

CURRICULUM VITAE

June 2024

FIONA COUPER

Address: Forensic Laboratory Services Bureau
Washington State Patrol
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Olympia, WA 98501

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EMPLOYMENT

- Jan 2021** **Bureau Director, WSP Executive Staff**
- present Forensic Laboratory Services Bureau
Washington State Patrol (WSP)
Olympia, WA U.S.A.
- Mar 2008** **State Toxicologist**
- Sept 2023 Toxicology Laboratory Division
Forensic Laboratory Services Bureau
Washington State Patrol
Seattle, WA U.S.A.
- Mar 2008** **Toxicology Laboratory Division Commander**
- June 2021 Toxicology Laboratory Division
Forensic Laboratory Services Bureau
Washington State Patrol
Seattle, WA U.S.A.
- Nov 2001** **Chief Toxicologist, and Director of Laboratory Services**
- Feb 2008 and **Risk Management Liaison** to Mayor's Office (2005-2008)
Office of the Chief Medical Examiner, District of Columbia
Washington, D.C. U.S.A.
- Sept 1998** **Senior Fellow - Post Doctoral Fellowship, and Forensic Toxicologist**
- Oct 2001 Department of Laboratory Medicine, University of Washington
Washington State Toxicology Laboratory
Seattle, WA U.S.A.
- April 1997** **Research Fellow - Post Doctoral Fellowship**
- Aug 1998 National Institute of Forensic Science
Victorian Institute of Forensic Medicine
Melbourne VIC, Australia

July 1994 **Research Assistant 3 (Part time)**
- Dec 1994 Department of Social and Preventive Medicine
Caulfield General Medical Centre
Caulfield VIC, Australia

Nov 1992 **Forensic Toxicologist VPS 2 (Part time)**
- Aug 1998 Department of Forensic Medicine
Victorian Institute of Forensic Medicine
Melbourne VIC, Australia

EDUCATION

2018 **Certificate, Police School & Command**
Center for Public Safety, Northwestern University, Illinois

1993-1997 **Doctor of Philosophy, Ph.D. (Med), Forensic Medicine-Forensic Toxicology**
Department of Forensic Medicine, Monash University, Australia
Thesis: *The Involvement of β_2 -Agonists in Asthma Deaths*

1992 **Bachelor of Science (Honours), Pharmacology-Toxicology**
Department of Pharmacology, and Department of Forensic Medicine
Monash University, Australia
Thesis: *Detection of Antidepressants and Antipsychotics in Human Scalp Hair*

1989-1991 **Bachelor of Science**
Faculty of Science, Monash University, Australia
Majors: Pharmacology-Toxicology, Biochemistry

TEACHING, RESEARCH, GRANT EXPERIENCE

2010-2023 Principle Investigator and/or Project Manager
Department of Health/Center for Disease Controls, state and federal grants
Washington Traffic Safety Commission, state and federal grants
Paul Coverdell Forensic Improvement, formula and competitive grants
National Institute of Justice, federal research grant

2002-2005 Instructor – The Effects of Drugs on Human Performance and Behavior
Robert F. Borkestein Center for Studies of Law in Action
Department of Criminal Justice, Indiana University

1999-2001 Faculty Mentor/Supervisor – Senior Research Enrichment Program
Department of Laboratory Medicine, University of Washington

1999-2001 Lecturer – Medical Technology (Chemistry), LMED 322, 418
Department of Laboratory Medicine, University of Washington

PROFESSIONAL SOCIETIES/COMMITTEES

2020- 2022 SOFT – Board of Directors

2017- 2018 AAFS – Chair, Toxicology Section

2016- 2017 AAFS – Secretary, Toxicology Section

2015- 2016 AAFS – Program Chair, Toxicology Section

2009- 2011 SOFT – Board of Directors

2006 SOFT – Annual Meeting, Scientific Program Chair

2006- 2016 AAFS – member; Toxicology Awards and Scholarships Committee

2002	SOFT – member; Nominating Committee
2002- 2005	SOFT/AAFS – Chair; Joint Drugs and Driving Committee
2001- 2019	SOFT/AAFS – member; Joint Drugs and Driving Committee
1999- 2013	SOFT – member; Drug-Facilitated Sexual Assault Committee
1999- 2003	TIAFT – member; Young Scientists Committee (U.S.A. Regional Representative)
1999- present	American Academy of Forensic Sciences (AAFS), member
1999- present	Society of Forensic Toxicologists (SOFT), member
1997-1999	TIAFT – member; Young Scientists Committee (Asia-Pacific Regional Representative)
1994- present	The International Association of Forensic Toxicologists (TIAFT)

PROFESSIONAL COMMITTEES/ACTIVITIES

2016- present	AAFS Standards Board (ASB) Toxicology Consensus Body, member
2016- 2020	Grant Reviewer, Office of Justice Programs (National Institute of Justice, Bureau of Justice Assistance)
2015- 2021	ANSI-ASQ National Accreditation Board (ANAB) ISO/IEC 17025 Accreditation technical assessor (Testing and Calibration Laboratories)
2014- 2019	Organization of Scientific Area Committee (OSAC) – Toxicology Subcommittee, Member and Executive Secretary
2010- 2014	Scientific Working Group – Toxicology (SWGTOX), member
2009- 2021	American Board of Forensic Toxicology (ABFT) Laboratory Accreditation assessor/lead assessor
2009- 2021	Washington Impaired Driving Advisor Council (WIDAC), voting member
2004	Guest reviewer for the 2004 <i>SOFT/TIAFT Special Issue of Forensic Science International</i>
2003	Guest reviewer for <i>Forensic Science International</i>
2001- 2021	Guest reviewer for <i>Journal of Forensic Sciences</i>
2001- 2021	Guest reviewer for <i>Journal of Analytical Toxicology</i>
2001- 2021	Guest reviewer for the <i>Special Issue of the Journal of Analytical Toxicology</i>
2001- 2003	Editorial Board for the AAFS Toxicology Section's <i>News & Views</i>
2001	Guest reviewer for <i>Forensic Science Communications</i>
2000	International Consultative Workgroup on Drugs and Driving Impairment – delegate & rapporteur
1999-2001	Seattle King County - Community Epidemiology Working Group (CEWG)
1993-1997	Victorian Asthma Mortality Study Group - Steering Committee
1992-1998	Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists

AWARDS, SCHOLARSHIPS, FELLOWSHIPS

2014	Target Zero Award – Traffic Data Systems, Washington Traffic Safety Commission
2006	Irving Sunshine Award, American Academy of Forensic Sciences
1998-2001	University of Washington, U.S.A. - Postdoctoral Fellowship
1997-1998	National Institute of Forensic Science, Australia - Research Fellowship
1995	Conference Grant-In-Aid Scholarship, Monash University, Australia
1993-1996	Monash Graduate Scholarship, Monash University, Australia

PUBLICATIONS (Peer Reviewed)

1. Extraction of Psychotropic Drugs from Human Scalp Hair
Couper FJ, McIntyre IM, Drummer OH. *Journal of Forensic Sciences* 1995; 40: 83-86
2. Detection of Antidepressant and Antipsychotic Drugs in Postmortem Human Scalp Hair
Couper FJ, McIntyre IM, Drummer OH. *Journal of Forensic Sciences* 1995; 40: 87-90
3. Gas Chromatographic-Mass Spectrometric Determination of β_2 -Agonists in Postmortem Blood: Application in Forensic Medicine
Couper FJ, Drummer OH. *Journal of Chromatography* 1996; 685: 265-272

4. Reviewing Mortality
Abramson M, **Couper F**, Campbell D, and The Victorian Asthma Mortality Study Group. *Clinical Asthma Reviews* 1998; 2: 21-25
5. Postmortem Stability and Interpretation of β_2 -Agonist Concentrations
Couper FJ, Drummer OH. *Journal of Forensic Sciences* 1999; 44 (3): 523-526
6. Determination of γ -Hydroxybutyrate (GHB) in Biological Specimens by Gas Chromatography-Mass Spectrometry
Couper FJ, Logan BK. *Journal of Analytical Toxicology* 2000; 24: 1-7.
7. Are Asthma Medications and Management Related to Deaths from Asthma?
Abramson MJ, Bailey M, **Couper F**, Driver JS, Drummer OH, Forbes AB, McNeil JJ, Walters E.H. *American Journal of Respiratory and Critical Care Medicine* 2001; 163: 12-18
8. Zolpidem and Driving Impairment
Logan BK, **Couper FJ**. *Journal of Forensic Sciences* 2001; 46 (1): 105-110.
9. GHB and Driving Impairment
Couper FJ, Logan BK. *Journal of Forensic Sciences* 2001; 46(4): 919-923.
10. 3,4-Methylenedioxymethamphetamine (MDMA, Ecstasy) and Driving Impairment
Logan BK, **Couper FJ**. *Journal of Forensic Sciences* 2001; 46(6): 1426-1433.
11. Prevalence of Drug Use in Commercial Tractor-Trailer Drivers
Couper FJ, Pemberton M, Jarvis A, Hughes M, Logan BK. *Journal of Forensic Sciences* 2002; 47(3): 562-567.
12. γ -Hydroxybutyrate (GHB): Effects on Human Performance and Behavior
Couper FJ, Marinetti L. *Forensic Science Review* 2002; 14(1/2): 101-121.
13. 3,4-Methylenedioxymethamphetamine – Effects on Human Performance and Behavior
Logan BK, **Couper FJ**. *Forensic Science Review* 2003; 15(1): 11-28.
14. Drugs and Human Performance Fact Sheets
Couper F, Logan B. Washington, DC: U.S. Department of Transportation, *NHTSA Technical Report No. DOT HS 809 725*. April 2004.
15. Suspected GHB Overdoses in the Emergency Department
Couper FJ, Thatcher JE, Logan BK. *J Analytical Toxicology* 2004; 28(6): 481-484.
16. Addicted to Driving Under the Influence – a GHB/GBL Case Report
Couper FJ, Logan BK. *J Analytical Toxicology* 2004; 28(6): 512-515.
17. Forensic Applications of New Analytical Technologies
Couper F, Gluodenis T, Jensen M, Klee M, Neufeld L, Quimby B, Zarwell L, Zweigenbaum. *Forensic Magazine* April/May 2005.
18. Substance misuse: Cocaine and other stimulants
Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2005; 141-144.
19. Substance misuse: Sedatives
Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2005; 163-164.
20. Substance misuse: Miscellaneous (volatiles, hallucinogens and ‘club’ drugs)
Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2005; 165-170.
21. Fatal Methadone Intoxication in an Infant
Couper FJ, Chopra K, Pierre-Louis M. *Forensic Science International* 2005; 153(1): 71-3.
22. The Use of Miscellaneous Prescription Medications to Facilitate Sexual Assault
Couper FJ, Saady JJ. *Forensic Science Review* 2010; 22(1): 83-112.
23. Calculation and verification of blood ethanol measurement uncertainty for headspace gas chromatography.
Sklerov JH, **Couper FJ**. *J Analytical Toxicology* 2011; 35(7):402-410.

24. CNS Depressant II: Carisoprodol, Diphenhydramine, GHB, Zaleplon, Zolpidem, Zopiclone and Eszopiclone.
Couper FJ. In: Kerrigan S & Spirk M, eds. Interpretive toxicology and drug impaired driving: a case oriented approach. *Humana Press, to be published.*
25. XLR-11 and UR-144 in Washington State and State of Alaska Driving Cases
Louis A, Peterson BL, **Couper FJ.** *J Analytical Toxicology* 2014; 38(8):563-568.
26. The Prevalence of Marijuana in Suspected Impaired Driving Cases in Washington State.
Couper FJ, Peterson BL. *J Analytical Toxicology* 2014; 38(8):569-574.
27. Suspected Impaired Driving Case Involving alpha-Pyrrolidinovalerophenone (α -PVP), Methylone, and Ethylone.
Knoy J, Peterson BL, **Couper FJ.** *J Analytical Toxicology* 2014; 38(8):615-617.
28. Substance misuse: Sedatives
Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2015.
29. Substance misuse: Miscellaneous (volatiles, hallucinogens and 'club' drugs)
Couper FJ. In: *Encyclopedia of Forensic and Legal Medicine*; Elsevier Limited; UK 2015.
30. Concentrations of AB-PINACA and AB-CHMINACA and driving behavior in suspected impaired driving cases.
Peterson BL, **Couper FJ.** *J Analytical Toxicology* 2015; 39(8): 642-647.
31. A case review of the first analytically confirmed 25I-NBOMe-related death in Washington State.
Lowe LM, Peterson BL, **Couper FJ.** *J Analytical Toxicology* 2015; 39(8): 668-671.
32. Tracking the opioid drug overdose epidemic in King County, Washington using an improved methodology for certifying heroin related deaths.
Harruff RC, **Couper FJ,** Banta-Green CJ. *Academic Forensic Pathology* 2015; 5(3):499-506.
33. Two fatal intoxications involving 3-methoxyphencyclidine.
Mitchel-Mata C, Thomas B, Peterson B, **Couper F.** *J Analytical Toxicology* 2017; 41(6):503-507.
34. Drugs and Human Performance Fact Sheets.
Couper F, Huestis M, Fulford J, Perkinson N, Miller S, Raymond P, Katz A, Symoun J, Smither D. National Highway Traffic Safety Administration, Report No. (*pending publication, 2024/2025*).