

Curriculum Vitae
Jennifer S. Mihalovich
Oakland Police Department
Criminalistics Division
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EDUCATION

Masters of Public Health - Forensic Science, University of California, Berkeley, May 1987.

Bachelor of Science – Microbiology and Medical Technology, University of Montana, Missoula, June 1985, Minor in Chemistry.

Luther College, Decorah, Iowa July 1980, August 1981 to May 1982

Carroll College, Helena, Montana, June-July 1982 and June-July 1983

CONTINUING EDUCATION

Forensic DNA Analysis, University of California, Berkeley, July, 1989.

Biochemistry and Physical Chemistry of Nucleic Acids, University of California, Berkeley, Spring Semester, 1990.

The Application of DNA Technology to Forensics, University of California, Riverside, March 1991.

Molecular Evolution, University of California, Berkeley, Fall Semester, 1994.

EMPLOYMENT HISTORY

Criminalist III

March 1999 to Present

Oakland Police Department Criminalistics Division
Oakland, California

Implementation of the PCR based STRs [Profler Plus, COfiler, and Identifiler] amplification and typing using the ABI Prizm 310 Capillary Electrophoresis instrument. Training laboratory staff in the amplification and typing of STRs [Profler Plus, COfiler, and Identifiler]. Conducting STR analysis on physical evidence. Testify with regards to PCR based DNA analyses. Supervision of Forensic Biology Unit staff.

Criminalist

November 1986 to February 1999

Forensic Science Associates
Richmond, California

Analyze biological material using PCR based DNA amplification and typing methods. Maintaining chain of custody, evidence examination and evaluation, differential extraction of sexual assault evidence, DNA extraction, DNA quantitation (slot blot and agarose gel), DQ Polymarker [PM] and D1S80 amplification and typing, Short Tandem Repeat [STR: AmpFISTR Green I, Profiler Plus and COfiler and X-Y Amelogenin] amplification and typing using ABI Prism 310 Capillary Electrophoresis. Maintain accurate and thorough records regarding evidence and testing procedures utilized. Preparation of case reports and court testimony. Participation in proficiency testing. Participation in proficiency studies conducted by other forensic laboratories. Conducted research involving the isolation and DQ α typing of DNA obtained from stained cellular material mounted on microscope slides, from various animal species, from aspermic semen specimens, and from partially cremated human remains. Sensitivity, mixture, animal and degraded DNA studies using STR markers and ABI Prism 310 Capillary electrophoresis. DQ α , Polymarker, and D1S80 typing of known racial origin samples for population studies. Instruction on DNA isolation and evaluation for forensic laboratory personnel. Instruction of sexual assault evidence examination and DNA processing for forensic DNA examiners and the collection and preservation of physical evidence for crime scene investigators.

Forensic Science Internship

June to November 1986

Contra Costa County Criminalistics Laboratory
Martinez, California

Analysis of drugs from biological fluids using EMIT and GC. Examination of solid dosage drugs using microcrystal tests, TLC and GC. Pyrolysis of automobile paint standards for reference library. Arson analysis using head space GC. Trained in the use of Intoxilyzer 4011A.

Research Assistant

September 1985 to January 1987

Forensic Science Group, University of California
Berkeley, California

EAP typing using isoelectric focusing. Development and testing of the Immunodot blot method for species determination.

Assistant Forensic Scientist

September 1984 to June 1985

Montana State Criminalistics Laboratory
Missoula, Montana

Reagent preparation for Forensic Scientists, drug analysis using FT-IR. Sexual assault kit preparation. Research on ABO typing using microtiter plates.

PROFESSIONAL AFFILIATIONS

Member of the California Association of Criminalists

California Association of Criminalists, Board of Directors, Regional Director of Northern California, May, 1990 to May, 1994.

California Association of Criminalists, Board of Directors, President Elect, May, 2007 to present.

Fellow of the American Academy of Forensic Science

American Board of Criminalistics, Board of Directors, President, CAC representative, June 1999 to 2004.

Forensic Science Student Organization, a University of California Berkeley student group: Coordinator 1986-1987

CERTIFICATION

Certified in Professional Competency in Criminalistics, 1990, (California Association of Criminalists).

Certified in Professional Competency in Criminalistics, Diplomat, 1993 - 2008, (American Board of Criminalistics)

Certified in Molecular Biology Specialty, Fellow, 1996 - 2008, (American Board of Criminalistics)

HONORS AND AWARDS

California Association of Criminalists - Paul Kirk Award recipient 1990

American Academy of Forensic Sciences - Regional Award recipient 1991

California Association of Criminalist - Merit Award for the work conducted on the DNA Quality Assurance Committee

California Association of Criminalist - Service Award for distinguished service as the Regional Director - North and Merit Award for distinguished service as the Nominating Committee Chair.

California Association of Criminalist - Service Award for distinguished service as the CAC Representative to the ABC.

Research Grant, A. Reed and Virginia McLaughlin Endowment, California Association of Criminalist. Grant Title Quantitation of Non-Sperm DNA in the Semen of Aspermic Males and Its Potential Use as a Genetic Marker in Sexual Assault Investigation, 1992 to 1995.

TRAINING RECEIVED

DNA Typing With STRs Workshop, Promega Corporation, Madison, Wisconsin, December 1995.

Statistics for DNA Analysis, California Criminalistics Institute, San Diego, California, July 1998.

STR Training II, Department of Justice DNA Laboratory, Berkeley, California, two weeks, March 1999. Instructor: Dr. Steve Lee.

Tools for the STR Typing Laboratory, International Association of Forensic Science, Los Angeles, California, August 1999

CODIS Training, Federal Bureau of Investigations, Arlington, Virginia October 1999

DNA Workshop, California Association of Criminalists, Ontario, California, October 1999

DNA Workshop, California Association of Criminalists, Los Angeles, California, October, 2000

DNA Workshop, California Association of Criminalists, Universal City, California, October, 2001

DAB Audit Training, Federal Bureau of Investigations, Berkeley, California, November 2001.

CODIS Training, Federal Bureau of Investigations, McLean, VA, March 2002.

DAB Audit Training, Federal Bureau of Investigations, Quantico, VA November 2004.

Microscopy of Hair, Distance Learning Course, West Virginia University, June 2006

35th Annual Crime Laboratory Development Symposium, Columbus, OH June 2007

TRAINING GIVEN

Super-Mihalovich, Jennifer “Forensic Application of PCR DNA Amplification and Typing” Guest Lecture, American Chemical Society, September 1990, Menlo Park, California.

DNA Extraction and Quantitation, guest lecturer, California Criminalistics Institute, Sacramento, California, February 2000.

COURT TESTIMONY

PCR Based DNA Analysis – DQA1, Polymarker, D1S80, Amelogenin, CTTA, 1986 – Present, Approximately 70 Times across the United States

Profiler Plus, COfiler – 1995 to present, Approximately 30 Times across the United States

Firearms Distance Determination – 1988, One Time

PUBLICATIONS

Kearney, J. J. et al, "Guidelines for a Quality Assurance Program for DNA Analysis" *Crime Laboratory Digest* Vol 18 No. 2, 1991, 44-75.

Blake, E., Mihalovich, J., Higuchi, R., Walsh, P. S., and Erlich, H. "Polymerase Chain Reaction (PCR) Amplification and Human Leukocyte Antigen (HLA)-DQ α Oligonucleotide Typing on Biological Evidence Samples: Casework Experience," *Journal of Forensic Science*, JFSCA, Vol 37, No. 3, May 1992,700-726.

PRESENTATIONS

Super-Mihalovich, J. and Sensabaugh, G. "Immunodot Blotting for the Detection of Species" presented at the Fall 1986 Semi-Annual Seminar of the California Association of Criminalist, Palm Springs, California.

Super-Mihalovich, J. and Sensabaugh, G. "Immunodot Blot Testing for the Identification of Species" presented at the 11th meeting of the International Associations of Forensic Science, Vancouver, British Columbia, Canada, August 5, 1987.

Barnett, P. and Super-Mihalovich, J. "Ricochet of Bullets from Automobile Windshields", presented at the Spring 1989 Semi-Annual Seminar of the California Association of Criminalist, Sacramento, California.

Gibson, D; Guydish, J; Case, P; Clark, G; Downing M; Dietrich; Lovelle-Drache, J; Wraxall, B; and Mihalovich, J. "Using Forensic Techniques to Document Intravenous Drug Users' Self-Reports of Needle Sharing", presented at the VI International AIDS Conference, San Francisco, California, June 23, 1990.

Gima, L; Sims, G; Konzak, K; Blake, E and Super-Mihalovich, J. "The Recovery, Amplification and DQ alpha Typing of DNA from Partially Cremated Human Remains", presented at the Fall 1990 Semi-Annual Seminar of the California Association of Criminalist, Long Beach, California.

Gima, L; Sims, G; Konzak, K; Blake, E and Super-Mihalovich, J. "The Recovery, Amplification and DQ alpha Typing of DNA from Partially Cremated Human Remains", presented at the Fall 1990 Seminar of the North Western Association of Criminalist, Seattle, Washington.

Gima, L; Sims, G; Konzak, K; Blake, E and Super-Mihalovich, J. "The Recovery, Amplification and DQ alpha Typing of DNA from Partially Cremated Human Remains", presented at the 1991 Annual Seminar of the American Academy of Forensic Science, Anaheim, California.

Super-Mihalovich, J. and Blake, E.T. "Detection of DQ Genotypes in DNA Mixtures" presented at the Spring 1991 Semi-Annual Seminar of the California Association of Criminalist, San Francisco, California.

Super-Mihalovich, J. and Blake, E.T. "DNA - PCR Blind Trial Results" presented at the Spring 1991 Semi-Annual Seminar of the California Association of Criminalist, San Francisco, California.

Mihalovich, J.; Blake, E.; Peer, A.; and O'Donnell, P. "Quantitative Determination of Non-Sperm DNA in the Semen of Aspermic Males and its Potential use as a Genetic Marker in Sexual Assault Investigation" presented at the Spring 1995 Semi-Annual Seminar of the California Association of Criminalist, Walnut Creek, California.

Mihalovich, J and Blake, E. "PCR Based DNA Diagnostic Analysis of Familial Dysautonomia (FD) from Hair" presented at the Spring 1995 Semi-Annual Seminar of the California Association of Criminalist, Walnut Creek, California.

Mihalovich, J and Blake, E. "PCR Based DNA Diagnostic Analysis of Familial Dysautonomia (FD) from Hair" presented at the Sixth Symposium on Human Identification, Promega, October 13, 1995, Scottsdale, Arizona.

Fassett, M. and Mihalovich, J. "Case Report: Sexual Assault by Foreign Object Penetration" presented at the Northwestern Association of Criminalists, Fall 1995 Seminar, October 18, 1995, Ashland, Oregon.

Fassett, M. and Mihalovich, J. "Case Report: Sexual Assault by Foreign Object Penetration" presented at the American Academy of Forensic Science, February 1996 Seminar, Nashville, Tennessee.

Mihalovich, J.; Blake, E.; Peer, A.; and O'Donnell, P. "Quantitative Determination of Non-Sperm DNA in the Semen of Aspermic Males and its Potential use as a Genetic Marker in Sexual Assault Investigation" presented at the American Academy of Forensic Science, February 1996 Seminar, Nashville, Tennessee.

Mihalovich, Jennifer "The use of Polymerase Chain Reaction in the Analysis of Biological Evidence," guest lecture, Stanford-NIH Graduate Training Program in Biotechnology, May 1996, Stanford University, Stanford, California.

Choy, B. and Mihalovich, J. "The Correlation Between the Number of the Epithelial Cells and the Level of Amylase Activity Found on Cigarette Butts" The Joint Meeting of the Canadian Society of Forensic Science and the Forensic Science Society, August, 1998, Wolfdell, Nova Scotia,

Mihalovich, J., and Blake, E.; "The Art of a DNA Report" presented at the American Academy of Forensic Science, February 1999 Seminar, Orlando, Florida.

Silva, L. Sentiwany, C. Wong, W. Mihalovich, J.. EZ1 BioRobot and ABI Real-Time Quantifiler Kit Internal Validation Studies Shed Light on Unusual Specimens. California Association of Criminalists 109th Semi-Annual Seminar, hosted by the Orange County Sheriff-Coroner Department. May 11, 2007. Orange County, CA