

PROFESSIONAL EXPERIENCE

Mrs. Wilson joined Forensic Analytical sciences in August 2015. She specializes in screening and examining physical evidence for human biological material. Post-screening analysis includes sampling, microscopy, extraction, concentration, quantification, amplification, and genetic interpretation of DNA samples using autosomal (Investigator 24plex and Identifiler) and y-chromosomal (Yfiler) PCR-based techniques, as well as capillary electrophoresis. She has also participated in the internal validation of several DNA methodologies, including the EZ1 Advanced XL Robot, the Quantiplex Pro DNA quantification kits, the Investigator 24plex STR multiplex amplification kit, the 3500 Genetic Analyzer, and STRmix probabilistic genotyping software. She has experience in the examination of evidence in civil and criminal cases and is available for consultation and review of other expert work.

PROFESSIONAL AFFILIATIONS

California Association of Criminalists Associate Member, current

EDUCATION

Master of Science in Biomedical Forensic Science, Boston University School of Medicine, 2012

Bachelor of Science in Neuroscience, University of California, Los Angeles, 2009

OTHER PROFESSIONAL EXPERIENCE

- 2011 – 2012 Laboratory Technician, Genetic Services, Inc., Cambridge, MA.
- Maintained *Drosophila melanogaster* stocks by transferring flies to fresh food vials; identifying and differentiating flies by phenotype; “crossing”, or mating, female virginal flies with males who have been injected with foreign DNA; and training and supervision of new lab personnel on standard laboratory protocols.

SPECIALIZED TRAINING

R106 Biological Fluid Identification, California Criminalistics Institute, California Department of Justice, Rancho Cordova, CA, June 21-24, 2016.

STRmix Training Workshop, Oakland Police Department Criminalistics Laboratory, Oakland, CA, February 21-24, 2017.

ANAB Forensic ISO/IEC 17025:2017 Internal Auditor Course, Kern County Regional Crime Laboratory, Bakersfield, CA, September 11-14, 2018.

PUBLICATIONS & PRESENTATIONS

An Analysis of the Accuracy and Function of Three Presumptive Methods Used in Forensic Science for the Detection of Urine presented to the Boston University Biomedical Forensic Science Graduate Program, Summer 2012, Boston, MA.

A Benchmark for Meaningful Forensic DNA Analysis: Field (Beta) Testing of the Qiagen Investigator Quantiplex Pro qPCR Assay, presented at the 6th Annual Qiagen Investigator Forum, Prague, Czech Republic, April 5, 2017.

The Twenty-six Year Investigation of the Kidnapping, Rape, and Murder of Dana Ireland, presented at the California Association of Criminalists Seminar, May 2017, San Francisco, CA.

Lessons Learned: The Exoneration of Robert Earl DuBoise, presented at the American Academy of Forensic Sciences Annual Meeting, February 2021, Virtual Meeting.

Stay Gold: Lab-based Considerations to Help Keep DNA the Shining Standard, presented at the American Academy of Forensic Sciences Annual Meeting, February 2021, Virtual Meeting.