

**Curriculum Vitae of
Margaret C. Kuo, retired Deputy Director, Forensic Science Services
Orange County Sheriff-Coroner, Santa Ana, CA**

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EDUCATION

- Bachelor of Arts, Chemistry, Winthrop College, South Carolina, 1966.
- Master of Science, Chemistry, University of Illinois, Urbana, Illinois, 1968.
- Graduate course work in Education, 10 units, University of Illinois, 1968-1969.

EMPLOYMENT

2001 - present Retired. Contractor, CA Dept. of Justice, Cold Hit Program. Responsible for conducting DAB audits of public forensic DNA laboratories in CA and any private forensic laboratories that contract with CA DOJ.

1997- 2001. Deputy Director, Forensic Science Services, Orange County Sheriff-Coroner. Responsible for the management of Identification Bureau and support services.

1980 - 1997. Assistant Director (Chief Criminalist), Forensic Science Services, Orange County Sheriff-Coroner. Responsible for the management of the Criminalistics Laboratory (crime scene investigation, controlled substance, trace evidence, firearm, documents, serology, and DNA) operation, policy-making, budget, recruitment, etc. Also includes dual responsibility for Identification and Criminalistics 1985-86; and for Toxicology and Criminalistics 1995- 97.

1978 - 1980. Supervising Criminalist, Orange County Sheriff-Coroner. Supervisor of the major crime section including crime scene investigation, serology, and trace evidence. Casework activities include blood stain analysis, sexual assault evidence evaluation, paternity blood testing, and crime scene investigation.

1974 - 1978. Criminalist/Senior Criminalist, Orange County Sheriff-Coroner. Casework experience: blood alcohol analysis, H&S 11550 and driving toxicology, blood and urine analysis by RIA, TLC, UV, GC, PC, and GC/MS (morphine/codeine), solid dose analysis by UV, IR, GC, GC/MS, microcrystalline test, serology, typing of blood and semen by electrophoresis, and crime scene investigation. Qualified in Municipal and Superior Courts in all the above areas.

1972 - 1974. Applications Chemist, Beckman Instruments, Fullerton, California. Prepared methods on the application of UV Spectrophotometer in clinical laboratory testing; worked on the development of radioimmunoassay kits for clinical diagnosis.

1970 - 1972. Quality Control Chemist, Abbott Laboratories, South Pasadena, California. Quality

control testing of the raw materials and manufactured products of clinical diagnostics kit for various chemistry and enzymes.

1968 - 1970. Senior Research Technician, Department of Pathology, University of Missouri, Columbia, Missouri. Research of drug metabolism in rat mitochondria.

1966 - 1968. Teaching Assistant, Department of Chemistry, University of Illinois, Urbana, Illinois. Taught freshman chemistry recitation and laboratory session; grader for radio chemistry course.

PROFESSIONAL AFFILIATIONS

California Association of Criminalists (CAC), 1976- 2001

American Academy of Forensic Sciences (AAFS) to 2001

California Association of Crime Laboratory Directors (CACLD), to present

American Society of Crime Laboratory Directors (ASCLD), to present

American Society of Crime Laboratory Directors - Laboratory Accreditation Board (ASCLD/LAB)

American Board of Criminalistics (ABC), to present

APPOINTMENTS

CAC: Treasurer, 1984; Accreditation Liaison, 1995.

AAFS: Symposium program moderator, 1991; delegate to ABC, 1997 - 2000.

CACLD: DNA Committee Chair, 1987; Board of Directors 1987-1990;; California Criminalistics Institute User Advisory Board, 1994 - 2000.

ASCLD: Laboratory Facility Committee Chair, 1989 - 1991; Newsletter Committee Chair, 1991-1993; Board of Directors, 1992 - 1995; PCR Licensing Task Force Chair, 1995.-1996.

ASCLD/LAB: Manual Revision Committee, 1992 - 1993 Inspector, 1992 - present; Team Captain, 1996 - present.

ABC: Board of Directors, 1997 - 2000.

Federal Bureau of Investigation Technical Working Group in DNA Analysis Methods (TWGDAM), 1988 - 1990.

Office of Technology Assessment (U.S. Congress): Report reviewer *Genetic Witness: Forensic Uses of DNA Tests*, 1990

University of California at Irvine Extension: Guest lecturer on Forensic Sciences course, 1991 - 1994.

College of American Pathology: Forensic Identity Committee consultant, 1993 - 2002.

California Criminalistics Institute: User Advisory Board, 1994- 2000.

Singapore Institute of Science and Forensic Medicine: International Advisory Panel, 1994 - 1997.

FBI: DNA Advisory Board, 1995 - 1997.

National Forensic Science Technology Center, consultant, 1997

National Institute of Justice: National Forensic DNA Review Panel, 1996 - 1999.

National Institute of Justice: CLIP Peer Review Panel, 2002

Choice Point, DNA Advisory Board, 2001-2003

PROFESSIONAL CERTIFICATES AND LICENSES

State of California Public Health Department license, Supervising Blood Alcohol Analyst, 1978-2001.

American Board of Criminalistics, Certificate of Professional Competency in Criminalistics, 1993 - 2003.

AWARDS

Drug Enforcement Agency Certificate of Appreciation, 1981.

Orange County Woman of Achievement Award, 1986.

City of Buena Park Woman of Achievement Award, 1987.

PUBLICATIONS

Graves, M.H., White, J.M., Fitzpatrick, F., Kuo, M.C., "A Comparison of Absorption Inhibition and

Absorption Elution Methods in the Detection of ABO(H) Antigens Found in Vaginal Samples Submitted in Sexual Offense Cases," J. of Forensic Sciences 23:2, 345, 1978.

Pearce, D., Kuo, M.C., Wiersema, S., "Simultaneous Determination of Morphine and Codeine in Blood by Use of Select Ion Monitoring and Deuterated Internal Standards," Clinical Toxicology 14:2, 161, 1979.

White, J.M., Clardy, D., Graves, M., Kuo, M., et al, "Testing for Sedative-Hypnotic Drugs in the Impaired Driver: A Study of 72,000 Arrests," Clinical Toxicology 18, 945, 1981.

Kuo, M., "Linking a Bloodstain to a Missing Person by Genetic Inheritance," J. of Forensic Sciences 27, 438, 1982.

Kearney, J., Mudd, J., Hartmann, J., Kuo, M., Nelson, M., Presley, L., Stuver, W., "Guidelines for a Quality Assurance Program for DNA Restriction Fragment Length Polymorphism Analysis, Crime Laboratory Digest, 16:2, 40, 1989.

TECHNICAL PRESENTATIONS

- "Linking a Bloodstain to a Missing Person by Genetic Inheritance," presented at the California Association of Criminalists, Fall 1980, and at the American Academy of Forensic Sciences, February, 1981.
- "DNA: A Blind Trial Study of Three Commercial Testing Laboratories," co-author M. Graves, presented at the American Academy of Forensic Sciences, February, 1989.
- "A Study of Polymorphism of Four Single-Locus DNA Probes Among Asian Population in Southern California," presented at the Taipei International Symposium on Forensic Sciences, March, 1991.
- "A Study of 150 Suicide Notes in Orange County, California," co-author John McPhee, presented at the American Academy of Forensic Sciences, February, 1993.
- "DNA Analysis of a Bite Mark in a Double homicide," co-authors M. Hong, E. Buse, J. Hartmann, E. Steinberger, presented at the International Forensic Science symposium, Republic of China, November, 1994.
- "PCR-Based analysis of a Wax bite Impression as a Comparison Standard for Saliva Typing of a Bite Mark," co-authors M. Hong, E. Buse, J. Hartmann, E. Steinberger, presented at AAFS, February, 1995.
- "Using New DNA Technology to Solve Old Homicides," presented at the California Peace Officers Association annual meeting, May, 1997.

- "ASCLD/LAB Accreditation," presented at the California State Division -International Association of Identification annual meeting, May, 1997.
- "Fighting Crime with Modern Technologies and Computerized Databases", presented at the Shanghai '98 Modern Crime Countermeasure Symposium, China, July, 1998
- "Solving Serial homicides and Sexual Assaults with computerized Databases and New Technology" co-author Ron shave, presented at AAFS, February, 2000

NATIONAL/INTERNATIONAL SYMPOSIA

- AAFS Annual Symposium
1977, 1981, 1984, 1987, 1988, 1989, 1991, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000
- ASCLD Annual Symposium
1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999
- IAFS: Adelaide, Australia, 1990; Tokyo, Japan, 1996 (section chair), Los Angeles, 1999.
- The Taipei International Symposium on Forensic Sciences, Taipei, Taiwan, 1991.
- International Forensic Science Symposium, Taipei, Taiwan, 1994.
- Shanghai '98 Modern Crime countermeasure Symposium,

LABORATORY INSPECTIONS/AUDITS

- Baltimore County Police Department, 1993
- Drug Enforcement Agency, Special Testing Lab, 1994
- Victoria State Police Forensic Science, Australia, 1994
- Los Angeles County Sheriff's Department, 1994
- Arizona Department of Public Safety, 1994
- California Department of Justice, 1994
- Institute of Science and Forensic Medicine, Singapore, 1994
- Florida Department of Law Enforcement, 1995
- Hong Kong Government Lab, Team Captain, 1996
- Suffolk County, NY, 1997
- Illinois State Police Forensic Science Services, 1997
- Centre of Forensic Sciences, Toronto, Canada, 1997
- Miami Valley Regional Lab, KY, Team Captain, 1998

- New York City Police, Group Leader, 1999
- Hong Kong Government Lab, 2001
- San Diego Police Department DNA Lab, 2001
- Oakland Police Department DNA Lab, 2001
- California DOJ-BFS Fresno Regional DNA Lab, 2002
- (4) Private Contract DNA Labs, 2002
- California DOJ-BFS Central Valley DNA Lab, 2002
- Alameda County Sheriff's DNA Lab, 2002
- Sacramento County DA's DNA Lab, 2002
- Oakland Police DNA Lab, 2002
- California DOJ-BFS Richmond DNA Lab, 2002
- California DOJ-BFS DNA Lab, 2003
- Cellmark, 2003
- Reliagene, 2003