

# Grace R. Williams, PhD



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## Education

2017 - 2019 ComACC Clinical Chemistry Fellow, Dartmouth-Hitchcock Medical Center, Lebanon, NH

2012 - 2017 Doctorate of Philosophy, Department of Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, SC

2006 - 2010 Bachelor of Arts, Department of Chemistry, University of North Carolina at Asheville, Asheville, NC

## Licenses & Certifications

2024 Fellow of the Academy of Diagnostic and Laboratory Medicine (FADLM)

2024 Diplomat of the American Board of Clinical Chemistry (DABCC) *Clinical Toxicology*

2021 Diplomat of the American Board of Clinical Chemistry (DABCC) *Clinical Chemistry*

## Professional Service (outside)

2025 Education Representative, Therapeutic Drug Monitoring & Toxicology Division of the Association for Diagnostics & Laboratory Medicine

2025 Past-Chairperson of the Capital Section, Association for Diagnostics & Laboratory Medicine

2024-2025 Member, Chemistry and Toxicology Expert Panel, Clinical and Laboratory Standards Institute (CLSI)

2022-2025 Chair-holder, Document Development Committee EP:37 Supplemental Tables for Interference Testing in Chemistry, Clinical and Laboratory Standards Institute (CLSI)

# Selected Publications

## Peer Reviewed Publications

**Williams GR**, Keller J, Gailliot C, Poklis JL, Prajapati V, Del Baugh R, Sanford K, Nanco C, and Wolf CE. Prevalence of High Phosphatidylethanol (PEth) Concentrations in a Blood Transfusion Product. 2025. (*In Preparation*)

**Williams GR**, Poklis JL, Medrano F, and Wolf CE. Detection of 216 Fentanyl Analogs and Opioids using Four Commercial Fentanyl Immunoassays. 2025. (*Submitted*)

**Williams GR** and Gin G. Interference of Ascorbate in Clinical Chemistry Assays. 2025. (*Submitted*)

Walsh ME, **Williams GR**, Jannetto PJ, and Geno KA. Evaluating Updated Fentanyl Immunoassays for Loperamide Interference. J Appl Lab Med 2025; Aug 20;jfaf110. doi: 10.1093/jalm/jfaf110

**Williams GR** (Chairholder), Geno KA, Jordan S, Weideck CM, Maus A, Neiens P, and Kellogg M. CLSI. Endogenous and Exogenous Interferents. CLSI database EP37. Clinical and Laboratory Standards Institute, 2024. <https://clsi.org/standards/products/subscriptions/documents/ep37-database/>

Wolf CE, Pokhai AA, Poklis JL, **Williams GR**. The Cross Reactivity of Cannabinoid Analogs (Delta-8 THC- THC, Delta-10 THC10-THC and CBD), and their metabolites, and Chiral Carboxy HHC metabolites in Urine of Six Commercially Available Homogeneous Immunoassays. J Anal Toxicol 2023; doi: 10.1093/jat/bkad059

Pokhai AA, Poklis JL, **Williams GR**, Wolf CE. Preanalytical Stability of Emerging Cannabinoid Analogs (Delta-8 THC and Delta-10 THC) and their Metabolites in Urine. J Anal Toxicol 2023 doi: 10.1093/jat/bkad061

**Williams GR**, Akala Modesola, and Wolf CE. Detection of 58 Fentanyl Analogs using ARK Fentanyl II and Immunalysis Fentanyl Immunoassays. Clin Biochem 2023;113:45-51. doi: 10.1016/j.clinbiochem.2023.01.001

**Williams GR**, Downs JW, Wolf CE, Cumpston KL, Tobarran N, Wills BK, Bachmann M, Evaluation of Strontium Interference in Calcium Measurement Procedures and Content in Supplements as Measured by ICP-MS. J Appl Lab Med 2023;8(2):307-318. doi: 10.1093/jalm/jfac092

**Williams GR**, Tsongalis GJ, Lewis LD, Barney RE, Cook LJ, Geno KA, Nerenz RD, Potential Impact of Pharmacogenomic Single Nucleotide Variants in a Rural Caucasian Population, J Appl Lab Med 2023;8(2):251-263. doi: 10.1093/jalm/jfac091

## *Book Chapters and Monographs*

Strathmann FG, **Williams GR**, and Blum LM. Toxic Elements. In Rifai N, Horvath HR, and Wittwer CT (Eds.) Tietz Textbook of Clinical Chemistry and Molecular Diagnostics (7th ed., pp. 888- 924) Elsevier. (*In Publishing*)

**Williams GR**. Arsenic: A Chronic Concern Clinical and Forensic Toxicology News. Mar 2025 (Quarterly, the Association for Diagnostics & Laboratory Medicine (formerly AACC)/CAP)

**Williams GR** and Wolf CE. Fentanyl Contamination in Street Drugs. Clinical and Forensic Toxicology News. Mar 2023. (Quarterly, the Association for Diagnostics & Laboratory Medicine (formerly AACC)/CAP), pages. Available from <https://www.aacc.org/science-and-research/clinical-and-forensic-toxicology-news/archives/2023/march-2021>

**Williams GR** and Downs JW. Magnesium. Patty's Industrial Hygiene and Toxicology (7th edition) (In publishing - Accepted 2023)

**Williams GR**, What operational procedures are essential for clinical laboratory infrastructure standardization? AACC Academy Scientific Short, December 2022. Available from: <https://www.aacc.org/science-and-research/scientific-shorts/2022/what-operational-procedures-are-essential-for-clinical-laboratory-infrastructure-standardization>