

Curriculum Vitae

Brianna Peterson

Washington State Patrol
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EDUCATION

Doctor of Philosophy, Toxicology
The University of Georgia, May 2007

Master of Science, Forensic Science
University of Illinois at Chicago, August 1999

Bachelor of Science, Chemistry
University of Wisconsin-La Crosse, May 1997

BOARD CERTIFICATION

Diplomate of the American Board of Forensic Toxicology (DABFT)
March 2012 – present

PROFESSIONAL EXPERIENCE

Laboratory Manager, Toxicology Division, Washington State Patrol, Seattle WA
August 2013 - Present

Forensic Scientist III, Washington State Patrol, Seattle WA
May 2007 – August 2013

Crime Lab Scientist II, Georgia Bureau of Investigation, Savannah GA
July 1999 - August 2001

CERTIFICATIONS

Washington State Blood Alcohol Analyst Permit, June 2007 to present

State of Georgia Department of Public Safety and Georgia Bureau of Investigation: Chemical Analysis of Blood/Urine Permit (#18037), November 1999 to October 2001

PROFESSIONAL AFFILIATIONS

Member, Society of Forensic Toxicologists, (2008 – present)
Member, Society of Toxicology (2004 - 2007)
Member, American Association of Pharmaceutical Scientists (2003 - 2007)
Member, American Academy of Forensic Sciences (1999 - present)
Member, Golden Key National Honor Society (1996 - present)

COURSES AND TRAINING

Northwest Association of Forensic Scientists annual meeting

Missoula, MT, September 25-28, 2012

Workshop attended: Solid Phase Extraction for the Forensic Scientist

The 18th Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving

Seattle, WA, August 17, 2012

Workshops attended: DRE Vital Signs: A Closer Look
Bath Salts 101

Discovery and Recovery of Human Remains

Ravensdale, WA, August 13-16, 2012

Crime Scene Analysis and Reconstruction

Green Forensics, Inc., Shelton, WA, March 12-16, 2012

Bloodstain Pattern Analysis II

Bevel, Gardner & Associates, Shelton, WA, January 9-13, 2012

The 17th Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving

Montreal, Quebec, July 19-21, 2011

Basic Toxicology course: General Principles of Drug Pharmacokinetics

Midwest Forensics Resource Center, Ames, IA, March 8-11, 2011

Horizontal Gaze Nystagmus

Dr. Karl Citek, Seattle, WA, January 5, 2011

Society of Forensic Toxicologists annual meeting

Richmond, VA, October 18-22, 2010

Workshop attended: Marijuana Pharmacology – Practical Applications for the Forensic Toxicologist

DWI Detection and Standardized Field Sobriety Testing

Seattle Police Department, Seattle WA, August 25-27, 2010

Essentials of Crime Scene Investigation

National Forensic Science Technology Center, Largo, FL, March 23-26, 2010

Firearms Safety Handling Procedures and Trajectory Analysis

Washington State Patrol, Firearms Division, Seattle, WA, October 28-29, 2009

Society of Forensic Toxicologists annual meeting

Oklahoma City, OK, October 19-23, 2009

Grave Excavation and Forensic Entomology

Drs. Katherine Taylor and Beth Marshall, Seattle, WA, August 5-7, 2009

Basic Bloodstain Pattern Analysis

Bevel, Gardner & Associates, Seattle, WA, February 2-6, 2009

Advanced Roadside Impaired Driving Enforcement
Seattle Police Department, Seattle, WA, November 24-25, 2008

Society of Forensic Toxicologists annual meeting
Phoenix, AZ, October 26-31, 2008
Workshops attended: ISO 17025 Accreditation – What You Need to Know
The Stimulating Realm of Sympathomimetic Amines and
Tryptamines

Drug Recognition Expert in-service
Washington State Patrol, Chelan, WA, October 8-9, 2008

Robert F. Borkenstein Course on the Effects of Drugs on Human Performance and Behavior
Indiana University, Bloomington, IN, April 13-18, 2008

Technical Report Writing
Peabody Communication, Tacoma WA, January 30-31, 2008

Robert F. Borkenstein Course on Alcohol and Highway Safety: Testing, Research and Litigation
Indiana University, Bloomington, IN, December 2-7, 2007

Ultra High Performance Liquid Chromatography
Restek Corporation, Seattle WA, October 2007

Interpretation of Mass Spectra
Dr. Kenneth Busch, Atlanta, GA, January 17, 2001

Quality Management and Measurement Systems
Jay Frank Rudisill Ph.D., Atlanta, GA, November 20, 2000

Principles of Pharmacology
Southern Association of Forensic Scientists, Gatlinburg, Tennessee, April 28, 2000

Forensic Application of Capillary Electrophoresis
Southern Association of Forensic Scientists, Gatlinburg, Tennessee, April 27, 2000.

Forensic Toxicology of Marihuana
Southern Association of Forensic Scientists, Gatlinburg, Tennessee, April 26, 2000.

Expert Witness in the Courtroom
Roy Paschal, Forsyth, Georgia, February 15, 2000

Presentation Skills
Raymond Davis, Forsyth, Georgia, February 14, 2000

HP GC-MSD ChemStation & Instrument Operation
Agilent Technologies, Summerville, Georgia, August 23-27, 1999

COURSES AND TRAINING (continued)

Pharmacology of Drugs Affecting the Central Nervous System

John M. Holbrook, Ph.D., Rome, Georgia, August 2 – 5, 1999

Science of Solid Phase Extraction

United Chemical Technologies, Summerville, Georgia, July 8, 1999

Blood Alcohol and Toxicology Training Program

Georgia Bureau of Investigation, Summerville, GA., July – September 1999

Chemical Microscopy and Ultramicroanalysis

McCrone Research Institute, Chicago, IL, 1997

Forensic Analytical Microscopy

McCrone Research Institute, Chicago, IL, May 1997.

HONORS, AWARDS, AND FELLOWSHIPS

Young Scientist Meeting Award, Society of Forensic Toxicologists, 2010

Outstanding Senior Graduate Student Research Award, Pharmaceutical and Biomedical Sciences Department, University of Georgia, 2007

Achievement Rewards for College Scientists Scholar, 2006-2007

Fellow, American Foundation for Pharmaceutical Education, 2005-2007

University of Georgia Dissertation Completion Assistantship, 2006-2007

University Wide Graduate Fellowship, University of Georgia, 2003-2005

Allen Chemistry Graduate Incentive Scholarship, University of Wisconsin-La Crosse, 1997

PRESENTATIONS

“Bath Salts: New Synthetic Cathinones” (*Presenter and Workshop Chair*)

Annual meeting of the Northwest Association of Forensic Scientists, Missoula, MT, September 25, 2012

“Deadly by Design: Suicides, Assaults, and Homicides Involving Designer Stimulants” (*Presenter and Workshop Chair*)

Annual meeting of the American Academy of Forensic Sciences, Atlanta, GA, February 21, 2012

“Evaluation of Drug Recognition Expert Reports in Marijuana Cases”

Annual meeting of the Society of Forensic Toxicologists, Richmond, VA, October 20, 2010

“History and Scope of the DRE program” (*Presenter and Workshop Co-Chair*)

Annual meeting of the Society of Forensic Toxicologists, Richmond, VA, October 19, 2010

PRESENTATIONS (continued)

“Alcohol as a Drug”

Washington State Patrol Drug Recognition Expert Pre-School, Shelton, WA, March 9, 2010

“Prevalence of Gabapentin in Impaired Driving Cases in Washington State from 2003 to 2007”

Annual meeting of the Society of Forensic Toxicologists, Oklahoma City, OK, October 23, 2009

“Alcohol as a Drug”

Washington State Patrol Drug Recognition Expert Pre-School, Squamish, WA, September 13, 2009

“The Role of Toxicology in Criminal Investigations”

Washington State Criminal Justice Training Commission: Crime Scene Investigation - Basic, Burien, WA, June 9, 2009

“Alcohol as a Drug”

Washington State Patrol Drug Recognition Expert Pre-School, Shelton, WA, March 30, 2009

“Drugs in the Human Body”

Advanced Roadside Impaired Driving Enforcement, Seattle, WA, November 24, 2008

“Alcohol and Drug Use Among Motorcycle Driver Fatalities in Washington State from 2005-2007”

Annual meeting of the Society of Forensic Toxicologists, Phoenix, AZ, October 31, 2008

“Methadone and Driving”

Washington State Patrol Drug Recognition Expert In-Service, Chelan, WA, October 9, 2008

PEER REVIEWED PUBLICATIONS

Poulet FM, Penraat K, Collins N, Evans E, Thackaberry E, Manfra D, Engstrom L, Geissler R, Geraci-Erck M, Frugone C, Abutarif M, Fine JS, **Peterson BL**, Cummings BS, Johnson RC. Drug-induced Hemolytic Anemia and Thrombocytopenia Associated with Alterations of Cell Membrane Lipids and Acanthocyte Formation. *Toxicol Pathol.* 2010; 38(6):907-22.

Peterson BL, Prevalence of Gabapentin in Impaired Driving Cases in Washington State from 2003 to 2007. *J Anal Toxicol.* 2009 Oct;33(8):545-9. **Peterson B**, **Stovall K**, **Monian P**, **Franklin JL**, and **Cummings BS**. Alterations in phospholipid and fatty acid lipid profiles in primary neocortical cells during oxidant-induced cell injury. *Chem Biol Interact.* 2008 Aug;174(3):163-76.

Peterson B, Knotts T, and Cummings BS. Involvement of Ca²⁺-independent phospholipase A₂ isoforms in oxidant-induced neural cell death. *NeuroToxicology* 2007 Jan;28(1):150-60.

Saavedra G, Zhang W, **Peterson B**, and Cummings BS. Differential roles for cytosolic and microsomal Ca²⁺-independent phospholipase A₂ in cell growth and maintenance of phospholipids. *Journal of Pharmacology and Experimental Therapeutics* 2006;318(3):1211-1219.

PEER REVIEWED PUBLICATIONS (continued)

Peterson B and Cummings BS. A review of chromatographic methods for the assessment of phospholipids in biological samples. *Biomedical Chromatography* 2006;20:227-243.

Zhang L, **Peterson B**, and Cummings BS. The effect of Ca²⁺-independent phospholipase A₂ on chemotherapeutic-induced death and phospholipid profiles in renal cells. *Biochemical Pharmacology* 2005; 70:1697-1706.

Peterson B, Su B, Chakraborty R, Budowle B, and Gaensslen RE. World population data for the HLA-DQA1, PM and D1S80 loci with least and most common profile frequencies for combinations of loci estimated following NRC II guidelines. *J Forensic Sci* 2000; 45(1):118-146.