

Lorin Bachmann, PhD, DABCC



Professor of Pathology
Co-Director of Clinical Chemistry
Co-Director of Point of Care Testing
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Education

2007 Clinical Chemistry and Laboratory Medicine Fellow
University of Virginia, Charlottesville, VA

2005 PhD, Molecular Medicine
University of Virginia, Charlottesville, VA

2005 Biotechnology Training Program Fellow
University of Virginia, Charlottesville, VA

1996 BS, Biology/Medical Technology
Virginia Tech, Blacksburg, VA

Licenses & Certifications

2008 Diplomate of the American Board of Clinical Chemistry (DABCC)

1996 American Society of Clinical Pathologists (ASCP), Medical Technologist (MT)

Selected Awards & Honors

2025 Certificate of Appreciation: College of American Pathology (CAP). Awarded for contributions to the CAP Accuracy Based Programs Committee

2022 CLSI Service Award: Clinical and Laboratory Standards Institute (CLSI). Awarded for contributions to CLSI C62 guidelines document, Liquid Chromatography Mass Spectrometry Methods

2019 Plenary Lecture Award: Clinical and Pharmaceutical Solutions through Analysis (CPSA). Awarded for contributions in clinical analysis across disciplines

2017 Outstanding Speaker Award: American Association for Clinical Chemistry (AACC)

2017 Excellence in Education Award: American Association for Clinical Chemistry

2016 CLSI Service Award: Clinical and Laboratory Standards Institute (CLSI). Awarded for contributions to CLSI C57 guidelines document, Mass Spectrometry for Androgen and Estrogen in Serum

Recent Grants & Funding

Former Grants

Evaluation of Use of Single Donor Urine Specimens for Commutability Assessment of Reference Materials for Development of Reference Measurement Systems for Urine Albumin.

Sponsor: National Institutes of Standards and Technology (NIST).

Role: Principal Investigator 7/17/2023-7/16/2024

Alinity i Transplant Assay Clinical Evaluation Protocol.

Sponsor: Abbott Laboratories.

Role: Principal Investigator 5/16/2019-2021

Alinity i STAT hsTnI Design Validation.

Sponsor: Abbott Laboratories.

Role: Principal Investigator 1/1/19-12/8/20

Evaluation of Harmonization of Urine Albumin Measurement.

Sponsor: National Kidney Disease Education Program (NKDEP)/National Institutes of Diabetes and Kidney Disease (NIDDK)

Role: Principal Investigator 5/1/2010-4/3/2012

Professional Service (outside)

- 2026 - present Member, Document Development Committee, Clinical and Laboratory Standards Institute (CLSI), CLSI EP50, Evaluation of Stability for Venous Whole Blood and Blood Derived Samples, 1st Edition. Appointed.
- 2026 - present Member (2nd Term), Board of Directors, Clinical Laboratory and Standards Institute (CLSI). Elected.
- 2026 - present Advisor, Clinical Laboratory and Standards Institute (CLSI) Expert Panel on Clinical Chemistry and Toxicology. Appointed.
- 2025 - present Member, Document Development Committee, Clinical and Laboratory Standards Institute (CLSI), CLSI QMS30, Good Clinical Practice (GCP) for Participation in Clinical Studies and Trials. Appointed.
- 2025 - present Member, Clinical Laboratory and Standards Institute (CLSI) Finance Committee. Appointed.
- 2025 - present Scientific Session Planning Committee Member, 2026 Annual Meeting Organizing Committee, Association for Diagnostics and Laboratory Medicine (ADLM). Appointed.
- 2025 - present Member, College of American Pathology Standards Committee. Appointed.
- 2022 - present Member, Document Development Committee, Clinical and Laboratory Standards Institute (CLSI), CLSI C46, Blood Gas and pH Analysis and Related Measurements, Third Ed. Appointed.
- 2021 - present Member, Document Development Committee, Clinical and Laboratory Standards Institute (CLSI), CLSI EP45, Implementation of Reference Intervals in the Medical Laboratory. Appointed.
- 2019 - present Member, National Institute of Diabetes and Digestive and Kidney Diseases/International Federation of Clinical Chemistry Laboratory Joint Working Group (NIDDK/IFCC LWG) for Standardization of Urine Albumin. Appointed.

2023 - 2025	Member (1 st Term), Board of Directors, Clinical Laboratory and Standards Institute (CLSI). Elected.
2023 - 2025	Member, Clinical Laboratory and Standards Institute (CLSI) Expert Panel on Clinical Chemistry and Toxicology. Appointed.
2022 - 2025	Member, Document Development Committee, Clinical and Laboratory Standards Institute (CLSI), CLSI EP21/EP46, Total Analytical Error. Appointed.
2019 - 2024	Member, College of American Pathology Accuracy Based Programs Committee. Appointed.

Recent Invited Presentations

2026 Verifying Comparability of Patient Results Across One Health Care System & Evaluating Reagent Lot-to-Lot Acceptability. College of Physicians and Surgeons of British Columbia, Vancouver BC, Canada.

2024 Embracing New Quality Specifications: Adjusting Lab Practices - CLIA 2024 and Beyond. Evaluating the Impact of an Out-of-Control Event. Association for Diagnostics and Laboratory Medicine (ADLM) Annual Meeting, Chicago, IL.

2023 LC-MSMS 101: Getting Started with Quantitative LC-MS/MS in the Diagnostic Laboratory (4-day workshop). Virtual Short Course

2022 Albumin Harmonization: Impact on Serum, Urine, and Body Fluid Interpretation. American Association for Clinical Chemistry (AACC) Annual Scientific Meeting, Chicago, IL.

2022 CLSI EP26, User Evaluation of Acceptability of a Reagent Lot Change, Clinical and Laboratory Standards Institute, Internationally broadcast webinar

2022 Perspectives on Quality Control Challenges in the Clinical Laboratory. American Association for Clinical Chemistry (AACC) Annual Scientific Meeting, Chicago, IL.

2021 Best Practices to Recover from an Out-of-Control Event, Bio-Rad Quality Control Conference, National Webinar

Selected Publications

Peer Reviewed Papers

Miller WG, Seegmiller JC, **Bachmann LM**, Pateghini M. Measuring urine albumin and total protein. *Nephrol Dial Transplant*. 2026 March 19. <https://doi.org/10.1093/ndt/gfag060>. Epub ahead of print.

Beasley-Green A, Camara JE, Wood ESC, Heckert NA, Miller WG, **Bachmann LM**, Ruvuna L, Ali S, Schneider R, O'Donnell S, Murrell L, Dai J, Xiong Y, Mahmoud S, Fanto-Holdaway P, Eichler K, Grebe A, Snyder J, O'Brien J, Phinney K. Commutability assessment of NIST SRM 3666 albumin and creatinine in frozen human urine among routine clinical laboratory measurement procedures. *Clin Chim Acta*. 2025;581:120760.

Bachmann LM. Commentary on Fluctuating hyperparathyroidism after Surgery. [Commentary]. *J of Appl Lab Med*, 2025;10(6):1713-1714.

Campbell MR, Astles JR, **Bachmann LM**, Brun M, Bryksin J, Erdosy M, Galior K, Holland M, Jennings B, Kondratovich M, Ladwig P, Love S, Antonio Pereira PA, Yundt-Pacheco J. Evaluation of Total Analytical Error for Quantitative Medical Laboratory Procedures. 3rd Ed. CLSI Guideline EP21. Clinical and Laboratory Standards Institute, USA; 2025

Miller WG, Beasley-Green A, **Bachmann LM**, Budd J, Tan HT, Teo TL, Liu Q, Phinney KW, Shiba S, Seegmiller J. Extent of equivalence of results for urine albumin among three candidate mass spectrometry reference measurement procedures. *Clin Chem*, 2024; 70(11):1375-1382

Seegmiller JC, **Bachmann LM**. Urine Albumin Measurements in Clinical Diagnostics [Review]. *Clin Chem*. 2024; 70(2):382-391

Williams GW, Downs JW, Wolf CE, Cumpston KL, Tobarran N, Wills BK, **Bachmann LM**. Evaluation of Strontium Interference in Calcium Measurement Procedures and Content in Supplements as Measured by ICP-MS. *JALM*. 2023;8(2):307-318

DeVore K, Holland M, **Bachmann LM**, Chromczak JG, Crepet F, Duncan J, Fennell S, Fertey J, Meng QH, Pierson-Perry JF, Pistorino M, Renley R, Simmons VL, Tusneem NA, Varlan AR, Xiong K. CLSI. Evaluation of Stability of In Vitro Medical Laboratory Test Reagents. 2nd ed. CLSI Guideline EP25. Clinical and Laboratory Standards Institute; 2023

Johansen JV, **Bachmann LM**, Babic N, D'Agostino PM, Danilenko U, Durham AP, Goldford MD, Long IS, Miller WG, Person NB, Standord JE, Vandepoele N, Varlan AR. Clinical and Laboratory Standards Institute (CLSI). User Evaluation of Acceptability of a Reagent Lot Change, 2nd Edition. CLSI guideline EP26. Clinical and Laboratory Standards Institute, USA, 2022

Clarke W, Molinaro RJ, **Bachmann LM**, Botelho JC, Cao Z, French D, Garg S, Gawoski JM, Grant RP, Hoofnagle AN, Iyer Bagyalakshmi, Kulasingam V, Mason DS, Rappold B, Tacker DH, Truscott SM, Yu Chunli, Zhu Yusheng. Clinical and Laboratory Standards Institute (CLSI). Liquid Chromatography-Mass Spectrometry Methods, 2nd Edition. CLSI guideline C62. Clinical and Laboratory Standards Institute, USA, 2022

Bystrom C, Grant RP, **Bachmann LM**, DeMarco M, Holmes DT, Hoofnagle AN, Intelmann D, Jeffery D, Kushnir MM, Ladwig P, Lowenthal MS, Master SR, Shuford CM, Thomas S, Whiteaker J. Clinical and Laboratory Standards Institute (CLSI). Quantitative Measurement of Proteins and Peptides by Mass Spectrometry. 1st ed. CLSI guideline C64. Clinical and Laboratory Standards Institute; 2021

Book Chapters and Monographs

Bachmann LM, French D, van der Gugten JG, Hubbard JA. Quality Assurance for LC-MS/MS Measurement Systems. In: Zhang YV, Garg U, eds. Practical Guide to Implementing Liquid Chromatography Mass Spectrometry in Clinical Laboratories. Springer; 2025.

Bachmann LM, Miller GW. Principles of spectrophotometry and related photometric measurements. In: Clarke W, Dufour RD, eds. Contemporary Practice in Clinical Chemistry. Fourth edition. Washington D.C.: AACC Press. 2020:119-133

Cook JC, **Bachmann LM**, French D. Steroid Hormones. In: Nair H, Clarke W, eds. Mass Spectrometry for the Clinical Laboratory. First edition. Cambridge: Elsevier Inc, 2017:205-226