

CURRICULUM VITAE

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FIONA JANE COUPER

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EMPLOYMENT

Mar 2008 **State Toxicologist, Toxicology Laboratory Division Commander**
- present Forensic Laboratory Services Bureau
Washington State Patrol
Mr. Larry Hebert (Director, Forensic Laboratory Services Bureau)
Seattle, WA U.S.A.

Nov 2001 **Chief Toxicologist, Director of Laboratory Services**
- Feb 2008 Toxicology Laboratory
District of Columbia, Office of the Chief Medical Examiner
Dr. Marie Pierre-Louis (Chief Medical Examiner)
Washington, D.C. U.S.A.

Sept 1998 **Senior Fellow - Post Doctoral Fellowship**
- Oct 2001 **and Forensic Toxicologist**
Department of Laboratory Medicine, University of Washington
Washington State Toxicology Laboratory
Dr. Barry K. Logan (Director, Forensic Laboratory Services Bureau)
Seattle, WA U.S.A.

April 1997 **Research Fellow - Post Doctoral Fellowship**
- Aug 1998 National Institute of Forensic Science
Victorian Institute of Forensic Medicine
A/Professor Olaf H. Drummer (Head, Scientific Services)
Melbourne VIC, Australia

July 1994 **Research Assistant 3 (Part time)**
- Dec 1994 Department of Social and Preventive Medicine
Caulfield General Medical Centre
Dr. Malcolm R. Sim (Head, Senior Lecturer)
Caulfield VIC, Australia

Nov 1992 **Forensic Toxicologist VPS 2 (Part time)**
- Aug 1998 Department of Forensic Medicine
Victorian Institute of Forensic Medicine
Dr. Iain M. McIntyre (Toxicology Laboratory Manager)
Melbourne VIC, Australia

EDUCATION

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

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*

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*

TEACHING EXPERIENCE, RESEARCH SUPERVISOR

1992 Pharmacology/Toxicology Laboratory Assistant
Department of Pharmacology, Monash University

1997 Research Co-supervisor – Karen van Loon, B.Sc. (Hons)
Department of Forensic Medicine, Monash University, Australia
Department of Pharmacy, University of Groningen, Netherlands

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

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

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

PROFESSIONAL SOCIETIES, COMMITTEES

1992-1998 Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists
1993-1997 Victorian Asthma Mortality Study Group - Steering Committee
1994- present The International Association of Forensic Toxicologists (TIAFT)
1997-1999 TIAFT – member; Young Scientists Committee (Asia-Pacific Regional Representative)
1998- present Society of Forensic Toxicologists (SOFT)
1998- present American Academy of Forensic Sciences (AAFS)
1999- 2001 Seattle King County - Community Epidemiology Working Group (NIDA-CEWG)
1999- 2003 TIAFT – member; Young Scientists Committee (U.S.A. Regional Representative)
1999- 2013 SOFT – member; Drug-Facilitated Sexual Assault Committee
2000 International Consultative Workgroup on Drugs and Driving Impairment – delegate & rapporteur

2001	Guest reviewer for <i>Forensic Science Communications</i>
2001	Guest reviewer for the 2001 <i>Special Issue of the Journal of Analytical Toxicology</i>
2001	Guest reviewer for <i>Journal of Analytical Toxicology</i>
2001- 2003	Editorial Board for the AAFS Toxicology Section's <i>News & Views</i>
2001- present	SOFT/AAFS – member; Joint Drugs and Driving Committee
2002- 2005	SOFT/AAFS – Chair; Joint Drugs and Driving Committee
2002	SOFT – member; Nominating Committee
2002	Guest reviewer for the 2002 <i>Special Issue of the Journal of Analytical Toxicology</i>
2003	Guest reviewer for <i>Forensic Science International</i>
2004	Guest reviewer for the 2004 <i>SOFT/TIAFT Special Issue of Forensic Science International</i>
2004	Guest reviewer for the 2004 <i>Special Issue of the Journal of Analytical Toxicology</i>
2005	Guest reviewer for the 2005 <i>Special Issue of the Journal of Analytical Toxicology</i>
2006	Guest reviewer for the 2006 <i>Special Issue of the Journal of Analytical Toxicology</i>
2006 - present	AAFS – member; Toxicology Awards and Scholarships Committee
2006	SOFT Annual Meeting, Scientific Program Chair
2009- 2011	SOFT – Board of Directors
2009- present	Washington Impaired Driving Advisor Council (WIDAC), member
2010- present	Scientific Working Group – Toxicology (SWGTOX), member

SCHOLARSHIPS, AWARDS, FELLOWSHIPS

1993-1996	Monash Graduate Scholarship, Monash University, Australia
1995	Conference Grant-In-Aid Scholarship, Monash University, Australia
1997-1998	National Institute of Forensic Science, Australia - Research Fellowship
1998-2001	University of Washington, U.S.A. - Postdoctoral Fellowship
2004	Paul Coverdell Forensic Science Improvement Grant
2006	Irving Sunshine Award, American Academy of Forensic Sciences

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-Methylenedioxyamphetamine (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-Methylenedioxyamphetamine – 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. Sklerov JH, **Couper FJ**. Calculation and verification of blood ethanol measurement uncertainty for headspace gas chromatography. *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*.

OTHER PUBLICATIONS / PROCEEDINGS

1. Detection of Psychotropic Drugs in Human Scalp Hair
Couper F, McIntyre I, Drummer O. In: Reid JJ, Ching MS (editors). *Clinical and Experimental Pharmacology and Physiology* (Suppl. 21). Blackwell Scientific, Melbourne, Australia; 1993; 15
2. Method for Quantifying Antidepressant and Antipsychotic Drug Levels in Postmortem Human Scalp Hair
Couper F, McIntyre I, Drummer O. In: Muller K (editor). *Contribution to Forensic Toxicology*. MolinApress, Leipzig, Germany; 1994; 160-162

3. Detection of Antidepressant and Antipsychotic Drugs in Human Scalp Hair
Couper F, McIntyre I, Drummer O. In: Jacob B, Bonte W (editors). *Advances in Forensic Science*. Verlag Dr. Koster, Berlin, Germany; 1995; 5: 40-42
4. Toxicological Analysis of Asthmatic Deaths
Couper FJ, Drummer OH. In: Kovatsis AV, Tsoukali-Papadopouou H (editors). *Aspects on Forensic Toxicology*. Technika Studio, Thessaloniki, Greece; 1995; 20-23
5. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls
Abramson M, Driver J, Willis J, Evans N, **Couper F**, Drummer O, McNeil J, Walters E. *Proceedings of the National Asthma Conference and Workshop*. Melbourne, Australia, 1995
6. Detection of Antidepressant Drugs in Hair
Drummer O, **Couper F**. In: De Zeeuw RA, Hosani IA, Munthiri SA, Maqbool A (editors). *Hair Analysis in Forensic Toxicology*, Abu Dhabi. 1995; 217-224
7. Extraction of Psychotropic Drugs in Hair
Drummer O, **Couper F**. In: De Zeeuw RA, Hosani IA, Munthiri SA, Maqbool A (editors). *Hair Analysis in Forensic Toxicology*, Abu Dhabi. 1995; 326-333
8. Toxicological Analysis of Asthmatic Deaths
Couper F, Drummer O. *Proceedings of The Australian and New Zealand Forensic Science Society 12th International Symposium on the Forensic Sciences*. Sydney, Australia, 1996
9. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls
Abramson M, Driver J, Willis J, Evans N, **Couper F**, Drummer O, McNeil J, Walters E. *Proceedings of The Thoracic Society of Australia and New Zealand*. Perth, Australia, 1996
10. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls
Coleridge J, Maclean A, Thomson G, Driver J, Willis J, Evans N, **Couper F**, Drummer O, Walters E, Abramson M. *Proceedings of The 6th International Conference on Emergency Medicine*. Sydney, Australia, 1996
11. Asthma Medications, Blood Salbutamol Levels and Mortality from Asthma
Abramson M, Driver J, Bailey M, Willis J, Evans N, **Couper F**, Drummer OH, Walters EH, Coleridge J, Maclean A, Thomson G. *Proceedings of The Thoracic Society of Australia and New Zealand*. Wellington, New Zealand, 1997
12. Postmortem Interpretation of β_2 -Agonist Concentrations
Couper FJ, Drummer OH. *Proceedings of The International Association of Forensic Toxicologists 35th Meeting*. Padova, Italy; 1997; 19-25
13. Blood Salbutamol Levels are Higher in Asthma Deaths than Controls after Adjusting for Administration and Severity
Abramson M, Bailey M, **Couper F**, Drummer O, Forbes A, McNeil J, Walters EH. *World Asthma Meeting*. Barcelona (Spain). *Eur Respir J* 1998; 12 (Suppl 29): 38s
14. The Application of Hair Analysis to Detect Anabolic Steroid Use in Humans
Couper FJ, Drummer OH. *Proceedings of The 14th International Symposium on the Forensic Sciences*. Adelaide, Australia, 1998
15. The Involvement of β_2 -Agonists in Asthma Deaths
Couper FJ, Drummer OH, Abramson MJ. *Proceedings of the American Academy of Forensic Sciences*. Orlando FL, U.S.A., 1999
16. Drug-Facilitated Sexual Assault
Couper F. *Law Enforcement Digest*. Washington, U.S.A., June 1999
17. The Determination of GHB in Clinical and Postmortem Specimens
Couper F, Logan B. *Proceedings of the Society of Forensic Toxicologists meeting*, Puerto Rico, U.S.A., 1999.
18. Pharmacological Facilitation of Robbery: Analysis of Two Cases from the Emergency Department
Blaho KE, Park LJ, Logan BK, **Couper F**, Winbery SL. *Proceedings of the Society of Forensic Toxicologists meeting*, Puerto Rico, USA, 1999.
19. Zolpidem and Driving Impairment
Logan BK, **Couper FJ**. *Proceedings of the American Academy of Forensic Sciences meeting*, Reno NV, U.S.A., 2000.
20. Determination of Drug Use in Tractor-Trailer Drivers: "Operation Trucker Check"
Couper FJ, Anonical A, Pemberton M, Logan BK. *Proceedings of the American Academy of Forensic Sciences meeting*, Reno NV, U.S.A., 2000.
21. Driving Under the Influence of GHB
Couper FJ, Logan BK. *Proceedings of the Society of Forensic Toxicologists meeting*, Milwaukee WI, U.S.A., 2000
22. Suspected GHB Overdoses in the Emergency Room
Couper FJ, Thatcher JE, Logan BK. *Proceedings of the American Academy of Forensic Sciences meeting*, Seattle WA, U.S.A., 2001.
23. A Combined Drug Intoxication Involving Metaxalone (Skelaxin®)
Zarwell LW, Colvin SM, **Couper FJ**. *Proceedings of the SOFT-TIAFT-FBI Forensic Toxicology meeting*, Washington DC, U.S.A., 2005