



**RESUME OF  
NICOLE M. WALICKI**

**EDUCATION**

**Graduated June, 2005**

**National University, San Diego, CA**  
MS, Forensic Science

**Graduated May, 2003**

**Duquesne University, Pittsburgh, PA**  
BS, Biology

(Coursework fulfills requirements for: Molecular Biology, Genetics, Biochemistry, and Statistics)

**WORK EXPERIENCE**

**May 2009-Present**

**Serological Research Institute, Richmond, CA**  
*Forensic Serologist II*

**April 2008-May 2009**

*Forensic Serologist I*

Examine and analyze biological physical evidence. Employ presumptive and/or confirmatory tests for blood, semen, saliva and other body fluids; extract DNA using chelex, organic and differential techniques; quantify DNA with RT-PCR ABI 7000/7500 Sequence Detection Systems using Quantifiler Human, Y Male and Duo Quantification Kits; amplify DNA using Identifiler, Yfiler and Minifiler kits; analyze and interpret data using the ABI 310 Genetic Analyzer and Genemapper ID software. Provide written reports and testify to results in court. Conduct research projects on various applications implemented in the lab. Performed validation studies on the Corbett Robot used for DNA RT-PCR quantification and amplification of samples. Validated Minifiler for amplification of degraded samples. Assist with the QC of critical reagents and quantification and amplification kits used for DNA analysis. Currently validating Identifiler Plus for amplification.

**November 2006-March 2008**

**Massachusetts State Police Crime Laboratory,  
Sudbury/Maynard, MA**

*Chemist II-DNA Unit*

**January 2006-November 2006**

*Chemist I-DNA Unit*

Completed 9 months of in-house training in the CODIS DNA caseworking unit. Performed chelex and organic extractions on exemplar samples and Convicted Offender Verification samples. Utilized RT-PCR ABI 7000/7500 Sequence Detection System using Quantifiler Human and Quantifiler Y Male Quantification Kits. Proficient to use Identifiler and Yfiler kits for amplification of exemplar samples. Analyzed and interpreted data using the ABI 3130xl Genetic Analyzer and Genemapper ID software. Performed technical batch file reviews on exemplar files for the CODIS DNA caseworking unit. Testified as an expert witness. Communicated with investigators and attorneys regarding cases being processed. Assist with the QC of critical reagents, quantification and amplification kits and solutions used for DNA analysis. Participated in the validation of the Qiagen Bio Robot M48 and True Allele systems for exemplar and Convicted Offender Verification samples. Assisted in training new analysts on sample prep for exemplar samples. Competent to run the Qiagen Bio Robot M48 on exemplar samples.

**January 2007-March 2008**

**Massachusetts State Police Crime Laboratory,  
Sudbury/Maynard, MA**

*Chemist II-Crime Scene Response Unit (Trainee)*

Provide technical assistance to law enforcement personnel related to crime scene investigations. Assist in identifying, documenting and collecting evidence at crime scenes (ex. biological fluids, trace evidence, clothing/furniture and weapons). Perform chemical screening tests for the presence of biological fluids on items of evidence. Communicate with investigators and attorneys regarding case issues. Compile data and write crime scene reports.

**June 2004 – August 2005**

**San Diego Police Department, San Diego, CA**

Crime Laboratory Intern

Gained experience performing organic DNA extraction, quantitation, PCR and genetic typing. Utilized presumptive, confirmatory and microscopy tests in mock sexual assault cases. Constructively observe technicians examine evidence, such as clothing and other objects through DNA extraction, quantification and running the ABI-310 Genetic Analyzer. Designed thesis project on alternate forms of Luminol and its effects on DNA sequences.

**August 2003 – January 2006**

**Eurogentec, North America, San Diego, CA**  
Manufacturing Chemist

Performed oligonucleotide purification, QC (quality control) and shipping in ISO certified lab. Utilized QC techniques, such as gel analysis, dye scans and reading OD values. Employed PAGE gel-electrophoresis and HPLC wave purification chromatography. Specialized in Horse-Radish Peroxidase and Alkaline Phosphatase enzyme-oligo conjugation with ion exchange purification. Implemented 5'hand-labeled dye conjugation to oligonucleotides. Observed and gained viable experience in Real-Time PCR.

**RELEVANT PROJECTS**

**2005:** ***A Latent Blood Reagent Comparison Between Luminol and BlueStar™***  
*Graduate Thesis Project:*

Research conducted during internship at San Diego Police Department, Forensic Biology Unit

Presented results of thesis project to entire San Diego Police Department, Crime Lab Unit

Project included following tests:

The sensitivity of Luminol vs. BlueStar™

The effect of Luminol vs. BlueStar™ when diluted and applied to various textiles

The effect Luminol vs. BlueStar™ has on a DNA profile following application

**RELEVANT TRAINING**

**2009** Attended an 8 hour *Future Trends in Forensic DNA Technology* Seminar, offered by ABI, Berkeley, CA

**2008** Attended an 8 hour *Future Trends in Forensic DNA Technology* Seminar, offered by ABI, Berkeley, CA

Attended an 8 hour *Genemapper ID* training session, presented by Jaime Handelsman from Forensic Training Network, Richmond, CA

Participated in an 8 hour *ABI 3130xl* training session offered by ABI, Maynard, Massachusetts

**2007** Attended an *Administrative Review Training* session, presented by Laura Bryant, Maynard, Massachusetts

Training on the Qiagen Bio Robot M48 for exemplar extractions, Maynard, Massachusetts

Attended *NEAFS* (Northeastern Association of Forensic Scientists) Annual Meeting, Bolton Landing, New York

Trained in performing Technical Batch File Reviews for exemplar files, Maynard, Massachusetts

*Mock Court*-Court Room Testimony Training, Maynard, Massachusetts

*True Allele*-Convicted Offender Analysis Database Training, Maynard, Massachusetts

*Video Conference on Ethical Issues*, presented by NERFI-Northeast Regional Forensic Institute, guest speakers, Dr. Douglas M. Lucas and Dr. Bonnie Steinbock, Sudbury, Massachusetts

**2006** *In-House Mixture Interpretation Seminar*, presented by Joanne Sgueglia, Sudbury, Massachusetts

*Forensic Mixture Interpretation and Statistical Analysis*, presented by Ray Wickenheiser, George Carmody and Joanne Sgueglia, Sudbury, Massachusetts

*Pipettes in the Laboratory Training*, given by Wendy Vaccaro, Artel Inc., Sudbury, Massachusetts

Completed four-weeks of Molecular Biology Theoretical Course-part of NERFI (North East Regional Forensic Institute) Training, presented by Charlotte Word, Sudbury, Massachusetts

*ABI-Genemapper ID Software Training*, presented by Jaime Handelsman and Laura Post, Sudbury, Massachusetts

## **PROFESSIONAL AFFILIATIONS**

**2009 – Present** Member of California Association of Criminalists

## **TESTIMONY EXPERIENCE**

Qualified as an expert witness in the Commonwealth of Massachusetts and California.

## **TECHNICAL SKILLS**

Biocad-Sprint Profusion Chromatography System ♦ HPLC- Transgenomic Wave System ♦ Spectrophotometer Absorbency Assays ♦ ABI-310 Genetic Analyzer ♦ GeneScan/Genotype Software ♦ Wavemaker Software ♦ Microsoft Office: Access, Excel, Outlook and Word ♦ ABI 7000 and 7500 quantification software ♦ ABI 3130xl Genetic Analyzer ♦ Genemapper ID software ♦ Qiagen M48 robot and software