Curriculum Vitae

Estuardo J. Miranda

Name: Estuardo J. Miranda, M.S.

Occupation: Forensic Scientist-3

Employer: Washington State Toxicology Laboratory

Work: 2203 Airport Way S. Suite 360

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EDUCATION:

Arizona State University, Tempe AZ

Master of Science in Zoology

1996

Arizona State University, Tempe AZ

Major: Bachelor of Science in Chemistry with emphasis in Biochemistry
Minor: Zoology
1993

EMPLOYMENT HISTORY:

Forensic Scientist 3 6/2001-Present

Washington State Toxicology Laboratory

- Analyze biological specimens for common drugs of abuse and alcohol in DUI and death investigations.
- Prepare simulator external standard solution for use with the Datamaster.
- Interpret results from analytical instrumentation (*i.e.* GC/MS).
- Testify in courts of law as an expert witness in alcohol and drug related issues, including pharmacology and effects.
- Perform regular maintenance of instrumentation.
- Prepare scientific examination reports

Criminalist 1998-5/2001

Arizona Department of Public Safety Crime laboratory (Toxicology Unit)

- Analyzed biological specimens for alcohol and common drugs of abuse in DUI investigations. Interpreted results from analytical instrumentation and prepared scientific examination reports.
- Testified in courts of law as an expert witness in alcohol and drugs of abuse related issues, including pharmacology, effects and retrograde calculations.
- Trained new criminalists and officers including drug recognition experts (DRE)

Research Technologist Carl T. Hayden VA Medical Center

1997-1998

• Investigated the role of lipoproteins in cardiovascular disease.

Graduate Research/Teaching Assistant Arizona State University 1993-1996

- Designed original research project in membrane physiology and conducted all data collection using various biochemical techniques.
- Taught laboratories in 1) Human anatomy and Physiology and 2) Basic Physiology, employing preserved and live animals including live animal surgeries.

LICENSES AND CERTIFICATIONS:

- Washington State Blood Alcohol Analyst, 7-31-01- present.
- Arizona Department of Health Services Lab Analyst Permit #232 (1998-2001)

PUBLICATIONS:

- Case Report: Two deaths attributed to Use of 2,4-Dinitrophenol. Estuardo J. Miranda MS; Ian M. McIntyre, Ph.D.; Dawn R. Parker, MS, Ray D. Gary, BS and Barry K. Logan Ph.D., DABFT. Journal of Analytical Toxicology, Vol. 30, April 2006.
- The effect of acclimation temperature on the fusion kinetics of lipid vesicles derived from endoplasmic reticulum membranes of rainbow trout (*Onchorhynchus mykiss*) liver. Comparative Biochemistry and Physiology Part A 131 (2002) 275-286.
- Temperature induced changes in the transbilayer distribution of phosphatidylethanolamine in mitoplast of rainbow trout (*Onchorhynchus mykiss*) liver. Journal of experimental Zoology, 1996, 274:23-32.

CONTINUING EDUCATION AND TRAINING:

- February 19-23-2007 American Academy of Forensic Scientist Annual Meeting Workshop 16 - Investigating SSRI Deaths Workshop 22 – Medicine for Addiction and Pain
- January 27-28-2006 California Association of Toxicologist Quarterly meeting Analgesics, Pain Management and addiction Workshop.
- October 13-14-2005 -Advanced Roadside Impaired Driving Enforcement (A-RIDE pilot project) National Highway Safety Administration. Spokane, WA.
- September 24-25-2004 California Association of Toxicologist Quarterly meeting. Workshops: 1) SSRI Drugs 2) Poisons and Venoms of the South West. Tempe, Arizona.
- September 19-22-2004 The effects of Drugs on Human Performance and Behavior, Indiana University, Center for Studies of Law in Action, Bloomington IN.
- April 14-16, 2004 *National Highway Traffic Safety Administration (NHTSA) DWI Detection and Standardized Field Sobriety Testing*. Instructed by Tom Bacon and Ed Harris from Seattle Police Department. Seattle Police training division in Seattle, Washington.
- October 20-24, 2003- Annual meeting of Society of Forensic Toxicologists in Portland, Oregon.
 - Workshop 6 Feeling Blue? Antidepressant workshop

- March 27-29, 2003 Annual meeting of Canadian Society of Forensic Science Drugs and Driving workshop – The A-Z of Marijuana Drugs and Driving workshop – Chemical Drugs and the Rave Culture
- October 13-17, 2002 Annual meeting of Society of Forensic Toxicologists in Dearborn, Michigan.
 - Workshop 2 *Pharmacogenomics*
 - Workshop 3 Forensic Toxicological Aspects of Human Growth and Development
 - Workshop 6 *Pharmacology and Toxicology of Brain Drugs*
 - Workshop 8 *Medicolegal Death Investigation*
- November 16, 2000 Workshop: The science of Solid Phase Extraction. Presented by Michael Telepchak, President and CEO of United Chemical Technologies, Inc. Phoenix, AZ.
- October 2-6, 2000 Annual meeting of Society of Forensic Toxicologists in Milwaukee, WI.
 - Workshop 3 Benzodiazepines: Pharmacology and Analytical Challenges.
 - Workshop 5 Marijuana Forensic Symposium
- December 3-6, 1999 Short Course: Mass spectrometry and spectral interpretation. Instructed by Dr. Henry Nowicki from Professional Analytical and Counseling Services Inc. (PACS). San Francisco, CA.
- October 1999 Seminar: *Comprehensive Gas Chromatography Training*. Presented by Paul Silvis and Christine Vargo from *RESTEK*. Phoenix, AZ.
- August 1999 California Association of Toxicologists, Quarterly Meeting. Las Vegas, NV.
- June 1999 *Effective Testifying skills seminar*. Presented by Paul and Sandra Sovinski of Stars Inc. Phoenix, AZ.
- January 1999 National Highway Traffic Safety Administration: *Drug Evaluation* and Classification Course "Drug Recognition Expert School". Phoenix, AZ.
- December 6-11,1998 Test for BAC in Highway Safety Programs *Supervision and expert Testimony*. Indiana University, Center for Studies of law in Action. Dr. Robert F. Borkenstein, Director. Bloomington, IN.
- 11/98-9/99 Urine Drug Screen Enzyme Multiplied Immunoassay Technique (EMIT) and Gas chromatography/mass spectrometry (GC/MS) Training program by Arizona Department of Public Safety, Crime Laboratory. Phoenix, AZ.
- 2/4-98 Forensic Blood Alcohol Training Program by Arizona Department of Public Safety Crime Laboratory. Phoenix, AZ.