



# Idaho State Police Forensic Services



## CYNTHIA HALL

Quality Manager/Laboratory Improvement Manager  
Idaho State Police Forensic Services  
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### Education:

University of California; San Diego  
Bachelor of Science – Chemistry/Biochemistry

San Jose State University  
Master of Science - Biological Sciences (Molecular Genetics emphasis)

### Experience:

7/2014-Present Idaho State Police Forensic Services  
Quality Manager/Laboratory Improvement Manager

7/2014-9/2016; 2/2019-Present Idaho State Police Forensic Services  
DNA Technical Lead

2/2003-7/2014 Idaho State Police Forensic Services  
Forensic Scientist IV (Biology Supervisor/DNA Technical Lead)

6/2001-2/2003 Idaho State Police Forensic Services  
Forensic Scientist III (Biology/DNA)

7/1999-6/2001 Santa Clara County District Attorney's Crime Laboratory  
Supervising Criminalist (Biology/DNA)

12/1998-7/1999 Santa Clara County District Attorney's Crime Laboratory  
Criminalist III (Biology/DNA)

6/1995-12/1998 Santa Clara County District Attorney's Crime Laboratory  
Criminalist II (Biology/DNA)

6/1994-6/1995 California Department of Justice, DNA Laboratory  
Laboratory Technician/DNA Analyst

3/1993-3/1994 San Diego Police Department Crime Laboratory  
Criminalist Intern (Biology)

<https://isp.idaho.gov/forensics>

**EQUAL OPPORTUNITY EMPLOYER**

Revised 6/8/2020

## Cynthia Hall

### **Certifications:**

2007 American Board of Criminalistics; Molecular Biology Fellow

### **Professional Organizations; Committees; Working Groups:**

2014-present American Society of Crime Laboratory Directors – Member

2014-present Association of Forensic Quality Assurance Managers - Member

2012 – present International Society for Forensic Genetics (ISFG) – Member

2012 - present FBI Quality Assurance Audit Review Committee – Reviewer

2009 – 2011 CODIS 7.0 User Acceptance Testing (FBI) – Working Group Member

2000 – present American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB) – Legacy/International Assessor

2000 – 2002 Association for Crime Scene Reconstruction (ACSR) - Member

1999 - 2001 California Association of Crime Lab Directors (CACLD) - Member

1995 - present American Academy of Forensic Sciences (AAFS) – Member

1995 – 2003 California Association of Criminalists (CAC) – Member

### **Testimony:**

State Courts – Idaho and California (biological screening and DNA analysis)

Federal Courts – District of Idaho (biological screening and DNA analysis)

### **Continuing Education; Association Meetings; Conferences:**

2020 American Academy of Forensic Sciences: DNA and general Criminalistics

2019 Sorenson Forensics In-Service Training: GeneMarker HID Expert System Validation  
American Academy of Forensic Sciences: DNA and general Criminalistics  
5<sup>th</sup> Annual Workshop on STRmix  
Northwest Association of Forensic Scientists DNA Workshop  
SoftGenetics In-Service Training: GeneMarker HID

2018 American Academy of Forensic Sciences Conference: DNA and general Criminalistics  
SoftGenetics In-Service Training: GeneMarker HID Expert System  
American Society of Crime Laboratory Directors Symposium: Quality and Management  
Marshall University In-Service Training: Forensic Y-STR Training  
29<sup>th</sup> International Symposium on Human Identification: DNA

2017 American Academy of Forensic Sciences Conference: DNA and general Criminalistics

2016 American Academy of Forensic Sciences Conference: DNA and general Criminalistics  
Promega In-Service Training: Promega Fusion 5C

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- 2015 American Academy of Forensic Sciences Conference: DNA and general Criminalistics  
American Society of Crime Laboratory Directors Symposium: Quality and Management  
STRMIX Training Workshop: Probabilistic Genotyping/STRMix Software  
Association of Forensic Quality Assurance Managers Conference: Quality
- 2014 DNA Mixture Interpretation and Software Evaluation Workshop  
NIST Webcast: Validation Concepts  
25<sup>th</sup> International Symposium on Human Identification: DNA
- 2013 Sorenson Workshop: Y-STRs  
American Academy of Forensic Sciences Conference: DNA and general Criminalistics  
NIST Workshop/Webcast: DNA Mixture Interpretation  
DNA Technical Leader Summit (NIST)
- 2012 9<sup>th</sup> Annual Advanced DNA Technical Workshop (Bode) : DNA  
Bode Workshop: Mixture Interpretation  
Promega Workshop: Bringing Y-STRs into Your Lab  
23<sup>rd</sup> International Symposium on Human Identification: DNA
- 2011 CODIS 7.0 Training – FBI  
Green Mountain DNA Conference: DNA
- 2010 Promega In-Service Training: Biomek 3000 Automation
- 2009 American Academy of Forensic Sciences Conference: DNA and general Criminalistics  
Promega In Service Training: Biomek 3000, FSSI<sup>3</sup>, PowerPlex 16 HS, Plexor  
(Promega at ISP)  
DNAView/Forensic Mathematics --Dr. Charles Brenner  
Digital Crime Scene Photography – FBI
- 2008 Genetic Privacy & Familial Searching Symposium: DNA  
ASCLD/LAB International Assessor Training – ASCLD/LAB  
NFSTC/NIJ Workshop: Validation of an Expert System  
Automation Training – Marshall University Forensic Science Center
- 2007 American Academy of Forensic Sciences Conference: DNA and general Criminalistics  
Advanced DNA Training – Marshall University Forensic Science Center  
Expert Systems for Single-Source Samples – Marshall University Forensic Science  
Center and NIJ  
Applied BioSystems In Service Training: ABI 7500 and 3130  
Promega In-Service Training: Promega FSSI<sup>3</sup> Expert System
- 2006 CODIS Training: FBI/SAIC  
Applied BioSystems Webinar: Genemapper ID  
Hair Examination for DNA Analysts – West Virginia University  
DNA Auditor Training – FBI  
Promega 17<sup>th</sup> International Symposium: DNA
- 2005 Missing Persons Clearinghouse Conference

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- 2004 Crime Scene Survey, Documentation, & Diagramming – FBI  
Northwest Association of Forensic Science Workshop: Hair Examination for DNA Analysts  
Northwest Association of Forensic Science Workshop: Bone Identification  
Applied BioSystems In-Service Training: ABI Prism 7000
- 2003-2019 Bi-Annual CODIS State Administrator’s Meeting  
Annual CODIS Conference
- 2003-2008: Annual NIJ conference: DNA
- 2003 American Academy of Forensic Sciences Conference: DNA & general Criminalistics  
Bloodstain Pattern Analysis – Jeff Gurvis  
Promega 14<sup>th</sup> International Symposium: DNA  
Promega 14<sup>th</sup> International Symposium Workshop: Y-STRs  
Promega 14<sup>th</sup> International Symposium Workshop: Popstats  
Sirchie In-Service Training: Krimesite Imager
- 2001 DNA/CODIS User’s Forum  
DNA/DAB Audit training - FBI  
American Academy of Forensic Sciences Conference: DNA & general Criminalistics  
California Association of Criminalists Conference: DNA  
Promega 12<sup>th</sup> International Symposium: DNA
- 2000 ASCLD/LAB Inspector training – ASCLD/LAB  
American Academy of Forensic Sciences Conference: DNA & general Criminalistics  
California Association of Crime Lab Directors Conference (program chair):  
Management
- 1999 CODIS Local training – FBI/SAIC  
ISFH 18<sup>th</sup> International Congress: DNA  
Crime Scene Reconstruction – Tom Bevel and Ross Garner  
Applied Biosystems In-service training: DNA/STRs - ABI 377/310
- 1998 American Academy of Forensic Sciences Conference: DNA  
Forensic Statistics – CA Criminalistics Institute  
In-service Training Santa Clara County DA Crime Lab – Latent Fingerprint Processing
- 1997 Training/Collaboration: STR Analysis and Instrumentation (ABD-HID)  
Forensic Statistics on DNA Analysis – CA Criminalistics Institute  
Short Tandem Repeat Analysis – CA Criminalistics Institute
- 1996 Introduction to Statistics – UC Berkeley  
Courtroom Presentation of Evidence – CA Criminalistics Institute  
California Association of Criminalists Conference (program co-chair): DNA & general Criminalistics  
California Association of Criminalists: Bullet Path Reconstruction Workshop

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Santa Clara County Sheriff's and DA Crime Laboratory: Night Photography Workshop

Promega 7<sup>th</sup> International Symposium: Statistics Workshop

- 1995 CA Department of Justice Workshop: DNA/D1S80  
California Association of Criminalists Conference: DNA  
Crime Scene Investigation I – CA Criminalistics Institute  
Electrophoresis and Isoelectric Focusing – CA Criminalistics Institute  
Promega 6<sup>th</sup> International Symposium: DNA

1994-2001 California Association of Criminalists Study Group Meetings: Biology/DNA

- 1994 In-service training CA Department of Justice: DNA/RFLP  
Forensic Serology – CA Criminalistics Institute  
Polymerase Chain Reaction – CA Criminalistics Institute  
In-service training CA Department of Justice: DNA/PCR-DQ $\alpha$   
Forensic Sciences Overview – CA Criminalistics Institute

- 1993 In-service training San Diego Police Department: Serology

### **Validations Completed:**

- 2014 FSS-i<sup>3</sup>™ Expert Systems Software  
AeroScout® MobileView Temperature Verification System
- 2012 ABI Prism® 3130xl Genetic Analyzer  
PowerPlex® System Control DNA 2800M for DNA Database  
Promega PowerPlex® 16 HS System for DNA Casework  
Promega Plexor® HY System for DNA Casework
- 2011 Promega Plexor® HY System for DNA Database  
Promega Identity Automation™ Methods of the Biomek® 3000  
Biomek® 3000 Laboratory Automation Workstation  
PowerPlex® System Control DNA 2800M for DNA Casework  
Driftcon® FFC Temperature Verification System and Fixture Upgrade
- 2010 ABI Prism® 3130xl Genetic Analyzer Upgrade
- 2009 BSD600-Duet Semi-Automated Dried Sample Punch Instrument  
Biomek® 3000 Laboratory Automation Workstation  
Promega DNA IQ™  
Promega PowerPlex® 16 HS System for DNA Database  
Applied Biosystems® 7500  
ABI Geneamp® 9700 Thermal Cycler  
ABI Prism® 3130 Genetic Analyzer  
Driftcon® FFC Temperature Verification System
- 2008 Qiagen BioRobot® EZ1  
Qiagen® EZ1 Investigator Extraction Kit and Card  
ABI Prism® 3130 Genetic Analyzer  
ABI Geneamp® 9700 Thermal Cycler

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GeneMapper ID® Version 3.2.1  
Applied Biosystems® 7500

2006 Qiagen BioRobot® EZ1  
Qiagen® Tissue Extraction Kit  
Mideo Sperm Identification System

2005 ABI Prism® 7000

1998 AmpFlSTR® Profiler Plus and COfiler DNA amplification kits  
ABI Prism® 310 Genetic Analyzer

### **Teaching; Presentations:**

Biological Evidence and DNA Services in Idaho – Presentation/Workshop for law enforcement and judicial personnel 3/9/2020, 3/11/2020, 3/12/2020 (Idaho State Police and RMIN)

A Small Lab's Approach to Backlog Reduction – Presentation 8/27/18 (NWAFS DNA Workshop/Promega Technology Tour)

Laboratory Transparency and Sexual Assault Kit Tracking – Presentation 8/28/18 (NWAFS Conference)

Transparency: How it Helps Despite the Risks – Presentation 5/22/18 (ASCLD Symposium; Co-Presenters Peter Stout and Ramit Plushnick-Masti)

An Evaluation of PowerPlex Fusion – Presentation 6/18/13, 9/17/13, 9/22/13 (Promega Seminar at Bode, MAAFS, and NWAFS)

PowerPlex 16 HotStart and Identity Automation – Presentation 9/30/10 (Promega Webinar)

PowerPlex 16 Experiences: Casework and Validation – Presentation 8/19/09 (Promega Workshop, Los Angeles)

Biological Evidence, DNA and CODIS – Presentation 8/1/09 (visiting Mexican Attorney General Delegation)

DNA, CODIS and Forensic Biology Services – Presentation (Idaho Prosecuting Attorney's Association Meeting 6/07)

Advanced Crime Scene Processing/Evidence Collection and Packaging/DNA, 4 hour classroom and crime scene practicals – Instructor, POST Crime Scene Investigator's Course (2005)

Crime Scene Processing/Biological Evidence Collection and Packaging, 2 hour classroom and 3 hour crime scene practical – Instructor, Idaho State Police Basic POST Academy (2002-2004)

Forensic Biology Services, Evidence collection and packaging, DNA, and CODIS – Training/workshops for law enforcement, judicial, and medical personnel – Idaho State Police (2001-present)

## **Cynthia Hall**

Effects Of Locus, Sequence, and Primers on Stutter Production During PCR Amplification of Tetranucleotide Short Tandem Repeat Loci. – Presentation (CAC Spring Seminar 5/01)

STR Data Interpretation – Presentation 10/1/98 (CAC Study Group Meeting)

STR Validation, Issues Involving the Use of Chelex and Kit Volume Reduction – Presentation (CAC Spring Seminar 10/98)

Validation and Casework Experiences at Santa Clara County Using Profiler Plus – Presentation 6/24/98 (CAC Study Group Meeting)

Evidence Technician Course/DNA Evidence – Instructor, Evergreen College (10/98, 5/01)

Crime Scene Processing and DNA Evidence, 8hr portion of Robert Presley Institute of Criminal Investigation Core Course – Instructor, San Jose State University, Administration of Justice (1997-1999)

Homicide Investigation/DNA Evidence – Instructor, San Jose State University, Administration of Justice (11/95, 5/96)

Crime Scene Processing and DNA Evidence – Trainer for law enforcement and medical personnel – Santa Clara County (1994-2001)

### **Research; Publications:**

**Cunnington, C.** Database Process Automation Using DNA IQ™, Plexor® HY and PowerPlex® 16 HS Systems on the Biomek® 3000 Workstation. Promega Corporation Web site. <http://www.promega.com/resources/articles/profiles-in-dna/2011/database-process-automation/> Updated 2011. (Profiles in DNA)

**Hall, C.R.** 2000. “Effects On Stutter Production During Amplification of Tetranucleotide STR Loci.” – Master’s Thesis (San Jose State University)

**Hall, C.R.**, et al. 2000. “Validation of the AmpliSTR Profiler Plus and the AmpFlSTR COfiler PCR Amplification Kits, Using TWGDAM Guidelines.” – AAFS Annual Meeting Proceedings, Abstract B77.p.56 (AAFS Meeting 2/00)

Optimization of the Chelex extraction procedure for reduced heme inhibition during amplification. 1997 (Santa Clara County DA Crime Lab in conjunction with Applied Biosystems)