE

**PRESIDENT/LABORATORY DIRECTOR, Human Identification Technologies-Missouri, LLC, Kirksville, MO, 2008 to Present**

### Corporate duties:

- President
- Oversee all business and laboratory operations

### As Laboratory Director:

- Oversee laboratory operations
- Ensure quality assurance compliance
- Evaluate scientific equipment and processes
- Validate scientific equipment and processes
- Supervise laboratory staff
- Recruit Forensic Scientists

### As Forensic Scientist:

- Perform forensic biology (DNA) testing
- Perform consultative services
- Generate scientific reports detailing evidence, examinations, results and conclusions
- Testify as an expert in courts of law
- Peer review other Forensic Scientists work for correctness and completeness
- Make presentations to the legal and scientific communities

**PRESIDENT/LABORATORY DIRECTOR/QUALITY ASSURANCE OFFICER**, Human Identification Technologies, Inc., Redlands, CA, 2009 to 2010

Founded California's first ASCLD/*LAB-International* accredited forensic DNA laboratory.

Corporate duties:

- Chief Executive Officer (CEO)
- Chairman, Board of Directors
- Oversee all business and laboratory operations

As Laboratory Director:

- Oversee laboratory operations
- Ensure quality assurance compliance
- Evaluate scientific equipment and processes
- Validate scientific equipment and processes
- Supervise laboratory staff
- Recruit Forensic Scientists

As Quality Assurance Officer:

- Ensure that the quality requirements of the management system are implemented and maintained
- Maintain quality manual
- Maintain quality logs
- Coordinate quality audits

As Forensic Scientist:

- Perform forensic biology (DNA) testing
- Perform consultative services
- Generate scientific reports detailing evidence, examinations, results and conclusions
- Testify as an expert in courts of law
- Peer review other Forensic Scientists work for correctness and completeness
- Make presentations to the legal and scientific communities

**PRESIDENT/FORENSIC SCIENTIST**, Human Identification Technologies, Inc., Redlands, CA, 2004 to 2009

Founded California's first ASCLD/*LAB-International* accredited forensic DNA laboratory.

Corporate duties:

- Chief Executive Officer (CEO)
- Chairman, Board of Directors

- Oversee all business and laboratory operations

**As Forensic Scientist:**

- Perform consultative services
- Generate scientific reports detailing evidence, examinations, results and conclusions
- Testify as an expert in courts of law
- Peer review other Forensic Scientists work for correctness and completeness
- Make presentations to the legal and scientific communities

**CRIMINALIST II, San Bernardino County Sheriff's Department Scientific Investigations Division, San Bernardino, CA, 1998 to 2004**

**DNA Analysis**

- Analyze DNA from biological evidence collected at crime scenes with polymerase chain reaction (PCR) based technologies
- Expertise includes the following PCR-based DNA typing systems: PM+DQA1 via reverse dot blot (SSO typing), D1S80 via polyacrylamide gel electrophoresis (VNTR typing), Profiler Plus and COfiler via capillary electrophoresis (STR typing).
- Identify physiological fluids
- Interpret data to form results and conclusions
- Calculate statistical significance of DNA typing results
- Generate scientific reports detailing evidence, examinations, results and conclusions
- Assist in inventory tracking and ordering
- Testify as an expert in courts of law
- Maintain strict quality control measures
- Peer review other Criminalists work for correctness and completeness

**Crime Scene Investigations**

- Assist in clandestine drug laboratory investigations

**CRIMINALIST I, San Bernardino County Sheriff's Department Scientific Investigations Division, San Bernardino, CA, 1994 to 1998**

**Controlled Substance Analysis**

- Analyze controlled substances and chemical evidence from clandestine drug laboratories

### **Crime Scene Investigations**

- Assist various law enforcement agencies with clandestine drug laboratory investigations
- Expertise includes the following: Crime scene reconstruction, crime scene photography, detailed note taking, crime scene sketches, evidence collection and latent print processing.

### **Forensic Biology/DNA**

- Performed physiological stain preservation on biological evidence collected at crime scenes
- Processed and preserved various sexual assault evidence
- Commenced forensic DNA analysis training

### **HOSPITAL SERVICES TECHNICIAN, Blood Bank of San Bernardino and Riverside Counties, San Bernardino, CA, 1992 to 1994**

- Performed enzyme-linked immunoassays (ELISA) for the detection of HIV I/II, hepatitis B and hepatitis C antibodies
- Assisted in the validation of new testing systems
- Responsible for equipment calibration, repair, and maintenance
- Generated reports detailing testing results

## **COURT TESTIMONY QUALIFICATIONS**

**Testified as an expert witness on over 125 occasions.**

### **DNA**

Qualified as an expert witness in PM+DQA1, D1S80, and/or STR, PCR-based DNA analyses in the following states:

- Alaska
- California

### **Other**

Qualified as an expert witness in analysis of controlled substances, chemical analysis of clandestine drug laboratory evidence, crime scene investigations, basic firearms including bullet trajectory analysis, and basic trace analysis in the following states:

- California

### **ACADEMIC QUALIFICATIONS**

**Bachelor of Arts in Biology, 1994**  
**Bachelor of Arts in Environmental Studies, 1994**  
California State University, San Bernardino

*Includes courses in Biochemistry, Genetics, Molecular Biology and Statistics*

### **SPECIALIZED TRAINING (DNA)**

Short Tandem Repeat (STR) Analysis Training (Identifiler)  
Human Identification Technologies, Inc.  
Redlands, California  
2009

Advanced Topics in Forensic Statistics  
The 17<sup>th</sup> International Symposium on Human Identification  
Nashville, Tennessee  
2006

Extraction of DNA from Aged Skeletal Remains &  
Forensic Mitochondrial DNA Sequence Analysis  
Armed Forces DNA Identification Laboratory  
Rockville, Maryland  
2005

Real-Time PCR Quantification Workshop  
Applied Biosystems  
Ventura, California  
2004

DNA Workshop  
California Association of Criminalists Seminar  
Ventura, California  
2004

DNA Statistics Workshop  
California Association of Criminalists Seminar  
San Diego, California  
2003

PCR – DNA: Short Tandem Repeat (STR) Analysis and Typing  
California Criminalistics Institute  
Sacramento, California  
2002

**Short Tandem Repeat (STR) Analysis Training (Profiler Plus/COfiler)**  
**San Bernardino County Sheriff's Department**  
**San Bernardino, California**  
**2001**

**Short Tandem Repeat (STR) Analysis by Capillary Electrophoresis**  
**Federal Bureau of Investigation**  
**Quantico, Virginia**  
**2001**

**DNA Forensics Conference**  
**Cambridge Healthtech Institute**  
**Springfield, Virginia**  
**2000**

**Statistics in DNA Analysis**  
**California Criminalistics Institute**  
**Newport Beach, California**  
**1999**

**DNA – Polymerase Chain Reaction: DQA1/Polymarker**  
**California Criminalistics Institute**  
**Sacramento, California**  
**1999**

**DNA Extraction and Quantification**  
**California Criminalistics Institute**  
**Sacramento, California**  
**1999**

**DNA Analysis Training –DQA1/Polymarker and D1S80**  
**San Bernardino County Sheriff's Department**  
**San Bernardino, California**  
**1998-1999**

#### **SPECIALIZED TRAINING (OTHER)**

**Technical Writing for Criminalists**  
**California Criminalistics Institute**  
**San Luis Obispo, California**  
**2001**

**Bloodstain Pattern Interpretation**  
**California Association of Criminalists Seminar**  
**San Diego, California**  
**1998**

**Basic Practical Microscopy  
California Criminalistics Institute  
Sacramento, California  
1998**

**Basic Firearms and Toolmarks Cross Training  
San Bernardino County Sheriff's Department  
San Bernardino, California  
1998**

**Basic Fiber Analysis Cross Training  
San Bernardino County Sheriff's Department  
San Bernardino, California  
1998**

**Clandestine Drug Laboratory Waste Operations  
California Specialized Training Institute  
San Luis Obispo, California  
1997**

**Clandestine Laboratory Technical Training Seminar  
Clandestine Laboratory Investigating Chemists  
San Diego, California  
1997**

**Clandestine Laboratory Investigation  
California Narcotic Officers' Association  
Huntington Beach, California  
1997**

**Explosives Recognition Training  
San Bernardino County Sheriff's Department  
San Bernardino, California  
1997**

**Clandestine Laboratory Investigation  
Clandestine Laboratory Investigators Association  
Sacramento, California  
1996**

**Interpretation of Infrared Spectra  
California Criminalistics Institute  
San Diego, California  
1995**

Clandestine Laboratory Analysis and Synthesis  
California Criminalistics Institute  
Sacramento, California  
1995

Clandestine Laboratory Investigations  
California Narcotic Officers' Association  
Fullerton, California  
1995

Explosives Recognition  
San Bernardino County Sheriff's Department  
San Bernardino, California  
1995

Controlled Substance Analysis  
San Bernardino County Sheriff's Department  
San Bernardino, California  
1994

Clandestine Laboratory Investigation and Analysis  
San Bernardino County Sheriff's Department  
San Bernardino, California  
1994 - Investigations  
1994- Analysis

Courtroom Testimony Skills  
Sound Communication, Los Angeles Police Department  
Los Angeles, California  
1994

## PRESENTATIONS

Provided forensic DNA and general criminalistics training to law enforcement and the legal community on over 60 occasions from 2005 to 2010. The following is a partial list.

Kern B. "DNA Up-Close", presented at NDIA, 2008, Las Vegas, Nevada

Kern B. "DNA Up-Close", presented at PICA, 2008, Redlands, California

Kern B. "DNA Evidence/DNA Up-Close", presented at Orange County Alternate Public Defender's Office, 2008, Santa Ana, California

Kern B. "DNA Up-Close", presented at Human Identification Technologies Conference Room, 2008, Redlands, California



Kern B. “DNA Evidence: ‘DNA Up-Close’”, presented at Federal Public Defender’s Office, 2008, Los Angeles, California

Kern B. “DNA and Statistical Calculations”, presented at Human Identification Technologies Conference Room, 2007, Redlands, California

Kern B., “DNA Evidence”, presented at NDIA, 2007, Scottsdale, Arizona

Kern B. “DNA Evidence/DNA Up-Close”, presented at CDIA, 2007, Monterey, California

Kern B. “DNA Evidence/DNA Up-Close”, presented at Pima County Public Defender’s Office, 2007, Tucson, Arizona

Kern B. “DNA Up-Close”, presented at Maricopa County Public Defender’s Office, 2007, Phoenix, Arizona

Kern B. “DNA Up-Close”, presented at Human Identification Technologies Conference Room, 2007, Redlands, California

Anjaria M. Kern B. “Considerations in the Design, Validation, and Accreditation of a Forensic, Casework-Focused DNA Laboratory”, poster presented at the 17<sup>th</sup> Annual International Symposium on Human Identification, 2006, Nashville, Tennessee

**Blaine M. Kern**  
Continued

Kern B. “What Every PI Needs to Know About DNA”, presented at the California Association of Licensed Investigators Seminar, 2006, San Diego, California

Kern B. “Forensic Science”, presented at the Federal Defenders of Montana / Montana Association of Criminal Defense Lawyers, Criminal Defense Attorney Seminar, 2005, Big Sky, Montana

## **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

American Academy of Forensic Sciences

California Association of Criminalists