



FORENSIC CONSULTANT



ED BARLEY

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CURRICULUM VITAE

EDUCATION

- *California State University, Long Beach* 1987 - 1990 *B.S. Biochemistry*
- *University of California, Riverside* 1986 - 1987 *Biomedical Studies*

PROFESSIONAL WORK EXPERIENCE

- *Forensic Consultant:* Independent Forensic Chemist. Years of Service 2013 – Present. On the Approved listing for the County of Los Angeles Superior Court’s “Panel of Expert Witnesses”.
- *Senior Criminalist:* Los Angeles County Sheriff’s Department Scientific Services Bureau. Years of Service 1991 – 2012 (medical absence 1999 – 2005). Medical Retirement 2012.

EXPERT WITNESS EXPERIENCE

- Consulted and qualified as an expert witness within the Criminal Courts of California in the areas of ***Drug and Driving Impairment*** in the following Counties: Los Angeles, Orange, San Bernardino, San Francisco and Ventura.
- Consulted and qualified as an expert witness within the Criminal Courts of California and Department of Motor Vehicle’s Administrative Per Se Hearings in the areas of ***sobriety testing, driving while intoxicated, NHTSA’s Standardized Field Sobriety Testing, breath alcohol testing with the use and technical aspects of infrared and fuel cell technologies, and blood alcohol testing*** in the following Counties: Alameda, Contra Costa, Fresno, Humboldt, Kings, Los Angeles, Marin, Napa, Orange, Riverside, San Bernardino, San Diego, San Francisco, San Mateo, Santa Barbara, Santa Clara, San Louis Obispo, Stanislaus & Ventura.
- Consulted and qualified as an expert witness within the Civil Courts of California in the County of Los Angeles in the areas of ***sobriety testing, driving while intoxicated, NHTSA’s Standardized Field Sobriety Testing, and breath & blood alcohol testing.***

- Consulted and qualified as an expert witness within the Criminal Courts in the States of California and Colorado in the area of *alcohol* as it relates to *homicide*.
- Consulted as an expert witness in the area of *Drugs and Alcohol* in criminal matters in the states of New York and Oregon.

WORKSHOPS AND PROFESSIONAL TRAINING

- The Science of Defending Marijuana DUIs – Dr. Stefan Rose; San Francisco (2019)
- Impaired Driver Education (16-hour training focusing on ARIDE curriculum) – Christian Martorana; Torrance (2019)
- Drug Combinations – Dr. Fran Gengo; Los Angeles (2019)
- The Drug Recognition Expert (DRE) Overview – Anthony D. Palacios & Ron Lloyd; Los Angeles (2019)
- The Drug Recognition Expert (DRE) Live Examinations – Anthony D. Palacios, Ron Lloyd & Dr. Lance A. Platt, Ph.D.; Los Angeles (2019)
- The Expert Witness as Educator – Jan Semenoff; San Francisco (2018)
- Establishing Reliability Standardized Acts, Practices & Conditions in Forensic Testing – Jan Semenoff; San Francisco (2018)
- Are All People Too Impaired to Drive Safely at 0.05%? – Ronald Moore; San Francisco (2018)
- Pharmacology of DUID – Dr. Alan Donelson; Fresno (2017)
- Beyond the GC Peak – Suzanne Perry; San Diego (2016)
- Marijuana DUID – Manny Daskal; San Diego (2016)
- Laryngopharyngeal Reflux “LPR” – Dr. Bret Sherman; Fresno (2015)
- Understanding Blood Gas Chromatography – Dr. Stefan Rose; Newport Beach (2014)
- Proper Forensic Blood Draw Evidence – Ron Lopez R.N.; Newport Beach (2014)
- Forensic Breath Testing – James Wigmore; Newport Beach (2014)
- Marijuana and DUI Issues – Paul Armentano; Fresno (2014)
- DRE Evaluation – Middlebrook; Fresno (2014)
- DataMaster DMT: Theory of Operation and Instructor – National Patent Analytical Systems; Downey (2011)
- Uncertainty of Blood Measurements for Blood Alcohol Levels; Downey (2011)
- Toxicology Sleep and Driving Under the Influence Workshop – California Association of Toxicologists; Sacramento (2010)
- American Academy of Forensic Sciences; 62nd Annual Scientific Meeting: Seattle, WA (2010)
- Forensic Alcohol Supervisor: California Department of Health Services (2010)
- Alcohol Correlation Study – Coordinator; Downey (2009)
- 22nd Annual Conference & NPAS’s Program Manager’s Meeting – International Association for Chemical Testing; Anchorage, AK (2009)
- Drinking and Driving – Simulator: California Association of Criminalists; Devore (2009)
- Pharmacokinetic Processes – Pharmacology and Pharmacokinetics of Amphetamines

- and Cocaine, Unlocking the Significance of Forensic Toxicology & Neurobiology & Pharmacokinetics of Cannabinoids – California Criminalistics Institute (2008)
- DataMaster cdm: Theory of Operation, Supervisory Functions, Maintenance, Calibration and Repair – NPAS; Mansfield, OH (2008)
 - Draeger Alcotest 6510 – Instructor: Draeger Safety Diagnostic; Downey (2006)
 - Standardized Field Sobriety Testing (16 hours) - NHTSA's SFST; Santa Anna (2006)
 - Alco-Sensor IV – Operator, Maintenance and Calibration (PAS Coordinator); El Segundo (2006)
 - Forensic Alcohol Analyst: California Department of Health Services (2006)
 - Robert F. Borkenstein – Course on Alcohol and Highway Safety; Indiana University, IN (2005)
 - DataMaster cdm – Officer Instructor Training; Downey (2005)
 - Lifeloc FC – Operator, Maintenance and Calibration Course for the FC Series – Lifeloc Technologies; Downey (2005)
 - Technical Seminar (Methamphetamine) – Clandestine Laboratory Investigating Chemist; San Diego (1997)
 - FTIR Workshop – Nicolet; Woodland Hills (1997)
 - Technical Seminar (Fentanyl) – Clandestine Laboratory Investigating Chemist; Alexandria, VA (1996)
 - Drivers Training: LASD – Emergency Vehicle Operations Center; Pomona (1995)
 - Clandestine Laboratory Safety Certification (DOJ) – California Criminalistics Institute; Chico (1995)
 - Technical Seminar (MDA) – Clandestine Laboratory Investigating Chemist; Vancouver B.C (1994)
 - Clandestine Laboratory Analysis and Synthesis – California Criminalistics Institute; Sacramento (1994)
 - Forensic Chemist Seminar – DEA; McLean, VA (1994)
 - Mass Spectra Theory and Interpretation – California Criminalistics Institute; Sacramento (1994)
 - Alcohol Correlation Study – Drinker; Los Angeles (1993)
 - Identification of Steroids; Los Angeles (1992)
 - Identification of Controlled Substances; Los Angeles (1992)
 - Emergency Medical Technician 1 Ambulance; Los Angeles (1992)
 - Toxicology – Training Colloquium - California Association of Toxicologists; Irvine (1992)
 - Toxicology – PCP Blood Confirmation; Los Angeles (1992)
 - Alcohol Correlation Study – Monitor; Los Angeles (1991)
 - Toxicology – General Meeting - California Association of Toxicologists; San Diego (1991)
 - Toxicology – EMIT & RIA Screening - Controlled Substances; Los Angeles (1991)
 - Toxicology – Workshop - California Association of Criminalists; Huntington Beach (1991)

DETAILED EMPLOYMENT HISTORY

Present – 2013 [Forensic Consultant] Professional experience is furthered by the courtroom observations of Police Officers, Standardized Field Sobriety Test Instructors, and other Forensic Witnesses. Additionally; with my reading of the scientific literature on forensic topics and participation in available workshops and seminars.

November 2012 [Retired] from Los Angeles County Sheriff's Department.

2012 – 2005 [Senior Criminalist (Forensic Alcohol Unit)] Professional experience with the Los Angeles County Sheriff's Department; included testing around a thousand blood and urine samples for alcohol content, with headspace gas chromatography. Reviewing and co-singing of the alcohol analysis of the section's laboratory technicians. Provided training of section personnel, clerical, administrative, and technical reviews of case reports and documentation. Responsible for the maintenance, programing and software installation, configuration, customization, and testing of the Perkin Elmer Clarus 500 gas chromatograph. Developed and designed crystal web reports and integration of the Perkin Elmer Clarus 500 gas chromatograph with the Laboratory Information Network. Assisted in the development and design of a web database for files and records associated with the Blood Alcohol Section's records website. Provided training for Deputy District Attorneys, and Public and Private Defense Attorneys in forensic alcohol topics. Trained and assisted law enforcement officers in breath analysis with the DataMaster and calibration of the Alco Sensor IV.

Worked with manufactures software engineer on the testing of the software configuration, customization, and communication of the DataMaster DMT. Development and design of the crystal web reports for the maintenance, accuracy, usage and subject data logs.

2005 – 1999 [Senior Criminalist] - Authorized Work Related Medical Absence

1999 – 1991 [Senior Criminalist/Criminalist (Toxicology, Narcotics and Clandestine Labs)] Professional experience with the Los Angeles County Sheriff's Department; included assignments in the analyses of evidentiary substances (narcotics, steroids, and other drugs) utilizing microscopic techniques, chromatography and spectrograph. Clandestine laboratories analysis and field response. Repaired and maintained: gas chromatograph, mass spectra and IR instrumentations. Provided training in analytical methods, instrumentation and procedures. Trained law enforcement officers in the manufacturing methods of clandestine laboratories. Assisted in the development of new analytical methods. Worked with the Toxicology section to co-author a paper on drug detection in urine.

Responsible for the analysis of blood to determine the presence and quantity of PCP. The screening of blood and urine for controlled substances by enzyme multiplied immunoassay technique and radioimmunoassay. Ride along with CHP to observe individuals under the influence of drugs. Attending Forensic Toxicology meetings.

ASSOCIATIONS (Past Law Enforcement Memberships)

American Academy of Forensic Sciences | International Association for Chemical Testing
California Association of Toxicologist | Clandestine Laboratory Investigating Chemist

PRESENTATIONS

Los Angeles County Deputy Public Defender's Office; Metropolitan Courthouse (Dec 2019) | San Luis Obispo County Criminal Defense Bar (Aug 2019) | The Kavinoky Law Firm (Jun 2019) | Los Angeles County Deputy District Attorney's Office, Beverly Hills, CA (2011) | South Bay Bar Association Substance Abuse Meeting, Redondo Beach, CA (2008) | Judges DUI Conference, Los Angeles, CA (2007) | South Bay Bar Association Substance Abuse Meeting, Torrance, CA (2006) | Microbiology Students at Cal State Northridge, Northridge CA (2005) | Clandestine Laboratories, Redondo Beach P.D., Redondo Beach, CA (1996) | Clandestine Laboratories Monterey Park P.D., Monterey Park, CA (1996) | Criminal Justice Program at Cal State Long Beach, Long Beach, CA (1994) | Criminal Justice Program at Cal State Long Beach, Long Beach, CA (1994) | Criminal Justice Program at Cal State Long Beach, Long Beach, CA (1992)

AWARD

Los Angeles County Sheriff's Department's - *Distinguished Service Award* [2012]

"Recognition of outstanding efforts in contributing to the Department's goals, which reflect a high degree of personal initiative, regarding the DataMaster DMT project"

PUBLICATIONS

- "Identification of Phencyclidine Analogs Using Thin Layer Chromatography." *Toxilab News* : Winter 1994, Vol. 13.
- LSD blotter case of special interest, Technical Note, *DEA Microgram* : January 9, 1993.