

AMANDA BOLDUC, MFS

CURRICULUM VITAE

Senior Forensic Chemist, Toxicology Section Supervisor
Vermont Forensic Laboratory
Department of Public Safety
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Waterbury, VT 05671-2101
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EDUCATION

Degree	Bachelor of Arts
Major	Biology
Minor	Chemistry
College	University of Vermont – Burlington, VT
Year	2002

Degree	Master of Forensic Science
Major	Forensic Science
College	National University – San Diego, CA
Year	2004

PROFESSIONAL WORK EXPERIENCE

Forensic Supervisor

4/2022 to present

Vermont Forensic Laboratory, Waterbury, VT

- Supervises the Toxicology Section staff.
- Oversees hiring, training, schedules, timesheets and purchase requests for the Toxicology Section.
- Prepares and oversees grant requests and spending for Toxicology Section financial needs.
- Oversees validation of new methods and instrumentation.
- Performs qualitative and quantitative testing for alcohol and drugs in blood.
- Performs technical and administrative review of blood and breath reports and results.
- Performs calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviews documentation and reports generated by DMT evidential breath testing instruments.
- Instructs police officers in the proper use as operators and supervisors using DMT evidential breath testing instruments.
- Reviews current literature and studies on drug and alcohol physiology, pharmacology and testing.
- Provides expert witness testimony regarding drug and alcohol physiology, pharmacology and testing, including policies and procedures.

Senior Forensic Chemist, Toxicology Section Supervisor

6/2017 to 4/2022

Vermont Forensic Laboratory, Waterbury, VT

- Supervises the Toxicology Section staff to include Forensic Chemists and Electronics Technician.
- Oversees hiring, schedules, timesheets and purchase requests for the Toxicology Section.
- Prepares and oversees grant requests and spending for Toxicology Section financial needs.
- Oversees validation of new methods and instrumentation.
- Performs qualitative and quantitative testing for alcohol and drugs in blood.

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- Performs technical and administrative review of blood testing results.
- Performs calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviews documentation and reports generated by DMT evidential breath testing instruments.
- Performs administrative review of blood and breath reports and results.
- Instructs police officers in the proper use as operators and supervisors using DMT evidential breath testing instruments.
- Reviews current literature and studies on drug and alcohol physiology, pharmacology and testing.
- Provides expert witness testimony regarding drug and alcohol physiology, pharmacology and testing, including policies and procedures.

Senior Forensic Chemist, Alcohol Section Supervisor

2/2015 to 6/2017

Vermont Forensic Laboratory, Waterbury, VT

- Supervises the Alcohol Section staff to include Forensic Chemists and Electronics Technician.
- Oversees hiring, schedules, timesheets and purchase requests for the Alcohol Section.
- Prepares and oversees grant requests and spending for Alcohol Section financial needs.
- Performs qualitative and quantitative confirmation testing for alcohol in blood.
- Oversees validation of new methods and instrumentation.
- Performs technical and administrative review of blood alcohol testing results.
- Performs calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviews documentation and reports generated by DMT evidential breath testing instruments.
- Performs administrative review of blood and breath reports and results.
- Instructs police officers in the proper use as operators and supervisors using DMT evidential breath testing instruments.
- Reviews current literature and studies on alcohol physiology, pharmacology and testing.
- Provides expert witness testimony regarding alcohol physiology, pharmacology and testing, including policies and procedures.

Forensic Chemist III, Alcohol Program

11/2012 to 2/2015

Vermont Forensic Laboratory, Waterbury, VT

- Performs qualitative and quantitative confirmation testing for alcohol in blood.
- Performs technical review of blood alcohol testing results.
- Performs calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviews documentation and reports generated by DataMaster DMT breath testing instruments.
- Instructs police officers in the proper use as operators and supervisors using DataMaster DMT breath testing instruments.
- Reviews current literature and studies on alcohol physiology, pharmacology and testing.
- Provides expert witness testimony regarding alcohol physiology, pharmacology and testing, including policies and procedures.

Forensic Chemist II, Alcohol Program

3/2012 to 11/2012

Vermont Forensic Laboratory, Waterbury, VT

- Performed qualitative and quantitative confirmation testing for alcohol in blood.
- Performed calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviewed documentation and reports generated by DataMaster DMT breath testing instruments.

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- Instructed police officers in the proper use as operators and supervisors using DataMaster DMT breath testing instruments.
- Reviewed current literature and studies on alcohol physiology, pharmacology and testing.
- Provided expert witness testimony regarding alcohol physiology, pharmacology and testing, including policies and procedures.

Analytical Chemist III, Organic Chemistry Program

12/2010 to 2/2012

Vermont Department of Health Laboratory, Burlington, VT

- Lead analyst for the alcohol group.
- Performed validation of the blood testing instrument.
- Performed confirmation testing for alcohol in blood.
- Conducted performance review of breath alcohol testing instruments. Lead analyst responsible for the testing and implementation of the DataMaster DMT evidentiary breath alcohol analysis instrument. Calibrated, certified, installed, and performed maintenance and repair of evidentiary breath alcohol testing instruments.
- Instructed police officers in the proper use of evidentiary breath alcohol testing instruments.
- Reviewed current literature and studies on alcohol pharmacology, physiology and testing.
- Provided expert witness testimony regarding alcohol physiology, pharmacology and testing.

Analytical Chemist II, Alcohol and Toxicology Program

5/2006 to 12/2010

Vermont Department of Health Laboratory, Burlington, VT

- Performed screening and confirmation analyses for drugs in urine.
- Performed confirmation testing for alcohol in blood.
- Performed analysis of capillary and venous blood samples for the presence of lead.
- Conducted performance review of breath alcohol testing instruments. Lead analyst responsible for the testing and implementation of the DataMaster DMT evidentiary breath alcohol analysis instrument. Calibrated, certified, installed, and performed maintenance and repair of evidentiary breath alcohol testing instruments.
- Instructed police officers in the proper use of evidentiary breath alcohol testing instruments.
- Reviewed current literature and studies on alcohol pharmacology, physiology and testing.
- Provided expert witness testimony regarding alcohol physiology, pharmacology and testing.

PH Laboratory Technician, Chemical Terrorism Preparedness Program

5/2005 to 5/2006

Vermont Department of Health Laboratory, Burlington, VT

- Technician for the Chemical Terrorism and Toxicology Programs.
- Performed screening for drugs in urine.
- Tested water for microcystin.
- Conducted a performance review of breath alcohol testing instruments.
- Accessioned and distributed samples for analyses.

PROFESSIONAL TRAINING

Vermont DataMaster Operator Course, Vermont Police Academy, Pittsford, VT, October 2005

Vermont DataMaster Supervisor Course, Vermont Police Academy, Pittsford, VT, May 2006

Borkenstein Course on Alcohol and Highway Safety: Testing, Research, and Litigation, Indiana University Center for Studies of Law in Action, Bloomington, IN, December 2006

DataMaster DMT Training, National Patent Analytical Systems, Inc., Burlington, VT January 2008

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Forensic Mass Spectroscopy, Cedar Crest College Forensic Science Training Institute, Allentown, PA, June 2009

Headspace Troubleshooting Made Easy, Teledyne Tekmar, online, December 2011

DataMaster DMT Technical Training, National Patent Analytical System, Inc., Waterbury, VT, July 2012

Introduction to Uncertainty in Forensic Chemistry and Toxicology 1, 2 & 3, online, November 27, 2012

“To Hell and Back: The Ethics of Stewardship and the Stewardship of Ethics”, online, November 28, 2012

Gaining Speed with “Fast GC”: A Practitioner’s Perspective, online, December 20, 2012

LC/QQQ Screening for 300 Designer Drugs and Metabolites, online, February 27, 2013

LC/MS/MS Validation of a Cannabinoid and Benzodiazepine Method with Comparison to the Proposed SWGTOX Method Validation Standards, online, June 20, 2013

DataMaster DMT Advanced Training Course, National Patent Analytical System, Inc., Waterbury, VT, July 24, 2013

International Association for Chemical Testing Annual Conference and Workshops, Newport Beach, CA, April 7-11, 2014

New Developments in Clinical Research and Forensic Technology using LC/MS/MS, AB Sciex, April 22, 2014

Introduction to Forensic Toxicology by Mass Spectroscopy, Agilent Technologies, Waterbury, VT, April 29-30, 2014

Supervisors’ Development Program, Vermont Department of Human Resources, Berlin, VT, June 12, 2014

Advanced Roadside Impaired Driving Enforcement, Vermont Criminal Justice Training Council, June 17-18, 2014

International Association for Chemical Testing Annual Conference and Workshops, Newport, RI, April 19-22, 2015

Ethics and Data Integrity for Environmental Laboratories, APHL Online, August 26, 2015

Estimating Uncertainty Workshop, Provided by West Virginia University, September 24-25, 2015

International Association for Chemical Testing Annual Conference, Orlando, FL, April 3-6, 2016

DRE Program with Demo Evaluation and Mock Court, IACT Workshop, April 7, 2016

Expert Witness Testimony: Dueling Scientific Articles, IACT Workshop, April 8, 2016

Supervising in State Government, Level 1, Montpelier, VT, May 2016

ASCLD/LAB Preparation Course for Calibration Laboratories, Aurora, CO, September 19-21, 2106

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Vermont Highway Safety Alliance: Impaired Driving Summit, Burlington, VT, December 7, 2016

Forensic Pharmacology, the Center for Forensic Science Research & Education, Online, December 12-14, 2016

Forensic Toxicology Instrumentation and Analysis, the Center for Forensic Science Research & Education, Online, January - May, 2017

Preliminary Training of the IACP Drug Evaluation and Classification Program, So. Burlington, VT, August 21-23, 2017

DRE School Training of the IACP Drug Evaluation and Classification Program, So. Burlington, VT, August 23 – September 1, 2017

Society of Forensic Toxicologists annual meeting and conference, Boca Raton, FL, January 9-11, 2018 Meeting cohosted by TIAFT (The International Association of Forensic Toxicologists)

Cannabis in DUID Investigations, SOFT Workshop, Boca Raton, FL, January 7, 2018

Where the Wild Things Are- Method Development, SOFT Workshop, Boca Raton, FL, January 8, 2018

Avoiding Aggravation with Method Validation SOFT Workshop, Boca Raton, FL, January 8, 2018

ANSI/ASQ National Accreditation Board (ANAB) Forensic ISO/IEC 17025:2017 Internal Auditor Training, Cary, NC, May 8-10, 2018

Borkenstein Course: Effects of Drugs on Human Performance and Behavior, CFSRE 9/23/19 – 9/27/19

SOFTember Workshop: Cannabis Impaired Driving: Where Are We in 2020, SOFT, 9/22/2020

SOFTember Scientific Sessions, online conference, 9/16-9/23/2020

Recommended specimens, scope, cutoffs and strategies for DUI/D testing & the impact of stop testing limits, IACT workshop, April 16, 2021

Development and validation: plan, execute, succeed! IACT workshop, April 15, 2021

Alcohol concentration and extrapolation, IACT workshop, April 14, 2021

Better than managing: generating positive results through leadership, IACT workshop, April 13, 2021

Quality assurance and uncertainty of measurement: fundamentals and implementation, IACT workshop, April 12, 2021

AAFS Standard Practices for Measurement Traceability in Forensic Toxicology webinar, June 17, 2021

PROFESSIONAL MEMBERSHIPS

International Association for Chemical Testing	member since 2007
Conference Committee member since 2015	

North Eastern Association of Forensic Scientists	member since 2007
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Society of Forensic Toxicologists

member since 2017