



<b>NAME:</b>	Kayla M. Yang	<b>DATE:</b>	10/24/2022
<b>LABORATORY:</b>	Houston Forensic Science Center		
<b>JOB TITLE:</b>	Forensic Scientist- Toxicology		

**Indicate all disciplines in which you do casework:**

<input type="checkbox"/>	Seized Drugs	<input type="checkbox"/>	Forensic Biology/DNA
<input type="checkbox"/>	Crime Scene	<input type="checkbox"/>	Latent Prints
<input type="checkbox"/>	Digital Forensics	<input checked="" type="checkbox"/>	Toxicology
<input type="checkbox"/>	Firearms	<input type="checkbox"/>	Forensic Audio/Video

**List all categories or sub-disciplines in which you do casework:**

Human performance toxicology: Alcohol Analysis, Drug Screen by Enzyme-Linked Immunosorbent Assay (ELISA), Drug Screen and Qualitative Confirmation by Gas Chromatography-Mass Spectrometry (GC-MS), Carisprodol/Meprobamate Confirmation by Gas Chromatography-Mass Spectrometry (GC-MS), Drug Confirmation by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS).
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**Texas Forensic Science Commission (TFSC) Licensing**

Per TFSC section 651.203, starting January 1, 2019, the following disciplines are subject to licensing: Seized Drugs, Toxicology, Forensic Biology & Firearms/Toolmarks. If applicable, select the type of license issued by TFSC (Select N/A if not applicable):

<b>Type of License:</b>	Toxicologist (Interpretative)
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**Certifications:**

Organization	Discipline	Type/Level (N/A if not applicable)
ABFT	Forensic Alcohol (FA)	Diplomate

**Education:**

List all higher education institutions attended (list high school if no college degree has been attained)

Institution	Dates Attended	Major	Type of Degree Earned
University of New Haven	2013-2015	Forensic Science (Concentration: Criminalistics)	Master of Science
Mercyhurst University	2009-2013	Forensic Science (Minor: Biology)	Bachelor of Science

**Other Training:**

List continuing education, workshops, in service, and other formal training received. Please include the course title, source, and dates of training.

Meetings and Conferences	
February 2022	The International Association of Forensic Toxicologists Annual Meeting, Virtual Meeting
November 2021	International Alliance of Clinical and Forensic Toxicologists Autumn Meeting, Virtual Meeting



February 2021	American Academy of Forensic Sciences 73 <sup>rd</sup> Annual Scientific Meeting, Virtual Meeting
October 2019	Society of Forensic Toxicologists Annual Scientific Meeting, San Antonio, Texas
February 2015	American Academy of Forensic Sciences 67 <sup>th</sup> Annual Scientific Meeting, Orlando, Florida
November 2014	Northeastern Association of Forensic Scientists Annual Meeting, Hershey, Pennsylvania
February 2013	American Academy of Forensic Sciences 65 <sup>th</sup> Annual Scientific Meeting, Washington D.C.

**Workshops:**

- The Impact of the COVID-19 Pandemic on Forensic Sciences With a Focus on Opioids and Emerging Drugs, American Academy of Forensic Sciences Annual Meeting, Virtual Meeting, February 15, 2021.
- A New Realm of NPS Opioids and NPS Benzodiazepines- Analytical and Interpretive Considerations, American Academy of Forensic Sciences Annual Meeting, Virtual Meeting, February 16, 2021.
- Benzodiazepines, Society of Forensic Toxicologists Annual Meeting, San Antonio, Texas, October 14, 2019.
- CBD and Hemp, Society of Forensic Toxicologists Annual Meeting, San Antonio, Texas, October 14, 2019.
- DUID Testing, Society of Forensic Toxicologists Annual Meeting, San Antonio, Texas, October 15, 2019.
- Poisonous Plants, Society of Forensic Toxicologists Annual Meeting, San Antonio, Texas, October 15, 2020.

**Other Training:**

- Introduction to Pharmacology, HFSC, January 19, 2022.
- Agilent LC-QQQ Training and Application Development, Noot Analytical Consulting Ltd., November 30 – December 2, 2021.
- 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.
- 2<sup>nd</sup> Annual Online Symposium: Current Trends in Forensics and Forensic Toxicology, RTI International, May 13-17, 2019.
- The Robert F. Borkestein 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.

**Courtroom Experience:**

List the disciplines/sub-disciplines in which you have testified as an expert witness and indicate over what time period and approximately how many times you have testified in each.

Discipline or Sub-Discipline	Time Period	Times Testified
Toxicology-Alcohol	October 2016- October 2020	6
Toxicology-Drug	October 2016- October 2020	12

**Professional Affiliations:**

List any professional organizations of which you are or have been a member. Indicate any office(s) or positions held and the dates of these activities.

Organization	Member Status & Position(s) Held	Dates of Membership
American Academy of Forensic Sciences	Trainee Affiliate- Toxicology	2015-2017
American Academy of Forensic Sciences	Student Affiliate- Criminalistics	2014-2015
Society of Forensic Toxicologists	Member	2021-present
American Academy of Forensic Sciences	Associate Member	2022-present

**Employment History:**

List all scientific or technical positions held, particularly those related to forensic science. List current position first. Be sure to indicate employer and give a brief summary of duties. Please list your dates of employment by month and year.

<b>Job Title:</b>	Forensic Scientist-Toxicology	<b>Dates of Employment:</b>	October 5, 2020-present
<b>Employer:</b>	Houston Forensic Science Center		

**Provide a brief description of duties below:**

Analyze blood and liquid samples for the presence of alcohol and other volatiles, screen blood and urine samples for the presence of drugs via immunoassay, screen and confirm drugs by Gas Chromatography-Mass Spectrometry (GC-MS), perform carisoprodol/meprobamate confirmation by GC-MS, and write reports. Interpret alcohol analysis results by performing retrograde extrapolation and Widmark calculations when necessary facts are available. Testify as an expert witness 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. Perform technical review of immunoassay batch data. Provide training to new analysts in drug screen by immunoassay, drug screen and qualitative confirmation by GC-MS, carisoprodol/meprobamate confirmation by GC-MS. Perform drug confirmation by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS).

<b>Job Title:</b>	Forensic Scientist I & II- Toxicology	<b>Dates of Employment:</b>	July 2015-October 2020
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<b>Employer:</b>	North Carolina State Crime Lab		
<b>Provide a brief description of duties below:</b>			
Performed analysis of biological specimens (blood, urine, liquid, and serum) to determine the presence or absence of alcohol, volatiles, drugs, and other impairing substances. Prepared and performed review of case reports and provided expert testimony in court as needed. Helped coordinate use and maintenance of: TECAN Enzyme Immunoassay (EIA), Gas Chromatography- Mass Spectrometer (GC-MS), and Liquid Chromatography-Quadrupole Time of Flight-Tandem Mass Spectrometer (LC-QTOF-MS). Ran new standards on GC-MS, updated the retention time index, updated processing methods on GC-MS instrumentation and updated the certified library on the GC-MS instruments. Helped with accessioning evidence as needed. Participated in the analysis of competency samples and external proficiency testing. Completed in an in-house training program for alcohol and drug analysis prior to starting casework which included pharmacology, instrumentation, general effects of drugs and alcohol, written exams, competency samples, testimony, alcohol mock trial and a drug round table. Used the following instrumentation: Gas Chromatography-Flame Ionization Detector (GC-FID), Tecan EVO, GC-MS, Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS). Began analytical training on LC-QTOF-MS.			

<b>Job Title:</b>	Toxicology Lab Intern	<b>Dates of Employment:</b>	April 2014-October 2014
<b>Employer:</b>	Connecticut Department of Emergency Services and Public Protection		
<b>Provide a brief description of duties below:</b>			
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.			

<b>Job Title:</b>	Intern	<b>Dates of Employment:</b>	May 2013-July 2013
<b>Employer:</b>	United States Marshal Service		
<b>Provide a brief description of duties below:</b>			
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.			

<b>Job Title:</b>	Intern	<b>Dates of Employment:</b>	June 2012-August 2012
<b>Employer:</b>	Montour County Coroner's Office		
<b>Provide a brief description of duties below:</b>			
Attended and observed hospital visits for the pronouncing of individuals as deceased. Assisted with documenting injuries of the deceased. Oversaw transportation of deceased to morgue or autopsy location. Observed the autopsy process at the medical examiner's office. Observed and assisted at crime scenes and assisted with documentation at crime scenes. Entered death certificate information into coroner's database.			

**Other Qualifications:**



List below any scientific papers authored or co-authored and/or scientific presentations given, research in which you have been involved, academic or teaching positions you have held, and any other information you consider relevant to your qualification as a forensic scientist.

**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

**Graduate Thesis:**

- "A Comparison of the Ratio of DNA in Cell-Free and Cellular Extracts in Low Template Analysis." University of New Haven, West Haven, CT. 2015

**Presentations:**

- K. Yang. "GC-MS Method Development and Validation Basics and Advances." 2021 Online Symposium: Current Trends in Forensic Toxicology (Day 2), CFSRE, June 1, 2021.
- Baylor, Kayla M.\* Adamowicz, M. "A Comparison of the Ratio of DNA in Cell-Free and Cellular Extracts in Low Template Analysis." American Academy of Forensic Sciences Young Forensic Scientists Forum Poster Session, Orlando, FL, February 2015.
- Baylor, Kayla M.\* Adamowicz, M. "A Comparison of the Ratio of DNA in Cell-Free and Cellular Extracts in Low Template Analysis." Northeastern Association of Forensic Scientists Presentation, Hershey, PA, November 2014.

**Permits:**

- Permit to Perform Chemical Analysis of Blood, North Carolina Department of Health and Human Services, October 2016-January 2022. Permit No. 523.

**Technical Skills:**

- **Instrumentation:** Gas Chromatography-Flame Ionization Detector (GC-FID), Enzyme Linked Immunosorbent Assay (ELISA), Gas Chromatography-Mass Spectrometer (GC/MS), Liquid Chromatography-Tandem Mass Spectrometer (LC-MS/MS), Liquid Chromatography-Quadrupole Time of Flight-Tandem Mass Spectrometer (LC-QTOF-MS/MS)
- **Data Analysis Software:** ChemStation® (Agilent), MassLynx™ (Waters), SCIEX OS™ (SCIEX), Agilent MassHunter Software