

Dr. Brianna Peterson previously worked as the Laboratory Manager of the Washington State Patrol Toxicology Laboratory Division (WSP TLD). During her employment in this capacity, the WSP TLD determined that the laboratory had environmental contamination of methamphetamine that impacted some casework. In her role as the manager, she assisted with determining remediation steps, customer notification, and responding to public disclosure requests. Dr. Peterson reported to the TLD Commander, who had ultimate authority on laboratory decisions. In 2022, a Washington municipal court ruling found that the WSP TLD demonstrated government misconduct in the form of mismanagement; no findings were made regarding Dr. Peterson directly.

## **CURRICULUM VITAE**

**Brianna Peterson, PhD, F-ABFT**  
**Toxicologist IV**

**NMS Labs**  
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Horsham, Pennsylvania 19044  
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### ***EDUCATION***

- Ph.D.** Toxicology (2007) University of Georgia; Athens, GA
- M.S.** Forensic Science (1999) University of Illinois at Chicago; Chicago, IL
- B.S.** Chemistry (1997) University of Wisconsin-La Crosse; La Crosse, WI

### ***PROFESSIONAL EXPERIENCE***

#### **NMS Labs - Horsham, PA**

National Medical Services, Inc., d/b/a NMS Labs, is a private independent full-service professional laboratory, providing certified and licensed clinical and forensic toxicological analysis of body fluids and tissues for drugs and intoxicants, analysis of controlled substances and pharmaceuticals in non-biological materials, with work supported by expert opinion reporting and testimony.

#### **2021 - Present Toxicologist IV**

- Makes final critical review of data and case history prior to release of reports.
- Prepares interpretation reports and/or provides testimony with and without analytical casework.
- Communicates with clients, laboratory staff, client and expert services, and toxicologists.
- Interacts with the toxicological community via publications, presentations, etc.
- Identifies potential laboratory-related issues, makes the appropriate notifications, and assists as needed.
- Provides input on policy and organizational improvement.
- Assists laboratory staff in improving and developing methods.
- Trains and assists in the development of Certifying Scientists and Toxicologists.

**Washington State Patrol – Seattle, WA**

**2013 - 2021**                    **Laboratory Manager**  
Oversee the day to day operations of the Toxicology laboratory.

**2007-2013**                    **Forensic Scientist III**  
Analyze biological samples for the presence or absence of drugs and alcohol.

**Georgia Bureau of Investigation – Savannah, GA**

**1999 - 2001**                    **Crime Lab Scientist**  
Analyze biological samples for the presence or absence of drugs and alcohol.

***CERTIFICATIONS***

**2012**                    Fellow, American Board of Forensic Toxicology (F-ABFT)

***PROFESSIONAL SOCIETIES***

**2008-present**                    Society of Forensic Toxicologists  
**1999-present**                    American Academy of Forensic Sciences (Toxicology Section)

***SPECIALIZED TRAINING***

- 2020** IACP Leadership in Police Organizations Facilitator Development Course
- 2019** School of Police Staff and Command (Northwestern University – Department of Public Safety)
- 2011** Basic Toxicology course: General Principles of Drug Pharmacokinetics (Midwest Forensics Resource Center, Ames, IA)
- 2011** Horizontal Gaze Nystagmus, Dr. Karl Citek, Seattle, WA
- 2010** DWI Detection and Standardized Field Sobriety Testing (Seattle Police Department, Seattle, WA)
- 2008** Advanced Roadside Impaired Driving Enforcement (Seattle Police Department, Seattle, WA)
- 2008** Robert F. Borkenstein Course on the Effects of Drugs on Human Performance and Behavior (Indiana University, Bloomington, IN)
- 2007** Robert F. Borkenstein Course on Alcohol and Highway Safety: Testing, Research and Litigation (Indiana University, Bloomington, IN)
- 2007** Ultra High Performance Liquid Chromatography (Restek Corporation, Seattle, WA)
- 1999** HP GC-MSD ChemStation & Instrument Operation (Agilent Technologies, Summerville, GA)
- 1999** Science of Solid Phase Extraction (United Chemical Technologies, Summerville, GA)

***PROFESSIONAL MEETING ATTENDANCE***

- 2022** Society of Forensic Toxicologists annual meeting (Cleveland, OH)  
Workshops attended: Drugs and Behavior: The Role of Forensic Toxicology  
There’s something about Fentanyl
- 2022** American Academy of Forensic Sciences annual meeting (Seattle, WA)
- 2019** American Society of Crime Lab Directors Annual Symposium (St. Louis, MO)

- 2019** Society of Forensic Toxicologists regional workshop (Reno, NV)
- 2018** American Society of Crime Lab Directors Annual Symposium (Atlanta, GA)
- 2018** Society of Forensic Toxicologists annual meeting (Boca Raton, FL)
- 2016** The 22nd Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving (Denver, CO)  
Workshops attended: Effective use of cannabis research to prove your DUID case in the courtroom  
Heroin and other opiates and their role in DUI
- 2016** American Society of Crime Lab Directors Annual Symposium (Bellevue, WA)
- 2016** Pittsburg Conference and Expo (Atlanta, GA)
- 2014** California Association of Toxicologists meeting (Sacramento, CA)
- 2014** American Academy of Forensic Sciences annual meeting (Seattle, WA)
- 2012** Northwest Association of Forensic Scientists annual meeting (Missoula, MT)  
Workshop attended: Solid Phase Extraction for the Forensic Scientist
- 2012** The 18<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving (Seattle, WA)  
Workshops attended: DRE Vital Signs: A Closer Look
- 2012** American Academy of Forensic Sciences annual meeting (Atlanta, GA)
- 2011** The 17<sup>th</sup> Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving (Montreal, Quebec)
- 2010** Society of Forensic Toxicologists annual meeting (Richmond, VA)  
Workshop attended: Marijuana Pharmacology – Practical Applications for the Forensic Toxicologist
- 2009** Society of Forensic Toxicologists annual meeting (Oklahoma City, OK)
- 2008** Society of Forensic Toxicologists annual meeting (Phoenix, AZ)  
Workshops attended: ISO 17025 Accreditation – What You Need to Know  
The Stimulating Realm of Sympathomimetic Amines and Tryptamines
- 2000** Southern Association of Forensic Scientists meeting (Gatlinburg, TN)

**PRESENTATIONS**

“Impact of Legalized Recreational Marijuana in Washington State”, Society of Forensic Toxicologist regional workshop, Reno NV, April 4, 2019

“Overview of Toxicology testing for Impaired Driving Cases”, American Bar Association Judicial Division National Conference of Specialized Court Judges, San Diego, CA, March 5, 2018

"The Prevalence of Marijuana in Suspected Impaired driving cases in Washington State", Mass Spectrometry: Applications to the Clinical Lab conference, Palm Springs CA, January 25, 2018

"DUID Case Studies", Annual meeting of the Society of Forensic Toxicologists, Boca Raton FL, January 7, 2018

"Synthetic Cannabinoids and their Impact on Driving", Idaho State Police DRE Conference, Meridian ID, July 26, 2017

"Impact of I-502 on the Toxicology Lab", American Association of Motor Vehicle Administrators, Seattle WA, May 24, 2017

"Synthetic Cannabinoids and their Impact on Driving", The 22nd Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving, Denver CO, August 14, 2016

"Impact of Legalized Recreational Marijuana in Washington State", International Forum on Traffic Records and Highway Safety Information Systems, Baltimore, MD, August 10, 2016

"Analytical Methods for the Detection of Marijuana in Biological Fluids in a Forensic Toxicology Laboratory" The Pittsburg Conference, Atlanta, GA, March 9, 2016

"Pharmacology of Marijuana", The National Judicial College, Seattle, WA May 20, 2015

"Marijuana and Synthetic Cannabinoids Impairment in Driving Cases", Washington State Patrol Drug Recognition Expert In-Service, Chelan, WA, October 8, 2014

"Marijuana Legislative Changes in Washington State", California Association of Toxicologists, Sacramento, CA, May 2, 2014

"Bath Salts: New Synthetic Cathinones", Annual meeting of the Northwest Association of Forensic Scientists, Missoula, MT, September 25, 2012

"Deadly by Design: Suicides, Assaults, and Homicides Involving Designer Stimulants", 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", Annual meeting of the Society of Forensic Toxicologists, Richmond, VA, October 19, 2010

"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

"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

## **PUBLICATIONS**

Mitchell-Mata C, Thomas B, Peterson B, Couper F. Two fatal intoxications involving 3-Methoxyphencyclidine. *Journal of Analytical Toxicology*, 2017 Jul;41(6):503-507.

Peterson BL, Couper FJ. Concentrations of AB-CHMINACA and AB-PINACA and driving behavior in suspected impaired driving case. *Journal of Analytical Toxicology*. 2015 Oct;39(8):642-7

Knoy JL, Peterson BL, Couper FJ. Suspected impaired driving case involving  $\alpha$ -pyrrolidinovalerophenone, methylone and ethylone. *Journal of Analytical Toxicology* 2014 Oct;38(8):615-7

Couper FJ and Peterson BL. The prevalence of marijuana in suspected impaired driving cases in Washington state *Journal of Analytical Toxicology*. 2014 Oct;38(8):569-74

Louis AJ, Peterson BL, Couper FJ. XLR-11 and UR-144 in Washington state and state of Alaska driving cases. *Journal of Analytical Toxicology*. 2014 Oct;38(8):563-8

Peterson BL, Prevalence of Gabapentin in Impaired Driving Cases in Washington State from 2003 to 2007. *Journal of Analytical Toxicology* 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  $\text{Ca}^{2+}$ -independent phospholipase  $\text{A}_2$  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  $\text{Ca}^{2+}$ -independent phospholipase  $\text{A}_2$  in cell growth and maintenance of phospholipids. *Journal of Pharmacology and Experimental Therapeutics* 2006;318(3):1211-1219.

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  $\text{Ca}^{2+}$ -independent phospholipase  $\text{A}_2$  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. *Journal of Forensic Sciences* 2000; 45(1):118-146.