

Isaac C. Avram, M.S.

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EDUCATION

University of Florida

M.S. Forensic Toxicology

Fall 2015 - August 2017

University of Colorado Boulder, Boulder, CO

B.A. Molecular, Cellular and Developmental Biology

May 2007

- Minor: Biochemistry

EXPERIENCE

ChemaTox Laboratory, Inc.

Forensic Toxicology Analyst / Toxicologist

March 2015 - February 2018

- Responsible for alcohol analysis in blood samples and other bodily fluids.
- Perform validation and calibration of Gas Chromatograph Flame Ionization Detector (GC/FID).
- Perform analysis on blood and other body fluids for the presence of drugs and other toxic substances using Gas Chromatography/Mass Spectrometry (GC/MS).
- Perform analysis on blood and other body fluids for the presence of drugs and other toxic substances using Ultra Performance Liquid Chromatography/Tandem Mass Spectrometry (UPLC/MS/MS).
- Provide expert testimony on alcohol analysis, drug determination, and the effects of drugs on human performance.
- Train personnel
- Various laboratory tasks as assigned.

ChemaTox Laboratory, Inc.

Shift Supervisor Molecular Genetics

March 2012 - March 2015

- Helped implement and create work flow processes for DNA extraction, DNA quantification, SNP Genotyping, and CYP2d6 Copy Number analysis assays.
- Assisted in design and performance of validation protocols for DNA extraction, DNA quantification, SNP Genotyping, and CYP2d6 Copy Number analysis assays.
- Wrote, edited, and organized the standard operating procedures for the division.
- Conducted and organized the primary research for the CYP Drug Metabolism Panel, and Statin Panel.
- Wrote, edited, and assisted the development of reporting comments for the CYP Drug Metabolism Panel, and Statin Panel.
- Supervised the division team to ensure that sample work flow was adhered to in a timely fashion for all testing in the division.
- Worked directly with clients to ensure sample collection was conducted properly, and an-

swered any questions about the testing performed or results reported.

Walgreen's Pharmacy*June 2007 - June 2012*

Senior Pharmacy Technician

- Maintained knowledge of current drugs and usage for assisting pharmacist and patients in safe and cost effective drug therapies.
- Entered hand written data into computer system quickly and efficiently.
- Ensured quality customer experience within all HIPAA guidelines.
- Engaged in over-the-counter drug patient consultation.
- Ordered, organized and maintained all drugs, including controlled substance inventory and dispensing.

University of Colorado Boulder*Fall 2006 - Fall 2011*

Teaching Assistant

- Lectured a two-hour lab section of twenty-four students each semester. Answered student questions and concerns for another TA in an additional lab section.
- Created appropriate quiz and lecture materials. Developed and maintained grade-book.
- Supervised students in the proper use, and disposal of a large variety of chemical and bio-hazardous materials.
- Assessed all exams for the lecture course as well as any lab related material for quality and errors.
- Counseled and tutored students when academic performance was diminished.

University of Colorado Boulder Klymkowski Lab*Fall 2004 - Spring 2007*

Lab Assistant

- Assured optimal care for all lab animals.
- Created new lab reagents and disposed of old reagents appropriately.
- Assisted in research and troubleshooting for a variety of experiments including immuno-histo-chemistry and PCR.

CERTIFICATIONS**National Certified Pharmacy Technician***March 2008 - March 2014***CONTINUING EDUCATION****Annual Society of Forensic Toxicologists meeting***October 17th-21st 2016*

Houston, TX

Workshops

- Opioids in DUID Investigations
- Postmortem Cannabinoids: Issues of Analysis and Interpretation

Summation of AAA study "An Evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per se Limits for Cannabis"*August 15th 2016*

Presented by Barry K. Logan, Ph.D., F-ABFT

The Robert F. Borkestein Course on the Effects of Drugs on Human Performance and Behavior*September 14th-18th 2015*

Tempe, AZ

Through the Indiana University Robert F. Borkestein Center for Studies of Law in Action and The Center for Forensic Science Research & Education

Topics: DUID Overview; National Roadside Survey and Crash Risk Assessment; Drug Recognition Expert (DRE) Program; Principles of Pharmacology and Drug Effects - Stimulants, Hallucinogens, Opiates, Benzodiazepines, CNS Depressants, and Cannabinoids; Effects on Human Performance and Behavior - Cocaine, Methamphetamine, Hallucinogens, "Bath Salts", Opiates, Carisoprodol, Butalbital, Topiramate, Cannabis, Synthetic Cannabinoids; On-Road Driving Studies - Cannabis, CNS Depressants: Antidepressants and Anxiolytics; Benzodiazepines, Zolpidem, and Other Imidazopyridines and Driving Impairment; Data Information and Resources; Oral Fluid Testing; Forensically Defensible Drug and Alcohol Testing in DUID - Laboratory Aspects; National Safety Council Recommendations for Drug Testing in DUID Investigations; Presenting Drug Impairment Evidence in Court - Prosecution Perspective, Defense Perspective.

The Robert F. Borkestein Course on Alcohol, and Highway Safety: Testing, Research and Litigation*May 17th-22nd 2015*

Bloomington, IN

Through the Indiana University Robert F. Borkestein Center for Studies of Law in Action and The Center for Forensic Science Research & Education

Topics: Pharmacology and Physiology of Alcohol; 0.08 The Film that Changed a Nation's Law; Chemistry and Biochemistry of Alcohol; Forensic Pharmacokinetics of Ethanol; Historical Perspective on Forensic Alcohol Analysis; Blood Alcohol Analysis: Theory and Practice; Breath Alcohol Instrumentation: Theory and Practice; Behavioral and Performance Effects of Alcohol on Driving; Approaches to Widmark Calculations; Practice and Pitfalls of Retrograde Extrapolation; Predicting Impairment: The Role of BAC and Complexity of the Driving Task Impairment; Principles and Applications of Standardized Field Sobriety Tests; Distribution of Ethanol between Blood and other Biological Specimens from Living and Deceased Persons; Basic Principles of Mathematics and Statistics in Alcohol Toxicology; The Changing Landscape: Standards in the Forensics Laboratory; Uncertainty of Measurement Determination in Blood and Breath Alcohol Testing; The Legal Framework for DUI - Constitutional Issues and Case Law; Analysis and Response to Defense Challenges in Forensic Alcohol Testing; The Confrontation Clause and Scientific Testimony; Expert Testimony: Basic Principles; Discussion - Expert Testimony: Practical Considerations