



Rosemary Bayless, DVM, MS, PhD, DACVIM (Large Animal)

Education and Clinical Training:

- 2006-2010 BS (Chemistry, Environmental Studies double major), University of Kansas
- 2010-2014 DVM (Doctor of Veterinary Medicine), Kansas State University
- 2014-2015 Rotating Hospital Internship, Rood and Riddle Equine Hospital
- 2015-2018 Large Animal Internal Medicine Residency and MS (Clinical Sciences), Colorado State University
- 2018-2022 PhD (Comparative Biomedical Sciences), North Carolina State University

Professional Experience:

- 2023-present Assistant Professor, Department of Molecular Biomedical Sciences, North Carolina State University
- 2022-present Visiting Scholar, University of North Carolina at Chapel Hill
- 2022-present Equine Internal Medicine Clinician, North Carolina State University College of Veterinary Medicine
- 2022-2023 Assistant Research Professor, Department of Clinical Sciences, North Carolina State University

Professional Activities:

Memberships

- 2025-present American Gastroenterological Association
- 2025-present Veterinary and Comparative Clinical Immunology Society
- 2024-present American Thoracic Society
- 2023-present Veterinary Emergency and Critical Care Society
- 2021-present Society for Leukocyte Biology
- 2019-present Comparative Medicine Institute, North Carolina State University
- 2019-present American College of Veterinary Internal Medicine (diplomate)
- 2011-present American Association of Equine Practitioners

Service

- 2025 Search Committee: Assistant Professor of Mathematical Modeling/Machine Learning (Chancellor's Faculty Excellence Program), North Carolina State University.
- 2025 Faculty Facilitator, See You at CVM recruitment event (undergraduate students from across North Carolina), North Carolina State University

2024	Search Committee: Associate Dean of Professional Education and Admissions, North Carolina State University College of Veterinary Medicine.
2024	Awards for Excellence Selection Committee, North Carolina State University College of Veterinary Medicine.
2024	NC State representative for Jill Biden's visit to Research Triangle Park (White House Initiative on Women's Health Research), North Carolina State University
2023	Facilitator, CVM Open House, North Carolina State University
2019-2021	Graduate Peer Mentor, Graduate Peer Mentoring Collaborative, North Carolina State University

Grant and Journal Review

2026	NC State Center for Human Health and the Environment Pilot Project Program
2025	Journal of Leukocyte Biology
2025	Frontiers in Immunology

Research Interests:

My research group is enthusiastic about improving therapeutic strategies for neutrophil-mediated diseases in human and veterinary patients. We approach this goal through three main directions:

- 1) Discovery, mechanistic elucidation, and translational application of drug candidates
- 2) Identification and refinement of novel therapeutic targets
- 3) Development and optimization of drug delivery systems

Our work is relevant to many organ systems and disease processes, and while current projects are tailored to neutrophil-mediated conditions in the lung (e.g., neutrophilic asthma, pulmonary fibrosis, cystic fibrosis) and liver (metabolic dysfunction-associated steatohepatitis), I embrace opportunities to expand the impact of my team's research to other diseases. Similarly, because neutrophil-mediated diseases occur in patients across different species, we can leverage the strengths of *in vitro* (e.g., human, equine, canine, murine) and *in vivo* (e.g., equine, murine) models to span basic science, translational research, and preclinical studies.

Statement of Interest:

As a veterinary clinician-scientist and self-professed "Neutrophil Nerd" who is enthusiastic about supporting trainees and early-career researchers, I would be honored to serve the SLB community as Associate Councilor. My involvement in SLB started in 2021, when I was a PhD student who was discovering their passion for basic science and translational leukocyte research. My previous training (veterinary school, internship, residency), research experience (master's degree), and conferences/abstract presentations (veterinary medicine) had reflected my initial clinical career focus. SLB resources, webinars, and online community enhanced my professional development during the pandemic, especially in support of my shift to a research-based career path. The SLB 2021 Virtual Meeting was one of my first non-veterinary conferences and opportunities to present a basic/translational research abstract. Two years later, the SLB 2023 Meeting was my first scientific meeting as tenure-track faculty, and I was thrilled to share findings from several projects via an oral abstract and a poster presentation. My early career research trajectory was highlighted in the iSLB Volume 3 2025 Member Interview section. I value the Journal of Leukocyte Biology as a source of high-quality scientific literature and have enjoyed serving as a manuscript reviewer. I am very excited to chair a Special Interest

Group (Naturally Occurring Veterinary Diseases as Models for Human Diseases) at the upcoming SLB 2026 Meeting.

As SLB Associate Councilor, I would appreciate the opportunity to give back to the society that has shaped my progression from trainee to junior faculty. In addition to representing the overall SLB community, I envision two major themes for my contributions to the Council:

- 1) **Supporting and expanding SLB resources and programming for trainees and early career researchers.** In the Associate Councilor's role as Council Liaison for the Members in Transition and Training Committee, I would advocate for professional development and networking events. For example, I would seek feedback from our Society's graduate students, postdoctoral researchers, and junior faculty regarding desired topics (e.g., deciding next steps in one's career, building and managing a lab team, diversifying research funding), skills (e.g., efficiently navigating vast amounts of scientific literature, preparing for interview seminars/chalk talks, grant-writing) and formatting (e.g., online, in-person; structured presentations, informal discussions).
- 2) **Promoting SLB to researchers from related and complimentary fields.** I am active in several other leukocyte communities (e.g., attendees of the Phagocytes Gordon Research Conference/Seminar and the Neutrophil International Symposium) as well as groups of veterinary clinician-scientists, physician-scientists, and biomedical engineers who study leukocyte-mediated diseases. I consider SLB's friendly and collaborative culture, particularly the welcoming environment at SLB meetings, to be a major strength of our Society. I am committed to fostering this collegial and inclusive atmosphere as we welcome new members and diversify our community's collective expertise.