

Statement of Qualifications

Name: Kayla M. Baylor
Laboratory: Brazoria County Crime Laboratory
Job Title: Toxicologist
Date: July 22, 2024

CASEWORK

Laboratory Section: Toxicology and Seized Drugs

Discipline(s) of Casework:

- Alcohol testing in blood
- Alcohol testing in liquid
- Analysis of controlled substances

EDUCATION

Institution	Dates Attended	Major	Degree Completed
University of New Haven	2013 – 2015	Forensic Science -Criminalistics	M.S.
Mercyhurst University	2009 – 2013	Forensic Science-Chemistry/Toxicology Biology	B.S. Minor

LICENSES AND CERTIFICATIONS

Affiliation	Discipline	License/Certificate Number
Texas Forensic Science Commission	Toxicologist (Interpretive) and Seized Drugs Analyst	1791
American Board of Forensic Toxicology	Diplomate: Forensic Alcohol	1586

PROFESSIONAL AFFILIATIONS

- American Academy of Forensic Sciences: Student Affiliate (2014-2015), Trainee Affiliate (2015-2017) and Member (2022-2023)
- Society of Forensic Toxicologists (2021-present)

COURTROOM TESTIMONY

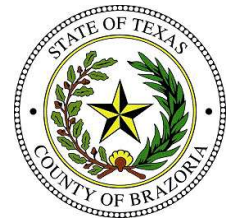
Discipline	Time Period	Location	Testimony Appearances
Toxicology -Alcohol	October 2016 - July 2021	State of North Carolina	6
Toxicology -Drug	October 2016 - October 2020	State of North Carolina	12

TRAINING AND EXPERIENCE

Discipline: Toxicology

Date	Title
September 2015 to May 2016	NCSCCL in-house training program for Drug Analysis (Blood/Urine) <i>Raleigh, NC</i>
June 2016 to October 2016	NCSCCL in-house training program for Volatile Analysis (Blood/Urine/Liquids) <i>Raleigh, NC</i>

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Discipline: Seized Drugs

Date	Title
June 2023 to February 2024	BCCL in-house training program for Seized Drug Analysis <i>Angleton, TX</i>

EMPLOYMENT HISTORY

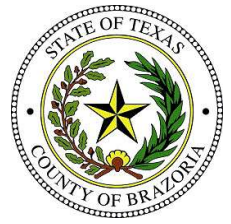
Tenure: June 2023 – present

- **Employer:** Brazoria County Crime Laboratory
- **Job Title:** Toxicologist
- **Primary Duties:**
 - Analyze blood and liquid samples for the presence of ethanol
 - Interpret alcohol analysis results by performing retrograde extrapolation and Widmark calculations when necessary, if facts are available
 - Perform technical and administrative review of alcohol data and reports
 - Perform method validation and validation studies in the toxicology section
 - Analysis of controlled substances in seized drugs section
 - Validation of seized drugs FTIR instrumentation
 - Prepare reports on analysis in toxicology and seized drugs
 - Provide expert testimony for toxicology and seized drugs analysis
 - Performance maintenance and troubleshooting on GC-FID and GCMS instrumentation
 - Assist with training of newly hired employees
 - Assist with Justice Trax (LIMS) administration

Tenure: October 2020 – June 2023

- **Employer:** Houston Forensic Science Center (HFSC)
- **Job Title:** Forensic Scientist II and III
- **Primary Duties:**
 - Analyzed blood and liquid samples for the presence of alcohol and other volatiles
 - Interpreted alcohol analysis results by performing retrograde extrapolation and Widmark calculations when necessary, if facts are available
 - Screened blood and urine samples for the presence of drugs via immunoassay (EIA)
 - Screened and confirmed drugs by Gas Chromatography-Mass Spectrometry (GC-MS)
 - Performed carisoprodol/meprobamate confirmation by GC-MS
 - Performed drug confirmation by LC-MS/MS
 - Performed technical review of immunoassay batch data
 - Provided training to new analysts in drug screen by immunoassay, drug screen and qualitative confirmation by GC-MS, carisoprodol/meprobamate confirmation by GC-MS
 - Prepared reports on analysis
 - Provided expert testimony to the testing process of alcohol analysis and its effects on the body, drug screen by immunoassay, drug screen and confirmation by GC-MS, and carisoprodol/meprobamate confirmation
 - Performed maintenance and troubleshooting on immunoassay, GC-MS, and LC-MS/MS instrumentation

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Tenure: July 2015 – October 2020

- **Employer:** North Carolina State Crime Laboratory
- **Job Title:** Forensic Scientist I and II
- **Primary Duties:**
 - Analyzed blood and urine for the presence of alcohol, other volatiles and drugs
 - Prepared reports on analysis
 - Provided expert testimony
 - Helped coordinate use and maintenance of TECAN Enzyme immunoassay (EIA) as a back-up coordinator

Tenure: April 2014 – October 2014

- **Employer:** Connecticut Department of Emergency Services and Public Protection
- **Job Title:** Toxicology Crime Lab Intern
- **Primary Duties:**
 - Assisted with the logging, inventory, security and disposal of evidence
 - Prepared batch summaries, assisted with opening cases, prepared case jacket files
 - Assisted analysts with Gas Chromatography/Mass Spectrometry (GC/MS) maintenance

Tenure: May 2013 – July 2013

- **Employer:** United States Marshal Service
- **Job Title:** Intern
- **Primary Duties:**
 - Assisted the Deputy Marshal with locating criminals and obtaining rap sheets
 - Assisted in the investigation and apprehension of a state parole violator
 - Observed federal court proceedings
 - Assisted with the location and apprehension of non-compliant sex offenders

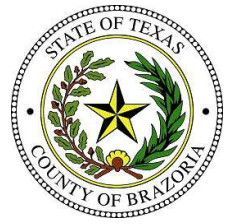
Tenure: June 2012 – August 2012

- **Employer:** Montour County Coroner's Office
- **Job Title:** Intern
- **Primary Duties:**
 - Assisted with documenting injuries of the deceased
 - Oversaw autopsies
 - Entered death certificate information into coroners database
 - Assisted with documentation at crime scenes

OTHER TRAINING

- 2023 TSRP DRE and Toxicologist Webinar Series, TSRP, January 4 to May, 2023.
- 2022 Current Trends in Forensic Toxicology Symposium, CFSRE, May 16-20, 2022.
- Alcohol: A Global Perspective, TIAFI, May 10, 2022.
- Introduction to Pharmacology, HFSC, January 19, 2022.
- Agilent LC-QQQ Training and Application Development, Noot Analytical Consulting Ltd., November 30 – December 2, 2021.

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- Human Factors and Cognitive Bias in the Forensic Sciences: General Session, Texas Forensic Science Commission (TFSC) and Harris County Institute of Forensic Sciences, November 1, 2021.
- Advances in DUID Testing, NMS Labs, March 16, 2021.
- Introduction to Pharmacology II – For Toxicologists David H. Eagerton, Ph.D., F-ABFR-FT, Chair and Associate Professor Campbell University, In-house training, Raleigh, NC, April 2020
- Introduction to Pharmacology I – For Toxicologists David H. Eagerton, Ph.D., F-ABFT-FT, Chair and Associate Professor Campbell University, In-house training, Raleigh, NC, March 2020
- Toxicology for Law Enforcement: Toxicologists and Law Enforcement Officers Training, North Carolina Conference of District Attorneys, Raleigh, North Carolina, January 31, 2020.
- Intox EC/IR II Operation and Breath Alcohol Analysis Training Course. North Carolina State Highway Patrol, Raleigh, North Carolina, August 20, 2019.
- 2nd Annual Online Symposium: Current Trends in Forensics and Forensic Toxicology, RTI International, May 13-17, 2019.
- The Robert F. Borkenstein Course on Alcohol & Highway Safety: Testing, Research & Litigation Indiana University Bloomington, IN, December 2-7, 2018
- Blood, Urine, Liquids Alcohol/Volatiles Analysis In-house Training Program, North Carolina State Crime Lab, June 2016-October 2016.
- Blood and Urine Drug Analysis In-house Training Program, North Carolina State Crime Laboratory, September 2015-May 2016.

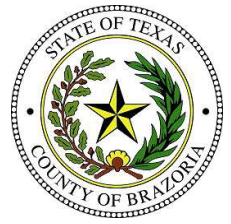
Meetings and Conferences

Date	Title
October 2023	Southwestern Association of Forensic Scientists 45 th Annual Conference Spring, TX
October 2019	Society of Forensic Toxicologists Annual Scientific Meeting <i>San Antonio, TX</i>
February 2015	American Academy of Forensic Sciences 67 th Annual Scientific Meeting <i>Orlando, FL</i>
November 2014	Northeastern Association of Forensic Scientists Annual Meeting <i>Hershey, PA</i>
February 2013	American Academy of Forensic Sciences 65 th Annual Scientific Meeting <i>Washington D.C.</i>

OTHER QUALIFICATIONS

- Permit to perform chemical analysis of blood, issued by NC Department of Health and Human Services
- Valid: October 27, 2016 – January 1, 2022
 - Permit Number: 523

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Graduate Thesis

- Compared the ratio of DNA in cell-free and cellular extracts in low template analysis.
- Presented at:
 - American Academy of Forensic Sciences Young Forensic Scientists Forum Poster Session: “A Comparison of the Ratio of DNA in Cell-Free and Cellular Extracts in Low Template Analysis,” Kayla M. Baylor*; Michael S. Adamowicz, University of New Haven February 17, 2015
 - Northeastern Association of Forensic Scientists Presentation A Comparison of the Ratio of DNA in Cell-Free and Cellular Extracts in Low Template Analysis,” Kayla M. Baylor*; Michael S. Adamowicz, University of New Haven November 4, 2014

Publication

- Cold Case Homicide with Paternity as an Investigative Lead (People of State of New York v. Robert Symonds, Jr.) Kayla Baylor and Heather Miller Coyle* Forensic Science Department, Henry C. Lee College of Criminal Justice & Forensic Science, University of New Haven, USA March 5, 2014