



Curriculum Vitae – Tamira Ballard Newquist

Email: Streamlinednaconsultants@gmail.com

Email: tballard8629@gmail.com

Telephone: 858-531-0727

Rapid City, South Dakota 57702

Education

Bachelor of Science in Biology, Minor in Anthropology – University of California San Diego, 1998
Certificate of Business - San Diego Community College District, 2004

Experience

Partner for Streamline DNA and Crime Scene Consultants, LLC - June 2022 to present

Provide expert testimony, opinions, and advice to the legal community concerning forensic DNA evidence case review and crime scene investigations. Consulting services encompass complex DNA mixture interpretation (up to five contributors), bloodspatter interpretation, cold case analysis, shooting trajectories, gang-motivated murders, John DOE cases, Innocence Project cases, dismemberment, torture, instruction regarding degraded DNA analysis and evaluation of dissolved human remains, and officer involved shootings. Offer legal and professional training to attorneys, investigators, and students.

Law Enforcement Liaison for Othram Inc. - September 2023 to April 2025

Identify opportunities for agencies to utilize advanced DNA testing technology and forensic genetic genealogy for law enforcement casework, engage with contacts and set up meetings to discuss Othram's DNA testing technology, document and track meetings and discussions, support agencies in onboarding casework using Othram's law enforcement portal, facilitate the submission of cases to the laboratory for testing, identify opportunities for Othram to present at regional events or training sessions, represent Othram at regional events or training sessions.

San Diego Police Department Crime Laboratory - 1999 to 2022

DNA Criminalist II (2008 – 2022)

Performed independent DNA analysis on casework (including robberies, kidnappings, burglaries, sexual assaults, homicides, criminal paternity, unidentified remains, and traffic investigations). This included biological fluid screening, DNA test result interpretation utilizing Applied Biosystems' GeneMapper ID-X Software and STRmix probabilistic genotyping software, report writing, and courtroom testimony. Responded to crime scenes for evaluation and reconstruction.

DNA Criminalist I (2006 – 2008)

Performed validation studies and independent DNA analysis on approximately 200 cases (includes robberies, burglaries, sexual assaults, and homicides). This included DNA test result interpretation, report writing, and courtroom testimony.

Laboratory Technician (2001 – 2006)

Performed reagent preparation, QC of reagents and equipment (performed biological screening through DNA genotyping), and validation studies (DNA extraction, P30 semen detection, DNA quantitation). Completed sexual assault casework (evidence evaluation, biological fluid screening, DNA extractions, microscopy, report writing). Responsible for lab maintenance, ordering of supplies, and hazardous waste storage. On-boarded and coordinated interns/volunteers and often facilitated thesis projects for their respective universities.

Intern (1999 – 2001)

Performed crossover electrophoresis, lab maintenance, sexual assault kit assembly, data entry, genotyping, report writing, DNA quantitation, DNA extractions, DNA purifications, and validations.

Field Experience/Investigator Training

- Field Evidence Technician (FET) Coordinator - provided support, equipment, and instruction/training to FET patrol officers (2003 - 2011).
- Area station lineup trainer – provided presentations regarding evidence collection, evidence packaging, crime scene photography, and proper lab request submissions.
- San Diego Police Department Basic Investigators Course Instructor – provided newly promoted investigators with training in evidence collection, scene processing and preservation, lab policies and procedures, and DNA result interpretation.
- Crime Scene Reconstruction – processed crimes scenes, including officer-involved shootings, homicides, sexual assaults, assaults, kidnappings, robberies, accident reconstructions, and body exhumations. Completed written reports summarizing observations and conclusions.

Western Dakota Technical College

Guest Lecturer – Criminal Justice Program (2024-2025)

Provide instruction in evidence collection, scene processing, documentation, and preservation.

Mira Costa Community College

Adjunct Professor – Field Evidence Technician Certification Course (2008 – 2010)

Provided training in evidence collection, scene processing, documentation, and preservation.

Scripps Institute of Oceanography

Staff Research Associate (1995 – 1999)

Responsible for demonstrating/training various procedures and project background to incoming graduate students, post-doctorates, work study students, and summer program students. Performed gel electrophoresis, allozyme screening, DNA extraction (various methods), PCR amplification, DNA cycle-sequencing for automated sequencer, plasmid cloning, bacterial culturing, plasmid preps, vector digests, spectrophotometer analysis, autoradiography development, and recording and analyzing of data. Responsible for lab maintenance and supply ordering.

Presentations

- 2024 Bureau of Indian Affairs, Missing and Murdered Unit – Emerging Trends in DNA Analysis/Othram Forensic Investigative Genetic Genealogy
- 2024 North Dakota Chiefs of Police Association – Emerging Trends in DNA Analysis/Forensic Investigative Genetic Genealogy
- 2024 Los Angeles Police Department - Emerging Trends in DNA Analysis/Othram Forensic Investigative Genetic Genealogy
- 2024 San Diego Police Dept and San Diego County District Attorney's Office – Bloodstain Pattern Analysis for Investigators
- 2022 San Diego County District Attorney's Gang Prosecution Unit – Forensic DNA Analysis, Pre-trial and Courtroom Testimony
- 2019 Pennington County Sheriff/Rapid City Police - Cartridge Case DNA analysis
- 2017 Bode Cellmark Forensics – Using Probabilistic Genotyping to Search CODIS and Casework Examples
- 2014 San Diego County District Attorney's Office – Forensic DNA Analysis in the Courtroom
- 2012 CSDIAI Presenter - Maintaining the integrity of both latent print and DNA evidence while in the pursuit of achieving results for each discipline
- 2008 San Diego Archaeological Center's Visiting Scholar – CSI in San Diego
- 2007 Applied Biosystems Roadshow – John Doe Warrants

Awards

- Exceptional performance award from the International Latino Gang Investigators Association for DNA analysis performed in the investigation of the Los Palillos Cartel kidnappings and murders. Laboratory/DNA analysis assisted in the arrest and prosecutions of several persons involved in 9 murders and 17 kidnappings. Successfully performed DNA analysis of dissolved human remains resulting in the identification of two homicide victims. This case being the first known incident of Mexican Drug Trafficking Organizations dissolving humans within the United States.
- Numerous Commanding Officers Citations, letters of commendation, and or recognition from San Diego County District Attorney's Office, Investigative Supervisors, and Chiefs of Police.

Continued Education and Training

Name of Course

94th California Association of Criminalists (CAC) Seminar (1999)
Sexual Assault Training for Suspectless Case Program (2000-2001)
First Aid/CPR (2000)
310 Instrumentation. PC Platform (2002)
DNA Statistics (2002)
CAC DNA Study Group (2002)
CAC DNA Workshop (2002)
Applied Biosystems Training Seminar, New DNA Technology (2003)
Applied Biosystems Training Seminar, Advances in Genomics (2003)
CAC Fall Seminar (2003)
First Annual Advanced DNA Technology Workshop (2004)
AP Biosystem's Model 7000 Real-Time Instruments (2005)
Second Annual Advanced DNA Technology Workshop (2005)
Field Evidence Technician Certification (2005)
37th Annual Training Seminar (2006)
Forensic Digital Photography Basic Training (2006)
GeneMapper ID Software Training (2006)
AB3130 Genetic Analyzer HID (2006)
Blood Evidence Evaluation (2006)
Future Trends in Forensic DNA Technology (2006)
DNA Analysis (2006)
DNA Workshop (2006)
CAC Fall Seminar (2006)
Forensic Biology Screening (2007)
Future Trends in Forensic DNA Technology (2007)
CAC Fall Seminar (2007)
CAC Fall DNA Workshop (2007)
Basic Blood Pattern Analysis (2007)
Firearms Safety (2008)
Crime Scene Investigation II (2008)
CAC Spring Seminar—General Meeting Police Officer Firearms Course (2008)
61st American Academy Meeting Bloodstain Pattern Symposium (2009)
20th International Symposium on Human Identification (2009)

Seventh Annual Advanced DNA Technical Workshop (2010)
Combined DNA Index System (CODIS) (2010)
Advanced DNA Mixture Interpretation Workshop (2010)
Forensic Relationship Training (2011)
Crime Scene Reconstruction I (2011)
Shooting Scene Reconstruction Course (2012)
Forensic DNA Interpretation and Statistics (2012)
Quality Assurance Standards and Auditor Training (2013)
CAC DNA Workshop (2014)
CAC Spring Seminar (2014)
Shooting Reconstruction: The 4 Elements of Trajectory (2014)
Hair Evaluation for DNA Analysis (2014)
Shooting Reconstruction (2014)
Forensic Entomology for the Crime Scene Investigator (2014)
Bloodstain Pattern Analysis II (2014)
STRmix Training Workshop (2015)
3500 Install Training (2015)
Crime Scene Reconstruction II (2015)
Globalfiler STRmix Internal Training (2015)
Wound Pathology Lecture (2016)
13th Annual BODE DNA Conference (2016)
Mixture Interpretation Workshop (2016)
Error and Uncertainty in Bloodstain Pattern Analysis (2017)
14th Annual DNA Conference General Session (2017)
Illumina Sponsored Workshop (2017)
MegaPlex Workshop (2017)
Promega Sponsored Workshop (2017)
Thermo Fisher Scientific Sponsored Workshop (2017)
Bloodstain Pattern Analysis on Textiles TTW (2017)
CAC Fall Seminar – General Session (2018)
CAC DNA Workshop (2018)
CAC ANAB Workshop – Forensic Accreditation Requirements (2018)
Investigative Genealogy Training (2018)
Probabilistic Genotyping Expert Testimony: Communication, Challenges, and Examples (2019)
30th International Symposium on Human Identification (2019)
Investigative Genealogy Workshop (2019)
6th Annual Workshop on STRmix Implementation and Casework Approach (2020)
7th Annual Workshop on STRmix Implementation and Casework Approach (2021)
Global Forensic and Justice Center - Investigative Genetic Genealogy (2022)
