David J. Patlak, M.S., D-ABFT-FT

Vermont Forensic Laboratory

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Education

Boston University School of Medicine; Boston, MA

September 2011 - September 2013

M.S. in Biomedical Forensic Sciences

- Coursework in: Forensic Biology, Chemistry, Toxicology, Pathology, DNA analysis, Criminalistics, Criminal Law, and other topics in forensic science
- Completed research thesis: "Evaluation of Wet-Vacuum Technique versus Traditional Methods for Collection of Biological Crime Scene Samples"

University of Vermont; Burlington, VT

September 2005 - January 2010

B.A. in Biology; Chemistry/Business Administration Minors

 Relevant coursework: molecular and cell biology, organic chemistry, toxicology, genetics, physiology, statistics

Experience

Forensic Chemist IV

May 2015 - Present

Vermont Forensic Laboratory; Waterbury, VT

- Perform presumptive and confirmatory toxicological analysis for drugs and alcohol in whole blood DUI samples
- Calibrate, certify, and maintain evidentiary breath alcohol testing instrumentation
- Review and interpret case information for retrograde extrapolation calculations
- Validate new methodology and instrumentation
- Instruct law enforcement personnel on protocols for evidentiary drug and alcohol testing

Scientist

August 2013 - May 2015

Burlington Labs, Inc.; Burlington, VT

- Performed clinical testing for drugs of abuse using various high-throughput screening and confirmation methods
- Participated in research and development functions to validate and optimize testing methods
- Communicated with clinicians and counselors to interpret and analyze results

Intern

February 2013 - July 2013

Boston Police Department Crime Lab; Boston, MA

 Performed analysis and comparison of acid phosphatase and P30 positive/weak positive serology samples

Teaching Assistant

June 2012 - July 2013

BU Division of Graduate Medical Sciences; Boston, MA

 Assisted in preparation and instruction of Forensic Biology Lab and Crime Scene Investigation courses

Scientific Research Technician

January 2011 - August 2011

IDEXX Laboratories, Inc.; Westbrook, ME

- Maintained various types of cell lines for use in veterinary immunoassay test kits

Bartender

December 2009 - August 2010

Das Bierhaus; Burlington, VT

- Served steins of Germany's finest beers

Relevant Training

Society of Forensic Toxicologists 2019 annual meeting; October 13 – 18, 2019 San Antonio, TX

Society of Forensic Toxicologists 2018 annual meeting; October 7 - 12, 2018 Minneapolis, MN

Xevo TQ-XS/Xevo TQ-S micro Training Course; May 8-11, 2018 Waters Corporation; Beverly, MA

The Robert Borkenstein Course: Effects of Drugs on Human Performance and Behavior; October 9-13, 2017

The Center for Forensic Science Research & Education; Austin, TX

Medico – Legal. Biology and Basic Science, and Clinical Practice 1 – Physiology and Pharmacology: Cannabis Science and Medicine; June 15, 2017 University of Vermont College of Medicine Continuing Medical Education

International Association of Chemical Testing 2017 Conference; April 23-28, 2017 Colorado Springs, CO

The Drug Recognition Expert Program Demonstration Evaluation and Mock Court; April 7, 2016 Workshop instructed by Tracey Durbin, Missouri DRE/SFST State Coordinator, and Dr. Curt Harper, Toxicology Discipline Chief, AL Department of Forensic Sciences IACT 2016 Conference, Orlando, FL

Expert Witness Testimony: Defense Against the Dark Arts; April 8, 2016 Workshop instructed by Jeremy Johnston, Idaho State Police IACT 2016 Conference, Orlando, FL

International Association of Chemical Testing 2016 Conference; April 3-6, 2016 Orlando, FL

Cognitive Factors in Forensic Decision Making; February 22-23, 2016 Workshop instructed by Dr. Itiel Dror, Cognitive Consultants International Ltd. Boston Police Department/Northeastern University; Boston, MA

Advanced Roadside Impaired Driving Enforcement (ARIDE); December 15-16, 2015 Vermont Police Academy; Pittsford, VT

The Robert F. Borkenstein Course on Alcohol and Highway Safety: Testing, Research, and Litigation; December 6-11, 2015 Indiana University; Bloomington, IN

DataMaster DMT Supervisor Training; October 8, 2015 Vermont Forensic Laboratory; Waterbury, VT

DUI Enforcement Certification Course, Datamaster DMT Operator Training; June 1-3, 2015 Vermont Police Academy; Pittsford, VT

Intoximeters Intox DMT Technical Training; September 21-23, 2015 Dan Dunsworth, Technical Services Supervisor of Intoximeters, Inc.

Measurement Uncertainty: The Basics; September 24-25, 2015 Lecture and workshop instructed by Dr. Suzanne Bell of West Virginia University

Ethics and Data Integrity for Environmental Labs; August 26, 2015 Association of Public Health Labs, Online

Publications & Presentations

Validation of Aqueous Ethanol Solutions as Certified Reference Materials used with the Intox DMT. Presented at IACT 2017 Conference, Colorado Springs, CO; April 27, 2017.

Headspace GC/FID Analysis of Ethanol in Whole Blood: Instrument Validation and Quality Control. Presented at IACT 2016 Conference, Orlando, FL; April 6, 2016.

Your Brain on Drugs: The Pharmacology, Physiology, and Chemistry of Drugs. Guest Lecture for PSY-4010-J01 Biological Psychology. Johnson State College, Johnson, VT; October 24, 2015.

Research thesis publication: Garrett, AD; **Patlak, DJ**; Gunn, LE; Brodeur, AN; Grgicak, CM. *Exploring the Potential of a Wet-Vacuum Collection System for DNA Recovery.* Journal of Forensic Identification. 2014; Volume 64, Issue 5: 429-448.

Patlak DJ. Evaluation of Wet Vacuum Collection versus Traditional Methods for Collection of Biological Crime Scene Samples. Presented at NEAFS Annual Meeting Poster Session, Saratoga Springs NY; November 14, 2012.

Professional Membership

American Board of Forensic Toxicology; Diplomate in Forensic Toxicology – October 2019

International Association of Chemical Testing; Member since April 2016

Northeastern Association of Forensic Scientists; Member since October 2016

Awards & Honors

Provost's Scholarship from Boston University School of Medicine, Division of Graduate Medical Sciences – 2011-2013

Graduated Cum Laude; University of Vermont – January 2010

Inducted into Phi Beta Kappa honor society; Alpha of Vermont – 2008

Dean's List Member; University of Vermont – September 2005-2009