

**Cynthia Silva Burbach, BS, MPA**  
**Colorado Department of Public Health and Environment, Laboratory Services Division**  
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## **EXPERIENCE**

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*Colorado Department of Public Health and Environment*

**Hazardous Materials Waste Management Division – Inspector January 1995 to November 2000**

**Laboratory Services Division – Forensic Chemist and Director of Toxicology January 1984 to January 1995 and November 2000 to present**

Responsible for Forensic Toxicology Analyses. Duties include supervising activities of full service forensic toxicology laboratory, which serves the State of Colorado. Work comprises legal drug screening and blood alcohol determinations for local, county, and state law enforcement agencies as well as methods development. Provide expert testimony in forensic toxicology, standard field sobriety maneuvers, and interpretation of the Colorado Board of Health Rules & Regulations for State and Federal hearings.

## **EDUCATION**

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### ***PhD Courses:***

*The Analytical Basis of Forensic Toxicology, University of Colorado Health Sciences Center, School of Pharmacy, fall 2006.*

*Topics included: Introduction/Fundamentals, Extraction/Fundamentals, and Fragmentation Characteristics of Major Functional Groups, Chromatographic Theory, Drugs and Human Performance, Clandestine Methamphetamine Manufacturers, Ethanol Methods of Measurements, Antibody-Based Methods, Pharmacokinetics, Pharmacodynamics, and Instrument Applications*

*Principles of Medicinal Chemistry, University of Colorado Health Sciences Center, School of Pharmacy, Fall 2009.*

*Topics included: Introduction Fundamentals, Sedative/Hypnotic Agents, Opiate Analgesic Agents, Local Anesthetics/Antipsychotic Agents, Vasodilators, Misc. Hypotensive Agents, Adrenergic Agents, Cholinergic Agents, Cholinergic Agents, Histamine H1 and H2 Antagonists, Anticoagulants, Sulfonamides, B-lactams, Tetracycline's, Macrolides, Cardiac Glycosides, and Steroids.*

**Masters Candidate-** Forensic Science, Emphasis-Forensic Toxicology, University of Colorado, Colorado Springs

**MPA, Public Administration University of Colorado – September 1993 to May 1996**

**B.S., Biology, New Mexico State University – September 1976 to August 1980**

## **PROFESSIONAL MEMBERSHIPS**

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*Society of Forensic Toxicologists*

*International Association for Chemical Testing*

*Colorado State Management Association*

## **COMMITTEES**

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*January 1, 2008 to December 31, 2010*

Forensic Toxicologist for the Technical Advisory Panel and Highway Safety Committee of the International Association of Chiefs of Police. Currently the Toxicology Representative on the DEC and SFST Technical Advisory Panel

*October 2009 to present*

National Safety Council-Committee on Alcohol and Drugs

*September 2010 to present*

Impaired Driving Steering Committee

## **PUBLICATIONS AND RELATED ACTIVITIES**

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Abstract, Society of Forensic Toxicologists, October 2005. Dynamic Headspace Extraction as an Alternative to Solid Phase Microextraction for the Analysis of Volatile Organic Compounds at Physiological Levels in Blood. Patrick Ayres, Cynthia Burbach, Ashley Demander, Ed Price, and C. Michael Smith.

Journal of Analytical Toxicology, Volume 30, Number 2: Page 134, March 2006

Dynamic Headspace Extraction as an Alternative to Solid Phase Microextraction for the Analysis of Volatile Organic Compounds at Physiological Levels in Blood. Patrick Ayres, Cynthia Burbach, Ashley Demander, Ed Price, and C. Michael Smith.

American Academy of Forensic Science

Isotopic Dilution in the Analysis of Cocaine, Cocaethylene, and Benzoyllecgonine in Whole Blood: Comparison of the "Tradition" to the "Direct" Application of Deuterated Drug Analogs.

San Antonio, Texas

February 21, 2007

Society of Forensic Toxicologists

Poster Abstract

Incidence of Levamisole in Urine Previously Confirmed Positive for Cocaine and Benzoyllecgonine by GCMS

Vanessa Simmons, Jennie Buchanan and Cynthia Burbach

Richmond, Virginia

October 21<sup>st</sup>, 2010

Prevalence of Levamisole in Urine Toxicology Screens Positive for Cocaine in an Inner-City Hospital

JAMA, April 27<sup>th</sup>, 2011-Vol 305, no. 16

## **LECTURES AND PRESENTATIONS**

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Forensic Toxicology in DUI/DWAI - Case Histories

University Of Colorado, Colorado Springs- ongoing

Toxicology Perspective in Drug-Facilitated Sex Assault Cases

SANE Nurses/Sex Assault Detectives

CDOT- SFST Instructor Update & DRE Update

State wide ongoing

DUI Comprehensive Training-CDAC/CDOT  
State wide ongoing

The Governor's Conference on Impaired Driving  
A Toxicologist's Guide to Understanding Drugs  
Laramie, Wyoming  
May 4<sup>th</sup>, 2011

Medical Marijuana  
The Colorado District Attorneys Council  
Breckenridge, Colorado  
September 14<sup>th</sup>, 2010

DUI Update 2010  
Colorado Bar Association  
Testing for Drugs in Blood and Urine: What It Does and Doesn't Mean  
January 21<sup>st</sup>, 2010

Why You Should Test For Drugs In Blood?  
The 15<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Little, Rock Arkansas, August 8-10<sup>th</sup>, 2009

The Colorado District Attorney Council  
Keystone, Colorado  
September 22<sup>nd</sup>  
Drugged, Driving and Dangerous On Colorado Roadways

The 14<sup>th</sup> annual IACP Training on Drug, Alcohol  
And Impaired Driving, Indianapolis, Indiana  
August 10-12<sup>th</sup>, 2008  
The Toxicologist and the DRE

DRE Main School  
Blood vs. Urine  
Avon, Colorado  
May 6<sup>th</sup>, 2008

DRE In-service  
Toxicology Updates  
Blood vs. Urine  
Denver Police Academy  
Denver, Colorado  
April 12<sup>th</sup>, 2008

Arapahoe Sertoma Club  
Toxicology  
Englewood, Colorado  
April 3, 2008  
DUI/DUID  
Arapahoe County  
March 14<sup>th</sup>, 2008

Toxicology Update  
CSP-Boulder  
March 7, 2008

Colorado District Attorney's Council  
DUI/DUID  
Slurring, Swerving and Staggering Prosecuting the Impaired Driver  
September 17, 2007

Toxicology Update-DUI/DRE Officers  
Colorado State Patrol Academy  
Golden, Colorado  
September 11, 2007

Toxicology Update-DUI/DRE Officers  
Colorado State Patrol Academy  
Golden, Colorado  
September 11, 2007

Forensic Toxicology Update  
Colorado State Patrol Adams County  
Broomfield Colorado  
August, 2007

Drug Recognition Main School  
Forensic Toxicology Review  
Golden, Colorado  
June 2007

SANE Symposium  
Drug Facilitated Sex Assaults & Laboratory Limitations  
St. Anthony's Hospital  
June, 2007

American Academy of Forensic Science  
Isotopic Dilution in the Analysis of Cocaine, Cocaethylene, and Benzoyllecgonine in Whole Blood: Comparison of the "Tradition" to the "Direct" Application of Deuterated Drug Analogs.  
San Antonio, Texas  
February 21, 2007

Drug Recognition Main School  
Forensic Toxicology Review  
Golden, Colorado  
August, 2006

Denver Sexual Assault Interagency Council  
Drug Facilitated Sex Assault  
Denver, Colorado  
July, 2006  
Forensic Toxicology a Case Review  
Forensic Toxicology Master's Program  
University Of Colorado Springs  
July, 2006

El Paso County District Attorney's Office  
Toxicology 101  
Colorado Springs, Colorado  
March 3, 2006

Jefferson County District Attorney's Office  
Driving Under the Influence of Drugs  
Golden, Colorado  
March 2006

Drug Recognition Update for Troopers  
Colorado State Patrol Academy  
Golden, Colorado  
December, 2005

Colorado Department of Transportation  
Impaired Driving Program Assessment  
Denver, Colorado  
October, 2005

Toxicology for the Chemist  
American Chemical Society  
Regis University  
Denver, Colorado  
September, 2005

The Colorado Collegiate Impaired Driving Conference  
Driving Under the Influence of Drugs and Alcohol  
Denver, Colorado  
September, 2005

Toxicology for the Prosecutor  
Driving Under the Influence of Drugs and Alcohol  
The Colorado District Attorney's Council  
Snowmass, Colorado  
September, 2005

Drug Recognition Main School  
Toxicology for the Police Officer  
Grand Junction Colorado  
July, 2005

Toxicology 101-Forensic Toxicology Update  
Arapahoe County District Attorney's Office  
June, 2005

Toxicology 101  
Denver District Attorney's Office  
April 2005

Drug Recognition Main School  
Forensic Toxicology Review  
Denver, Colorado  
January, 2001

Drug Recognition Main School  
Forensic Toxicology Aspects  
Denver, Colorado  
May, 1994

Drug Recognition Main School  
Toxicology Update  
Pharmokinetics/Pharmodynamics  
Denver, Colorado  
April, 1993

Drug Recognition Main School  
Toxicology Update  
Pharmokinetics/Pharmodynamics  
Denver, Colorado 1992

Drug Recognition Main School  
Forensic Toxicology Review  
Denver, Colorado  
July, 1991

Drug Recognition Main School  
Forensic Toxicology Update  
Denver, Colorado  
February, 1990

Drug Recognition Main School  
Pharmokinetics/Pharmodynamics  
Denver, Colorado  
March, 1989

A Toxicology Update  
Interpretive DUID Workshop  
Training Seminar-Arapahoe County District Attorney's Office  
Littleton, Colorado  
April, 1989

Drug Recognition Main School  
Toxicology for the Police Officer  
Denver, Colorado  
April 1988

## **TRAINING COURSES, WORKSHOPS AND SEMINARS – CONTINUING EDUCATION**

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Colorado Impaired Driving Enforcement  
2011 Conference  
May 16<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
A Sentry Perspective on Emerging Synthetic Drug Threats  
Susan A. Seese, PhD  
National Drug Intelligence Center  
Arlington, Va  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Epidemiology of Stimulants: Licit (ADHD) Medications  
Justine Larson, MD, MPH  
John Hopkins University Baltimore, MD  
Arlington, Va  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Clandestine Lab Issues  
Robert B. Palmer, PhD  
Toxicology Associates  
Denver, Colorado  
Arlington, Va  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Stimulant Related Deaths  
Mary G. Ripple, MD  
Office of the Chief Medical Examiner  
Baltimore, MD  
Arlington, Va  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Pharmacokinetic of Amphetamines and Analogs  
Cynthia L. Morris-Kukoski, PharmD  
Department of Justice, FBI Laboratory, Quantico, Va  
Arlington, Virginia  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Structure-Activity Relationships of the Phenethylamines: A Focus on the Basics  
Robert B. Palmer, PhD  
Toxicology Associates, Denver, Colorado  
Arlington, Virginia  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Pharmacology and Toxicology of Cocaine  
Edward J. Cone, PhD  
Johns Hopkins University  
Arlington, Virginia  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Interpretation of Post-Mortem Stimulant Laboratory Determinations  
Barry K. Logan, PhD,  
NMS Labs, Willow Grove, PA  
Arlington, Virginia  
May 9<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Analytical Techniques for Stimulant Detection  
Cynthia L. Morris-Kukoski, Pharm D  
Department of Justice, FBI Laboratory, Quantico, Va  
Arlington, Virginia  
May 10<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
“Amphetamine-Related Impairment” and “Reverse Impairment”  
Dr. Barry Logan, PhD  
NMS Labs, Willow Grove, PA  
Arlington, Virginia  
May 10<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Workplace Testing for Stimulant Use and Abuse  
Yale H. Caplan, PhD  
University of Maryland  
Arlington, Virginia  
May 10<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Clinical Pearls and Forensic Pitfalls in the Management of the Stimulant-Abusing Patient  
Lewis S. Nelson, MD  
New York University, NY, NY  
Arlington, Virginia  
May 10<sup>th</sup>, 2011

Seminars in Forensic Toxicology  
Drug Recognition Evaluator Program (DRE): Program Overview and Scientific Basis  
Lt. Thomas Woodward  
Maryland State Police, Hagerstown, MD  
Dr. Barry Logan, PhD, NMS Labs, Willow Grove, PA  
Arlington, Virginia  
May 10<sup>th</sup>, 2011



Seminars in Forensic Toxicology  
Clinical Presentation of Newer Stimulants  
So What's The Buzz?  
Dr. Kurt C. Kleinschmidt, MD  
University of Texas Southwestern, Dallas, Texas  
Arlington, Virginia  
May 10<sup>th</sup>, 2011

Annual Meeting of the Technical Advisory Panel for the International Association of Chiefs of Police (IACP)  
October 24<sup>th</sup>, 2010  
Orlando, Florida

“Marijuana Pharmacology”  
Practical applications for the Forensic Toxicologist  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia  
“A Stroll through the Cannabinoid Field”  
Pharmacology, Therapeutics and Untoward Effects  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia

”To Err is Human...to Identify it is Divine”  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia

Evaluation of Drug Recognition Expert Reports in Marijuana Cases  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia

The Involvement of Prescribed Drugs in Road Trauma  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia

1, 1-Difluoroethane Abuse and Driving Impairment in Wisconsin  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia

Cannabinoids Time-Profiles, Subjective and Clinical Effects, Simulating Driving Capability after Smoking a Joint  
Made of Neat Cannabis containing 11% THC  
Society of Forensic Toxicologists Annual Meeting  
October 18-22, 2010  
Richmond, Virginia

“Homicide by Vehicle DUI/Drugs from the Prosecutor Perspective”  
Timothy Barker, Chief Deputy  
July 22, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

“Current Defense Trends”

Joanne Micheals, National Traffic Law Center, National District Attorneys Association  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
July 22, 2010  
Pittsburg, Pennsylvania, July 22-24, 2010

“Stimulants and Depressants: A Dangerous Mix”

Dr. Barry Logan, Director, National Medical Services Laboratory  
July 23, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

“National Current Drug Trends”

Jeb Bird, Regional Administrator, White Deer Run/Cove Forge Behavioral Health System  
July 23, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

“DUI Courts”

The Honorable Michael Barrasse, Lackawanna County, Pennsylvania  
July 23, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

“A DRE, a Toxicologist and a TSRP Are In a Row Boat”

Amy Miles, Chemist, Tara Schipper, TSRP and John Gscheidmeier, Glendale Police Department, Milwaukee, Wisconsin  
July 23, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

“The Pupil Assessment for the DRE: A Closer Look”

Jack Richmond, O.D.  
New England College of Optometry  
July 24<sup>th</sup>, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

“Spice”

Jennifer Messick  
Alaska Traffic Safety Resource Prosecutor  
July 24<sup>th</sup>, 2010  
The 16<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Pittsburg, Pennsylvania, July 22-24, 2010

A Retrospective Comparison of Blood and Breath Alcohol Results in Wisconsin Impaired Drivers 2001-2007

Patrick Harding  
General Session  
February 22-27, 2010  
American Academy of Forensic Sciences Annual Meeting  
Seattle, Washington

Gastric Fentanyl Concentrations in Fentanyl-Related Deaths: A Study of 11 Cases

Ruth E. Kohlmeier, MD

American Academy of Forensic Sciences Annual Meeting

February 22-27, 2010

Seattle, Washington

Concentration Distribution of the Drugs Most Frequently Identified in Postmortem Femoral Blood Representing All Causes of Death

A.W. Jones, PhD

American Academy of Forensic Sciences Annual Meeting

February 22-27, 2010

Seattle, Washington

Workshop #22: Navigating the World of Forensic Journals & Forensic Information

Barry K. Logan, PhD and A. W. Jones, PhD

American Academy of Forensic Sciences Annual Meeting

February 22-27, 2010

Seattle, Washington

RE-Certification Training in SFST's Evaluations

Denver Police Department-District #2

December 2<sup>nd</sup>, 2009

ABFT Certification Preparation Class

Society of Forensic Toxicologist, Inc.

Monday, October 19, 2009

Oklahoma City, Oklahoma

Bridging the Gap in Postmortem Laboratory Practices and Case Interpretations

Ann Marie Gordon, Jeri Roper-Miller, & Sherri Kacinko

Society of Forensic Toxicologist, Inc

Tuesday, October 20<sup>th</sup>, 2009

Oklahoma City, Oklahoma

Newer Prescription Drugs: Impairment Potential & Identified Polypharmacies

Michelle Spirk and Loralie Langman

Society of Forensic Toxicologist, Inc

Tuesday, October 20<sup>th</sup>, 2009

Oklahoma City, Oklahoma

Blood Cannabinoids Levels and Effects on Cognitive Performance and Behavior as a Function of Joint Smoking Procedure and Inhalation Technique-Scientific Session

Christian Giroud

Society of Forensic Toxicologist, Inc

Wednesday, October 21st, 2009

Oklahoma City, Oklahoma

Development of a Novel Homogeneous Enzyme Immunoassay Method for the Detection of Carisoprodol and Meprobamate in Urine-Scientific Session

Guohong Wang

Society of Forensic Toxicologist, Inc

Tuesday, October 20<sup>th</sup>, 2009

Oklahoma City, Oklahoma

Development of a High Throughput LC/MS-MS Assay for Thirteen Commonly Prescribed Pain Management Drugs From Urine with Clean Up Using Solid Phase Extraction (SPE)- Scientific Session

Michael Campognone

Society of Forensic Toxicologist, Inc

Tuesday, October 20<sup>th</sup>, 2009

Oklahoma City, Oklahoma

A Comprehensive analysis of 24 Opioid analgesics Utilizing LC-MS/MS-Scientific Session

Tracy A. McKinnon

Society of Forensic Toxicologist, Inc

Tuesday, October 20<sup>th</sup>, 2009

Oklahoma City, Oklahoma

Understanding the Distribution of Buprenorphine and Its Metabolites in Blood-Scientific Session

Shu-Ching Yang

Society of Forensic Toxicologist, Inc

Tuesday, October 20<sup>th</sup>, 2009

Oklahoma City, Oklahoma

Postmortem Redistribution of Fentanyl in Femoral Blood-Scientific Session

Kalen N. Olson

Society of Forensic Toxicologist, Inc

Wednesday, October 21st, 2009

Oklahoma City, Oklahoma

Evaluation and Validation of the BAC Tracker in Two Drinking Studies-Scientific Session

Vincent M. Papa

Society of Forensic Toxicologist, Inc

Wednesday, October 21st, 2009

Oklahoma City, Oklahoma

Annual Meeting of the Technical Advisory Panel for the International Association of Chiefs of Police (IACP)

October 4<sup>th</sup>, 2009

Denver, Colorado

The 15<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving

Little, Rock Arkansas, August 8-10<sup>th</sup>, 2009

Herbal and Over-The Counter Medications: Highs, Enhancements and Misadventures

Dr. Karen Simone, Director of the Northern New England Poison Control Center

The 15<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving

Little, Rock Arkansas, August 8-10<sup>th</sup>, 2009

Impaired Driving Research and Updates

Richard Compton, National Highway Traffic Safety Administration

The 15<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving

Little, Rock Arkansas, August 8-10<sup>th</sup>, 2009

Drive For Sleep: Driving Impairment and Sleep Aides

William Johnson, Advanced Chemist

Wisconsin State Laboratory of Hygiene

The 15<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Little, Rock Arkansas, August 8-10<sup>th</sup>, 2009  
DUI and Medical Conditions with the Eyes  
Karl Citek, OD, PhD, FAAO, Professor of Optometry  
Pacific University College of Optometry

The 15<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving  
Little, Rock Arkansas, August 8-10<sup>th</sup>, 2009  
Pupil Measurement Update: Everything I Didn't Know About The Pupil  
Dr. Jack Richman, O.D., Professor, Pediatric Optometry and Binocular Vision  
New England College of Optometry

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
Ethics in Forensic Science  
Gil Sapir, Illinois

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
"DUI Drugs That Impair-Depressants v Stimulants"  
Laura Liddicoat, Forensic Toxicologist, Wisconsin

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
"Blinded by the Light: the Police Light Bars and HGN"  
Ofc. Steve Dunn, Anchorage Police Department

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
"The Role of the Expert Witness"  
June Stein, Anchorage, Alaska

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
"The Evolution of Breath Alcohol Testing as a Discipline in Forensic Science"  
George Taft, Director of Alaska State Laboratory

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
"Cannabis Impairment"  
Brian Capron, Washington State Laboratory

International Association For Chemical Testing 22nd Annual Meeting  
May 3<sup>rd</sup>-May 7<sup>th</sup>, 2009  
Anchorage, Alaska  
"Polydrug Interactions in the DUI Offender"  
Sarah Swenson, Washington State Laboratory

American Academy of Forensic Sciences 61<sup>st</sup> Annual Scientific Meeting  
February 13<sup>th</sup>-21<sup>st</sup>, 2009  
Denver, Colorado  
Recent Advances in Liquid Chromatography and Mass Spectrometry for Application in a Variety of Disciplines in  
The Forensic Sciences

American Academy of Forensic Sciences 61<sup>st</sup> Annual Scientific Meeting  
February 13<sup>th</sup>-21<sup>st</sup>, 2009  
Denver, Colorado  
Operation Street Smart: An Overview of Current Street Drugs and Drug Culture

American Academy of Forensic Sciences 61<sup>st</sup> Annual Scientific Meeting  
February 13<sup>th</sup>-21<sup>st</sup>, 2009  
Denver, Colorado  
Drugs & Driving Special Session

Annual Meeting of the Technical Advisory Panel for the International Association of Chiefs of Police (IACP)  
November 7<sup>th</sup>-8<sup>th</sup>, 2008  
San Diego, California

Priority Drug Classes in DUID Investigation  
Dr. Barry Logan  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Pharmacology of Impairment  
Dr. Lionel Raymon  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Marijuana and Driving Impairment  
Dr. Marilyn Huestis  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Stimulants and Driving Impairment  
Dr. Daniel Isenschmid  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

The DRE program and drug categories  
Mr. Joe Turner  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

On Road Driving Studies of Drug Impairment  
Dr. Jan Ramaekers  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Update on Recommendations for DUID testing laboratories  
Ms. Laurel J. Farrell  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Analytical Best Practices for DUID testing  
Dr. Bruce Goldberger  
Effects of Drugs on Human Performance and Behavior  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Human Behaviors Measured in Drugged Driving Research  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Laboratory Studies of Drug-Impaired Performance  
Dr. Miriam Z. Mintzer  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Between the Laboratory and the Highway: Drug-Impaired Simulated Driving  
Dr. Anthony Liguori  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

General Psychometric Principles & On-the-Road Driving  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

Guidelines for Research on Drugged Driving  
Dr. Marilyn Huestis  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

#### A Review of Cases Analyzed for Zopiclone/Eszopiclone

Dr. Laura M. Labay, NMS Labs  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

#### Multiple Drug Use by Ecstasy Abusers in the United States

Dr. Yale H. Caplan, National Scientific Services  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

#### Carisoprodol and Drug Impaired Driving in Arizona

Ms. Abbegayle J. Dodds, Arizona Department of Public Safety  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

#### Zolpidem Blood Concentrations in DUI Related and Postmortem Cases in Georgia

Mr. Michael Morrison, Georgia Bureau of Investigation-Division of Forensic Science  
Society of Forensic Toxicologists Annual Meeting  
Monday October 27<sup>th</sup>-31<sup>st</sup>, 2008  
Phoenix, Arizona

#### Pharmacodynamics and Pharmacokinetics of Cannabis

Marilyn A. Huestis, Ph.D., Chief, Chemistry and Drug Metabolism  
Section, The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

#### Incidence of DUID

Tim Kerns, University of Maryland's National Study Center for Trauma and EMS  
Dr. Derece Smither, National Highway Safety Administration  
Joe Turner, Indiana Law Enforcement Academy  
August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

#### Medical Foundations of Eye Testing

Karl Citek, OD, PhD, FAAO  
Professor of Optometry, Pacific University College of Optometry  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

#### Inhalant Abuse and Driving Impairment

Amy Cochems, Advanced Chemist  
Wisconsin State Laboratory of Hygiene  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana



Methadone and Driving  
Laurel Farrell, Independent Contractor  
National Laboratory Certification Program  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

Nuts & Bolts of DUI: DUI Courts  
Elizabeth Earleywine, Traffic Safety Resource Prosecutor  
Illinois Department of Transportation  
David Wallace, Director of the National Center of DWI Courts  
National Association of Drug Court Professionals  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

Injury, Forensic Medical Evidence and Operator  
Dr. Dean A. Hawley, Forensic Pathologist,  
Professor of Pathology, Indiana University School of Medicine  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

How Drugs Create the Eye and Physical Signs of Impairment  
Jack E. Richman, O.D., F.A.A.O  
Professor, Pediatric Optometry/Binocular Vision  
New England College of Optometry  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

Pills and Potions of Abuse  
Trendy Chemicals of Compulsion  
Officer Chuck Matson, Omaha, NE, Police Department  
The 14<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol & Impaired  
Driving, August 10<sup>th</sup>-12<sup>th</sup>, 2008  
Indianapolis, Indiana

Colorado State Managers Association  
Colorado Springs, Colorado  
April 14<sup>th</sup>-April 16<sup>th</sup>, 2008

Understanding Gaze Nystagmus  
Eye Physiology  
Presented by Dr. Karl Citek O.D., PhD  
Fort Carson, Colorado  
April 4<sup>th</sup>, 2008

Standard Field Sobriety 8 hour update  
Denver Police Department  
Traffic Investigation Unit  
December 19, 2007

SOFT Continuing Education CMTE Workshop  
Raleigh-Durham, North Carolina  
October 19<sup>th</sup>, 2007  
Detection Times of D9-Tetrahydrocannabinol (THC)  
11-Hydroxy-D9-Tetrahydrocannabinol (11-OH-THC)  
and 11 –nor-D9-Tetrahydrocannabinol-9-Carboxylic Acid (THCCOOH)  
in Urine from Chronic cannabis Users during Abstinence  
Scientific Session #5

SOFT Continuing Education CMTE Workshop  
Raleigh-Durham, North Carolina  
October 19<sup>th</sup>, 2007

An Overview of Drug Facilitated Sexual Assaults in New Jersey  
SOFT Continuing Education CMTE Workshop  
Scientific Session #4  
Raleigh-Durham, North Carolina  
October 18<sup>th</sup>, 2007

Age Related Difference in Blood Alcohol Concentration  
In Acute Alcohol Intoxication Fatalities  
Scientific Session #1  
SOFT Continuing Education CMTE Workshop  
Raleigh-Durham, North Carolina  
October 17<sup>th</sup>, 2007

Toxicology Jeopardy  
A Practical Approach to DUID Testing  
SOFT Continuing Education CMTE Workshop  
Raleigh-Durham, North Carolina  
October 16<sup>th</sup>, 2007

Benzodiazepines-The Basics and Beyond  
SOFT Continuing Education CMTE Workshop  
Raleigh-Durham, North Carolina  
October 15<sup>th</sup>, 2007

Hallucinogens-Old, New and Trendy  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
August 2nd, 2007

Dextromethorphan Use and Abuse in DUI Investigations  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
August 2nd, 2007

Sleep Deprivation and the Effects on Driving and SFSTs  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
August 1st, 2007

Working With Difficult DRE Cases  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
August 1st, 2007

Toxicology Support in Impaired Driving Cases  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
August 1st, 2007

Over-the-Counter Drugs and Herbal Products DUI Investigations  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
August 1st, 2007

Inside the Mind of the Marijuana User  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
July 31, 2007

Examining Methamphetamine Dopamine Blues  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
July 31, 2007

Interpretive Toxicology and Drug Impaired Driving  
A Case Oriented Approach  
The 13<sup>th</sup> Annual IACP Training Conference on  
Drugs, Alcohol and Impaired Driving  
July 31, 2007

Newer Analytical Techniques:  
Applications in Forensic Toxicology  
American Academy of Forensic Sciences Annual Meeting  
San Antonio, Texas  
February 21<sup>st</sup>, 2007

Alcohol, Drugs, and Homicide  
American Academy of Forensic Sciences Annual Meeting  
Scientific Session  
San Antonio, Texas  
February 21<sup>st</sup>, 2007

Cocaine Impaired Driving: Evaluation of  
Toxicology, Driving Behavior, and Impairment  
Symptoms in Arrested Drivers  
Scientific Session  
American Academy of Forensic Sciences Annual Meeting  
San Antonio, Texas  
February 20<sup>th</sup>, 2007

Driving Under the Influence of Methamphetamine: Comparison of  
Driving Behavior and Impairment Symptoms in Subjects Arrested for  
Driving While Intoxicated  
Scientific Session  
American Academy of Forensic Sciences Annual Meeting  
San Antonio, Texas  
February 20<sup>th</sup>, 2007

Driving Behavior and Impairment  
Symptoms in Cannabinoid Positive Subjects  
Arrested for Driving Under the Influence of Drugs  
American Academy of Forensic Sciences Annual Meeting  
San Antonio, Texas  
February 20<sup>th</sup>, 2007

Finding the Needle in the Haystack:  
Improving the Toxicological Investigations  
Of Drug-Facilitated Sexual Assault and Other Crimes  
American Academy of Forensic Sciences Annual Meeting  
San Antonio, Texas  
February 20<sup>th</sup>, 2007

Downside of Methamphetamine Impairment  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 16<sup>th</sup>, 2006

Basic Drug and Drug Paraphernalia Identification  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 16<sup>th</sup>, 2006

Drugged Driving: Beyond Illicit Substances  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 15<sup>th</sup>, 2006

The Role of the Toxicologist:  
Challenges and Solutions  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 15<sup>th</sup>, 2006

The Pupils: A New and Innovative Look  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 15<sup>th</sup>, 2006

History of DRE and the Expansion to the Midwest  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 14<sup>th</sup>, 2006

SFST/HGN Research  
The 12<sup>th</sup> Annual IACP Training Conference on Drugs,  
Alcohol and Impaired Driving  
Kansas City, Missouri  
June 14<sup>th</sup>, 2006

The Administration of Standard Field Sobriety Maneuvers  
Classroom/Drinking Laboratory (3 day class)  
Certification Class  
Denver Police Academy  
December 2005

A GC-MS Method Development Study for the Determination of  
Ketamine or its Metabolites and the Evaluation of the REMEDI  
Real Urine Samples  
Scientific Session  
SOFT Continuing Education  
Nashville, Tennessee  
October 21<sup>st</sup>, 2005

The Use of LC/MS/MS Technologies for Drug Screening,  
Confirmation and Quantification  
Scientific Session  
SOFT Continuing Education  
Nashville, Tennessee  
October 20th, 2005

Cyclobenzaprine (Flexeril) Concentration in Postmortem Cases  
Scientific Session  
SOFT Continuing Education  
Nashville, Tennessee  
October 20th, 2005

Zolpidem Impaired Drivers in Wisconsin-A Six-Year Retrospective  
Scientific Session  
SOFT Continuing Education  
Nashville, Tennessee  
October 20th, 2005

LC/MS/MS Analysis of THC and its Metabolites  
Scientific Session  
SOFT Continuing Education  
Nashville, Tennessee  
October 20th, 2005

Central Nervous System Depressants  
Case Studies In DUI: Numbers, Signs,  
Symptoms and Beyond  
SOFT Continuing Education CMTE Workshop  
Nashville, Tennessee  
October 19, 2005

Drug Combinations & Basic Receptor Theory  
SOFT Continuing Education CMTE Workshop  
Nashville, Tennessee  
October 19, 2005

Interpretive Strategies  
The Good, the Bad and the Ugly....  
SOFT Continuing Education CMTE Workshop  
Nashville, Tennessee  
October 19, 2005

Blood Alcohol Concentration Extrapolation  
An Approach to Retrograde Extrapolation  
SOFT Continuing Education CMTE Workshop  
Nashville, Tennessee  
October 18, 2005

Stimulants and Driving Impairment  
SOFT Continuing Education CMTE Workshop  
Nashville, Tennessee  
October 18, 2005

The Eleventh IACP DRE Training Conference on  
Drugs, Alcohol, and Impaired Driving  
Benzodiazepines and Driving  
Arlington, VA  
August 7, 2005

The Eleventh IACP DRE Training Conference on  
Drugs, Alcohol, and Impaired Driving  
Marijuana and Driving  
Arlington, VA  
August 6, 2005

The Eleventh IACP DRE Training Conference on  
Drugs, Alcohol, and Impaired Driving  
The Dynamics of an Impaired Driving Trial  
Arlington, VA  
August 6, 2005

The Eleventh IACP DRE Training Conference on  
Drugs, Alcohol, and Impaired Driving  
Horizontal Gaze Nystagmus Revisited and Revitalized  
Arlington, VA  
August 5, 2005

The Eleventh IACP DRE Training Conference on  
Drugs, Alcohol, and Impaired Driving  
Pharmacology Aspects of DRE  
Drug Impaired or Medical Rule Out  
Arlington, VA  
August 5, 2005

The Eleventh IACP DRE Training Conference on  
Drugs, Alcohol, and Impaired Driving  
Standard Field Sobriety Testing Updates  
Arlington, VA  
August 5, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Presentation of Expert Testimony  
Indiana University, Bloomington, IN  
May 20<sup>h</sup>, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Analysis of Defense Challenges to Breath-Alcohol Testing  
Indiana University, Bloomington, IN  
May 19<sup>h</sup>, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Legal Aspects—constitutional Issues/Case Law  
Indiana University, Bloomington, IN  
May 19<sup>h</sup>, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Psychomotor Effects and Driving  
Indiana University, Bloomington, IN  
May 18<sup>h</sup>, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Recent Research on Forensic Alcohol Analysis  
Indiana University, Bloomington, IN  
May 18<sup>h</sup>, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Blood Alcohol Analysis  
Indiana University, Bloomington, IN  
May 18<sup>h</sup>, 2005

The Robert F. Borkenstein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Theory and Practice of Breath-Alcohol Analysis: Physical-Chemical Aspects  
Indiana University, Bloomington, IN  
May 17<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Forensic Alcohol Toxicology Databases and Their  
Courtroom Applications  
Indiana University, Bloomington, IN  
May 17<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Mathematics of Breath and Blood Alcohol Analyses  
Indiana University, Bloomington, IN  
May 17<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Pharmacology of Alcohol-Extrapolation  
Indiana University, Bloomington, IN  
May 16<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Breath Alcohol Instrumentation  
Indiana University, Bloomington, IN  
May 16<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Theory and Practice of Breath-Alcohol Analysis: Selected  
Biological Aspects  
Indiana University, Bloomington, IN  
May 16<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
Pharmacology of Alcohol  
Indiana University, Bloomington, IN  
May 15<sup>th</sup>, 2005

The Robert F. Borkestein Course On Alcohol  
And Highway Safety: Testing, Research and Litigation  
A Career in Forensic Alcohol Toxicology  
Indiana University, Bloomington, IN  
Dr. Kurt M. Dubowski  
May 15<sup>th</sup>, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Narcotic Analgesics  
Spokane, WA  
May 3, 2005



Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Antidepressants  
Spokane, WA  
May 3, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Antihistamines & NSAIDs  
Spokane, WA  
May 3, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Hallucinogens  
Spokane, WA  
May 3, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Antipsychotics  
Spokane, WA  
May 3, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Herbal Supplements  
Spokane, WA  
May 3, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Drugs & Driving Overview  
Spokane, WA  
May 3, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Forensic Drug Testing Overview  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Pharmacology Overview  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Specimen Preparation  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Instrument Analysis  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Principles of Drug-Drug Interaction  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Alcohol & Volatiles  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Carbon Monoxide & Cyanide  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Stimulants  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Marijuana  
Spokane, WA  
May 2, 2005

Society Of Forensic Toxicologist  
Continuing Education Committee Seminar  
Drinking Laboratory with SFST's  
Spokane, WA  
May 2, 2005

Drinking Laboratory-The Administration of Standard  
Field Sobriety Maneuvers-Certification/3 day course  
Denver Police Academy  
March, 2005

Applications of Liquid Chromatography-Mass Spectrometry  
Introductory Course  
Agilent Technology  
Golden, Golden  
March, 2005

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Amphetamines and their effects on skills related to driving  
Indiana University  
Bloomington, Indiana  
September 22, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Narcotic Analgesics and their effects on skills related to driving  
Indiana University  
Bloomington, Indiana  
September 22, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
A survey of Toxicology Laboratories performing DRE Toxicology  
Indiana University  
Bloomington, Indiana  
September 22, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Analytical Toxicology considerations in drugs and driving cases  
Indiana University  
Bloomington, Indiana  
September 22, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
DUID Testimony for Toxicologists  
Indiana University  
Bloomington, Indiana  
September 22, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Cocaine and its effects on skills related to driving  
Indiana University  
Bloomington, Indiana  
September 21<sup>st</sup>, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Antidepressants and Driving Impairment  
Indiana University  
Bloomington, Indiana  
September 21<sup>st</sup>, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Marijuana and Driving performance  
Indiana University  
Bloomington, Indiana  
September 21<sup>st</sup>, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
PCP and Driving Impairment  
Indiana University  
Bloomington, Indiana  
September 20th, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Selected Central Nervous System Drugs and their effects on driving  
(GHB, Soma, Zolpidem, Inhalants)  
Indiana University  
Bloomington, Indiana  
September 20th, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Benzodiazepines: Pharmacology and Psychomotor effect related to driving  
Indiana University  
Bloomington, Indiana  
September 20th, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Assessment of Impaired Drivers-DRE  
Indiana University  
Bloomington, Indiana  
September 20th, 2004

The Effects of Drugs on Human Performance and Behavior  
Robert F. Borkestein Center for Studies of Law in Action  
Driving Simulation and On-Road Driving Studies  
Indiana University  
Bloomington, Indiana  
September 20th, 2004

Focus On Quality A Practical QA Program  
For Your Laboratory  
CLIA  
Denver, Colorado  
December 2002

The Seventh IACP DRE, Drugs, Alcohol and Impaired Driving  
Training Conference  
The Effect Of Low Doses Of Alcohol On Driving-Related Skills  
Long Beach, California  
June, 2001

The Seventh IACP DRE, Drugs, Alcohol and Impaired Driving  
Training Conference  
Drugs Of Abuse  
Long Beach, California  
June, 2001

The Seventh IACP DRE, Drugs, Alcohol and Impaired Driving  
Training Conference  
The Drug Evaluation and Classification (DEC) Program  
Long Beach, California  
June, 2001

Current Quality Control Methods  
CDC Training  
Denver, Colorado  
March, 1991

Drug Recognition Expert Training Program  
Division Of Highway Safety and NHTSA  
Denver, Colorado  
November, 1990  
A Look at CLIA 88  
Colorado Training Network  
Denver, Colorado  
August 1990

GCMS for the Chromatographer, Hewlett Packard Analytical  
Seminar Series  
Denver Colorado  
May, 1990

Drug Recognition Expert School Main School  
Colorado Department Of Transportation-Highway Safety Program  
Aurora, Colorado  
October, 1987

Drug Recognition Expert School-Pre School  
Colorado Department Of Transportation-Highway Safety Program  
Aurora, Colorado  
October 1987

DUI Enforcement Course-Standard Field Sobriety Maneuvers,  
CDOT Division Of Highway Safety  
Denver, Colorado  
March 1987

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