

CURRICULUM VITAE

March 03, 2025

Jamie N. Retallick (Henningson), DVM, PhD, Diplomate ACVP

Professor/Anatomic Veterinary Pathologist
Director, Kansas Veterinary Diagnostic Laboratory
Department of Diagnostic Medicine/Pathobiology
Kansas State University



EDUCATION:

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| • University of Nebraska | PhD | 2008 |
| ▪ Major: Integrative Biomedical Sciences | | |
| ▪ Areas of Focus: Classic Virology and Pathology | | |
| ▪ Topic of Dissertation: Influence of BVDV nonstructural proteins Npro and NS4B on virulence in experimental acutely infected calves and viral antigen distribution in persistently infected alpacas | | |
| • Kansas State University | DVM | 2004 |
| • Kansas State University | BS | 2002 |
| ▪ College of Agriculture-Pre-vet/Animal Science | | |

PROFESSIONAL CERTIFICATION:

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| • American College of Veterinary Pathologists | 2009 |
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CERTIFICATIONS/TRAINING:

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| • Kansas State University-Certificate, Public Administration | 2023 |
| • AAVMC Leadership Academy | 2019-2022 |
| • Post-Doctoral Fellowship | 2010-2011 |
| ▪ USDA Swine Virology | |
| • Anatomic Pathology Residency | 2004-2008 |

CAREER SUMMARY:

ACVP board certified anatomic pathologist, additionally with a PhD in disciplines of classic virology and anatomic pathology focused on economic disease in cattle, BVDV. Early career included teaching and pathology case work at University of Nebraska-Lincoln and University of Wisconsin School of Veterinary Medicine. In 2009 H1N1 pandemic joined the USDA in swine virology working in biocontainment on pandemic influenza and highly pathogenic PRRS. Years of late 2011-2017 were spent as a diagnostic pathologist doing primarily cases for the Kansas State Veterinary Diagnostic Laboratory (2017) along with teaching and collaborative research projects. In 2017, KSVDL lost AAVID accreditation and I was appointed as interim director to restore accreditation which was accomplished in late 2018. In 2019, I was hired as the permanent director and most of my time is spent overseeing the operation and improvements to

keep KSVDL viable for all that depend on it. My appointment is 80% administration and 20% service/research. In 2021, my name changed from Jamie Henningson to Jamie Retallick. I do teach in Veterinary Virology course at the College of Veterinary Medicine, KSU.

KVDL ACCOMPLISHMENTS AS DIRECTOR:

- 2017-2018 Established and Built Quality System
- Sept 2018 Returned KSVDL to Full Accreditation
- 2019 KSVDL moved from NAHLN level 2 to NAHLN level 1
- 2020 Led KSVDL and CVM teams to establish SARS-CoV-2 testing for Kansas State and Manhattan community
- 2022-2023 KSVDL experienced severe faculty and staff shortages with 62% faculty turnover. Led 5 sections (necropsy, client care, accessioning, rabies and clinical pathology), full time on duty pathologist and some director responsibilities.
- 2023-2024 Initiated and Contributed to 3 Studies for the Importance of KSVDL and the need for a new facility.
- 2025 Secure \$128 million bond issue for a new VDL facility for KS from KS legislature; \$2 million in private donations required. Name change from KSVDL to KVDL.

WORK EXPERIENCE:

June 2019-Current **Kansas Veterinary Diagnostic Laboratory (KVDL), *Director and Professor.* Responsibilities include:**

- In April 2025, KVDL was allocated a \$128 million bond issue to build a new VDL facility; \$2 million in private donations are required.
- In summer 2025, began the name change from the Kansas State Veterinary Diagnostic Laboratory (KSVDL) to the Kansas Veterinary Diagnostic Laboratory (KVDL) at Kansas State.
- In 2023-2024, initiated and contributed to 3 studies to illustrate the importance of KSVDL to the State of KS and garner support for a new stand-alone facility
 - 3 Studies:
 - Teconomy: Economic Impact
 - FLAD: Facility Gap Analysis
 - Clark & Enersen: Preliminary design and cost determination
- 2024-3 Legislative KSVDL tours and toured new ISU VDL with Central administration and KS Legislature.
- Oversee day to day operations of KSVDL, personnel, client communication, and faculty and staff communication/well-being/promotion. Oversee hiring processes.
- Manage employee conflict and issues to ensure efficient operation of KSVDL.
- Oversee sections as section head when faculty leave their position. I have overseen virology, rabies, client care, accessioning, necropsy, and clinical pathology.
- Provide oversight and management of an approximately \$18 million dollar budget with CVM business team.

- Partner with the KSVDL associate director and CVM business team to monitor test counts and business aspects including company contracts/agreements.
- Provide oversight of KSVDL quality management system and team which involves the AAVLD standard for all laboratory sections and several additional accrediting bodies for the rabies section, which are not limited to CLIA, New York State, and GLP/GXP studies. I am a strong advocate for KSVDL QMS in all sections.
- Maintain good relationship with our CLIA director for human testing.
- Oversee and manage lab responses to disease outbreaks such as SARS-CoV-2 pandemic and HPAI.
- Developed two committees in KSVDL: FAD Planning Committee and Continuous Improvement Committee (CIC).
- Expanding KSVDL Foreign Animal Disease (FAD) Plan and standard operating procedures (SOP). I work with Biomedical Research Institute (BRI) for BSL3 space in case of a FAD outbreak. Yearly enrollment of select number of KSVDL employees in biocontainment training.
- Continuing annual Lean Six Sigma training for KSVDL team members. Working to build Lean Six Sigma culture to drive continuous improvement through increasing efficiencies and implementing new processes throughout the laboratory. A Continuous Improvement Committee (CIC) was developed and meets monthly to work on systemic and sectional issues.
- Process reengineering team developed automated rabies testing and online rabies submission forms and electronic reporting.
- Developing Rabies Section Success Plan with 1- and 3-year goals in conjunction with CVM Business Team and leadership of sections.
- Audit sections for compliance to QMS, TAT or to address other issues.
- Coordinate interactions in CVM with Anatomy and Physiology, Department of Diagnostic/Medicine Pathobiology, Department of Clinical Sciences and the Veterinary Health Center.
- Coordinate and meet with state and federal veterinary agencies, such as KDA and USDA.
 - Part of Kansas Poultry Disease Task Force.
 - Attend FAD Roundtable meetings and exercises.
- Coordinate and participate in NAHLN activities, including conference calls and webinars. Oversee the NAHLN activities for KSVDL.
- Provided leadership for KSVDL to become level 1 NAHLN status for 2019; this is the first time KSVDL has been a NAHLN level 1 laboratory; maintenance of level 1 NAHLN status.
- Represent KSVDL at Kansas State Government Relation Meetings.
- Represent KSVDL at monthly Kansas State University Wide Administrative Meetings.
- Foster Communication with regular meetings: Quality, Pathologists, Toxicology and VDL Faculty, etc.
- Conduct staff meetings quarterly to bi-annual.
- Conduct KSVDL advisory board meetings. Institute change from advisory board feedback.

- Lead KSVDL in collaborative agreements/projects
- In SARS-CoV-2 pandemic established staggered shifts and social distancing to remain open and serve clients. Also set up human SARS-CoV-2 testing for Community.
- Service, Teaching and Research:
 - Pathology duty on occasion except in 2022-2023 when shortage of pathologists
 - 2022: Cases Coordinated-1476 ; Weeks on Duty-44
 - 2023: Cases Coordinated-753; Weeks on Duty-23
 - 2024: Cases Coordinated-521; Cases Read-411
 - Teaching small ruminant virology and necropsy to senior veterinary students
 - Virology: 4-7 lectures
 - Necropsy: 2022 (due to pathologist shortage)
 - Collaborate on Foreign Animal Disease projects at BRI, particularly Classical Swine Fever and African Swine Fever
 - During pandemic, assisted researchers with SARS-CoV-2 projects.
 - Maintain IACUC research and BRI biocontainment training.
 - Research projects.

**Aug 2017-June 2019 Kansas State Veterinary Diagnostic Laboratory (KSVDL),
Interim Director and Associate Professor. Responsibilities
include:**

- Oversee day to day operations of KSVDL, personnel, client communication, and faculty and staff communication/well-being/promotion.
- Provide oversight and management of 11 million dollar budget with CVM business team.
- Partner with the KSVDL associate director and CVM business team to monitor test counts and business aspects including company contracts/agreements.
- Provide oversight of KSVDL quality management system and team which involves the AAVLD standard for all laboratory sections and several additional accrediting bodies for the rabies section, which are not limited to CLIA, New York State, and GLP/GXP studies. I am a strong advocate for KSVDL QMS in all sections.
- Expanding KSVDL Foreign Animal Disease (FAD) Plan. I have worked with the Biomedical Research Institute (BRI) for space in case of a FAD outbreak. Ten KSVDL employees are currently receiving biocontainment training.
- Instituted Lean Six Sigma training for 50 KSVDL employees including myself. Working to build Lean Six Sigma culture to drive continuous improvement through increasing efficiencies and implementing new processes throughout the laboratory.
- Formed two new committees in KSVDL: FAD Planning Committee and Lean Six Sigma (LSS) Committee.
- Developing Success Plans for laboratory sections with 1- and 3-year goals in conjunction with CVM Business Team and leadership of sections. Rabies laboratory section is the first section with plan to be finalized Feb 2019.
- Audit sections for compliance to QMS, TAT or to address other issues.
- Coordinate interactions in CVM with Anatomy and Physiology, Department of Diagnostic/Medicine Pathobiology, Department of Clinical Sciences and the Veterinary Health Center.

- Coordinate and meet with state and federal veterinary agencies, such as KDA and USDA.
 - Part of Kansas Poultry Disease Task Force.
 - Attend FAD Roundtable meetings and exercises.
- Coordinate and participate in NAHLN activities, including conference calls and webinars. Oversee the NAHLN activities for KSVDL.
- Provided leadership for KSVDL to become Level 1 NAHLN status for 2019; this is the first time KSVDL has been a NAHLN Tier 1 laboratory.
- Represent KSVDL at Kansas State Government Relation Meetings.
- Represent KSVDL at monthly Kansas State University Wide Administrative Meetings.
- Foster Communication with several regular meetings/week: Quality, Anatomic Pathologists, Toxicology and VDL Faculty.
- Conduct staff meetings every 1-2 months.
- Conduct KSVDL advisory boards. Institute change from advisory board feedback.
- Lead KSVDL in collaborative agreements/projects
 - For example, lead and delegated KSVDL team members to Multi-Laboratory International Collaboration Environment (MICE) project sponsored by the Department of Homeland Security
- Service, Teaching and Research:
 - Two days/month scheduled on mail-in-case pathology duty
 - Teaching Ocular pathology and Male Reproductive System to sophomore students and IHC to senior veterinary students
 - Collaborate on Foreign Animal Disease projects at BRI, particularly Classical Swine Fever and African Swine Fever
 - Maintain IACUC research and BRI biocontainment training.

March 2017-Sept 2017 Kansas State Veterinary Diagnostic Laboratory (KSVDL) and Department of Diagnostic Medicine/Pathobiology (DMP); Associate Professor. Responsibilities include:

- Responsible for diagnostic case analysis including necropsies, mail in samples and surgical biopsies, BVDV and prion IHC resulting.
- Read all ocular pathology cases.
- Provided resident and 4th year veterinary student instruction/training.
- Attended annual training to work on high consequence diseases in BRI/BSL3.
- Wrote and organized the pathologist's case receiving schedule.
- Participated in collaborative research projects that included BRSV, Rocky Mountain Spotted Fever, Rift Valley Fever, and Classical Swine Fever. Provided assistance with manuscript writing.
- Provided instruction of 4th year Veterinary Students on necropsy technique, lesion description and report generation.
- Provided introduction to IHC and its uses in practice to 4th year Veterinary Students.
- Assisted with the development of KSVDL QMS for system-wide and pathology related SOPs.

- Attended AAVLD annual meeting and one meeting per year of Academy of Veterinary Consultants (AVC).

Jan 2012-Sept 2017

**Kansas State Veterinary Diagnostic Laboratory (KSVDL),
Faculty Supervisor of Histology and Immunohistochemistry
Laboratory. Responsibilities include:**

- Oversaw day to day operation of histology laboratory.
- Conducted evaluations of laboratory technicians and supervisor.
- Responsible for reading and approving all standard operating procedures and other documents for the histology and immunohistochemistry laboratory for AAVLD accreditation of KSVDL.
- Changed schedule for early slide delivery times and reduced TAT with technician.
- Added testing including ISH using RNAscope by Advanced Cell Diagnostics.
- Added Digital Pathology by adding 3D HistoTech MIDI scanner and software (2013).
- Installed and maintained IHC and ISH algorithm software through Indica Laboratories.
- Developed and validated new immunohistochemistry antibodies in the histopathology and immunohistochemistry laboratory. Have added the following tests: cytokeratin A1/A3, PNL-2, TRP-1, TRP-2, CD117, MUM-1, SIV, claudin-5, TTF-1, Ki-67, CD18, Pax-5, melanoma blend (4 antibodies), PTH, calcitonin, Iba-1, claudin-5 and a mast cell tumor panel.
- Assays developed include: African Swine Fever Virus IHC (2013), Classical swine influenza virus, and rift valley virus.
- Developed with the histopathology technicians a way to process eyes and makes slides with whole sections of eyes.

Nov 2011-March 2017

**Kansas State Veterinary Diagnostic Laboratory (KSVDL) and
Department of Diagnostic Medicine/Pathobiology (DMP);
*Assistant Professor. Responsibilities include:***

- Performed diagnostic case analysis including necropsies, mail in samples and surgical biopsies, BVDV and prion IHC resulting.
- Provided training and teaching to residents and 4th year veterinary students.
- Conducted collaborative research projects including low path avian influenza, Mycobacterium bcg classical swine fever, rift valley fever, prostate cancer in TRAMP mice, nasal carcinoma in dogs, influenza, porcine reproductive respiratory syndrome, bovine respiratory disease syndrome, cattle fatigue syndrome, Seneca valley virus, influenza D in cattle, and interstitial pneumonia in cattle.
- Read and interpreted all ocular pathology cases.
- Served as search committee member when needed. Have served for searches to fill the following positions: a necropsy technician, a supervisor for the histopathology laboratory, two technicians for the histopathology laboratory, two clinical pathology faculty searches, and clinical pathologist clinical instructor search.

July 2010-October 2011 Swine Virus and Prion Research Unit, National Animal Disease Center, USDA-ARS; *Post-Doctoral Fellow/Research Veterinary Medical Officer*. Responsibilities include:

- Provided overall pathology support/collaboration for pandemic influenza H1N1, swine influenza, PRRS, and High-Path PRRS from Asia.
- Conducted necropsies and histopathological examination of experimental studies.
- Used immunohistochemistry (cell markers, complement markers, etc.) to study pathogenesis.
- Performed ELISAs.
- Conducted virological techniques (viral titrations, hemagglutination assays, hemagglutination inhibition assays, immunocytochemistry).
- Implemented and conducted studies digital pathology with Aperio system.

September 2008-July 2010 Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison; *Clinical Instructor of Anatomic Pathology*. Responsibilities include:

- Performed surgical biopsies, necropsies on various species, histopathological examination, and written laboratory reports.
- Communicated with clinicians.
- Trained and mentored pathology residents.
- Provided instruction of fourth year veterinary students on necropsy rotation.
- Lead daily gross rounds with veterinary students on necropsy rotation.
- Performed didactic teaching, designed and moderated laboratory, administered examinations to second year veterinary students.
- Attended rounds including oncology, biopsy, necropsy and ocular rounds.
- Read ocular pathology cases for Comparative Ocular Pathology Laboratory of Wisconsin.

June 2004-September 2008 Nebraska Veterinary Diagnostic Center, University of Nebraska, Lincoln; *Veterinary Anatomic Pathology Resident*. Responsibilities included:

- Conducted surgical biopsies, necropsies on various species, histopathological examination, and written laboratory reports.
- Selected ancillary testing for the diagnosis of animal diseases.
- Provided consultation to referring veterinarians and clientele.

PROFESSIONAL COMMITTEE ACTIVITIES:

2020-Current	AAVLD Accreditation Committee
Feb 2019-Current	AAVLD Government Relation Committee
Feb 2018-Current	Active AAVLD Accreditation Auditor

October 2017-Current	USAHA BVDV subcommittee co-chair
October 2017-Current	USAHA Bovine committee
Oct 2017-2021	AAVLD Pathology committee chair
Oct 2017-Current	AAVLD Foundation committee
Oct 2017-2019	AAVLD-AVC Liaison.
Oct 2015-Oct 2017	AAVLD Pathology committee co-chair

PROFESSIONAL ACTIVITIES/DEVELOPMENT:

2017- Current	Attend and Represent KSVDL at AAVLD annual meeting in Director, Government, and NAHLN meetings.
August 2023	Host KSU Government Relations and Lobbyist for What KSVDL does for Kansans (and beyond) presentation and lab tour.
June 2023	Host Kansas Farm Bureau for What KSVDL does for Kansans (and beyond) presentation and lab tour.
June 2019-2023	Kansas State Public Administration Graduate Certificate; have taken courses of Public Organizational Theory and Public Personnel Administration; Public budgeting first class for 2020; <i>Kansas State University, Manhattan, KS</i>
September 2021	AAVLD Laboratory Auditor for Ohio Animal Disease Diagnostic Laboratory
Sept 2019-2020	AAVMC Leadership Academy
August 2019	AAVLD Laboratory Auditor of Utah Laboratories
July 2019	Host Australian Delegation at KSVDL as part of audit of United States fresh, frozen beef
March 2019	AAVLD Government relations visit to Washington DC to advocate for \$30 Million for the NAHLN
February 2019	AAVLD Auditor Training- <i>Las Vegas, NV</i>
January 2019-Current	Government Relation Meetings- <i>Kansas State University, Manhattan, KS</i>

January 2019	Managing Difficult Conversation training- <i>Kansas State University, Manhattan, KS</i>
January 2019-Current	Introduction to Political Science Course- <i>Kansas State University, Manhattan, KS</i>
April-May 2018	AAVLD Audit as Observer of MN Diagnostic Laboratory
September 2017-Current	Attend KDA FAD working group discussions, every 2 months- <i>Manhattan, KS</i>
Sept 2018-Dec 2018	New Department Head Orientation, weekly- <i>Kansas State University, Manhattan, KS</i>
November 2018	Lean Six Sigma, Yellow Belt Training, <i>KSVDL, Manhattan, KS</i>
April 2017-Oct 2018	Executive Veterinary Program-Beef- <i>Olathe, KS</i> Graduated October 2018.
August 2018	NAHLN/AAVLD QMS Training, <i>Ames, IA</i>
Jan-May 2018	Kansas State College of Veterinary Medicine Search Committee Member
April 2018	AAVLD Auditor Team Observer of another VDL
January-May 2018	Kansas State College of Veterinary Medicine Dean Search Committee
February 2018	AAVLD Auditor Training, <i>Las Vegas, NV</i>
January 2013-Current	Trained to do research in Biocontainment at Pat Roberts Hall/Biosecurity Research Institute (BRI) at Kansas State University. Select agent certified for Classical Swine Fever Virus.
October 2017	Quality Symposium training at Annual AAVLD Meeting- <i>San Diego, CA</i>
March 2016-2018	Phi Zeta Research Day-Kansas State University, <i>Manhattan, KS</i> - Oral presentation judge and elected President. Served as president in 2017.
October 2015	AAVLD National Meeting- <i>Providence, Rhode Island</i> ; moderator of pathology section presentations.

November 2014

American College of Veterinary Pathologists (ACVP) – *Atlanta, GA*; Poster presentation judge.

January 2004

National Veterinary Services Laboratory (NVSL) – *Ames, IA*, Supervisor: Dr. Mark Hall; Pathology Externship

PUBLICATIONS:

Kwon T, Artiaga BL, McDowell CD, Whitworth KM, Wells KD, Prather RS, Delhon G, Cigan M, White SN, **Retallick J**, Gaudreault NN, Morozov I, Richt JA. Gene editing of pigs to control influenza A virus infections. *bioRxiv* [Preprint]. 2024 Jan 16:2024.01.15.575771. doi: 10.1101/2024.01.15.575771. Update in: *Emerg Microbes Infect.* 2024 Dec;13(1):2387449. doi: 10.1080/22221751.2024.2387449. PMID: 38293027; PMCID: PMC10827075.

Cezar G, Magalhães E, Rupasinghe K, Chandra S, Silva G, Almeida M, Crim B, Burrough E, Gauger P, Siepker C, Mainenti M, Zeller M, Fano E, Piñeyro P, Main R, Thurn M, Lages P, Corzo C, Rovira A, Naikare H, McGaughey R, Matias-Ferreira F, **Retallick J**, Gebhardt J, Greseth J, Kersey D, Clement T, Pillatzki A, Christopher-Hennings J, Prarat M, Johnson A, Summers D, Bowen C, Boyle J, Hendrix K, Arruda AG, Linhares D, Trevisan G. Using diagnostic data from veterinary diagnostic laboratories to unravel macroepidemiological aspects of porcine circoviruses 2 and 3 in the United States from 2002-2023. *PLoS One.* 2024 Dec 10;19(12):e0311807. doi: 10.1371/journal.pone.0311807. PMID: 39656698; PMCID: PMC11630593.

Phadke VK, Gromer DJ, Rebolledo PA, Graciaa DS, Wiley Z, Sherman AC, Scherer EM, Leary M, Girmay T, McCullough MP, Min JY, Capone S, Sommella A, Vitelli A, **Retallick J**, Seetahal J, Koller M, Tsong R, Neill-Gubitz H, Mulligan MJ, Rouphael NG. Safety and immunogenicity of a ChAd155-vectored rabies vaccine compared with inactivated, purified chick embryo cell rabies vaccine in healthy adults. *Vaccine.* 2024 Dec 2;42(26):126441. doi: 10.1016/j.vaccine.2024.126441. Epub 2024 Oct 16. PMID: 39418686.

Artiaga BL, Madden D, Kwon T, McDowell C, Keating C, Balaraman V, de Carvahlo Madrid DM, Touchard L, Henningson J, Meade P, Krammer F, Morozov I, Richt JA, Driver JP. Adjuvant Use of the Invariant-Natural-Killer-T-Cell Agonist α -Galactosylceramide Leads to Vaccine-Associated Enhanced Respiratory Disease in Influenza-Vaccinated Pigs. *Vaccines (Basel).* 2024 Sep 18;12(9):1068. doi: 10.3390/vaccines12091068. PMID: 39340098; PMCID: PMC11435877.

Wang L, Kim J, Kang H, Park HJ, Lee MJ, Hong SH, Seo CW, Madera R, Li Y, Craig A, Retallick J, Matias-Ferreira F, Sohn EJ, Shi J. Development and evaluation of two rapid lateral flow assays for on-site detection of African swine fever virus. *Front Microbiol.* 2024 Aug 29;15:1429808. doi: 10.3389/fmicb.2024.1429808. PMID: 39268541; PMCID: PMC11390401.

Truong QL, Wang L, Nguyen TA, Nguyen HT, Le AD, Nguyen GV, Vu AT, Hoang PT, Le TT, Nguyen HT, Nguyen HTT, Lai HLT, Bui DAT, Huynh LMT, Madera R, Li Y, **Retallick J**, Matias-Ferreya F, Nguyen LT, Shi J. A Non-Hemadsorbing Live-Attenuated Virus Vaccine Candidate Protects Pigs against the Contemporary Pandemic Genotype II African Swine Fever Virus. *Viruses*. 2024 Aug 19;16(8):1326. doi: 10.3390/v16081326. PMID: 39205300; PMCID: PMC11359042.

Kwon T, Artiaga BL, McDowell CD, Whitworth KM, Wells KD, Prather RS, Delhon G, Cigan M, White SN, **Retallick J**, Gaudreault NN, Morozov I, Richt JA. Gene editing of pigs to control influenza A virus infections. *Emerg Microbes Infect*. 2024 Dec;13(1):2387449. doi: 10.1080/22221751.2024.2387449. Epub 2024 Aug 24. PMID: 39083026; PMCID: PMC11346336.

Singh G, Trujillo JD, McDowell CD, Matias-Ferreya F, Kafle S, Kwon T, Gaudreault NN, Fitz I, Noll L, Morozov I, **Retallick J**, Richt JA. Detection and characterization of H5N1 HPAIV in environmental samples from a dairy farm. *Virus Genes*. 2024 Oct;60(5):517-527. doi: 10.1007/s11262-024-02085-4. Epub 2024 Jul 15. PMID: 39008139; PMCID: PMC11686969.

Serafini Poeta Silva AP, Arruda Cezar G, Sousa Magalhães E, Rupasinghe K, Chandra S, Silva GS, Almeida M, Crim B, Burrough E, Gauger P, Siepker C, Mainenti M, Zeller M, Main RG, Thurn M, Fioravante P, Corzo C, Rovira A, Naikare H, McGaughey R, Matias Ferreyra F, **Retallick J**, Gebhardt J, Pillatzki A, Greseth J, Kersey D, Clement T, Christopher-Hennings J, Prarat M, Johnson A, Summers D, Bowen C, Hendrix K, Boyle J, Lima Linhares DC, Trevisan G. Monitoring emerging pathogens using negative nucleic acid test results from endemic pathogens in pig populations: Application to porcine enteric coronaviruses. *PLoS One*. 2024 Jul 5;19(7):e0306532. doi: 10.1371/journal.pone.0306532. PMID: 38968319; PMCID: PMC11226029.

Cool K, Gaudreault NN, Morozov I, Trujillo JD, Meekins DA, McDowell C, Carossino M, Bold D, Mitzel D, Kwon T, Balaraman V, Madden DW, Artiaga BL, Pogranichniy RM, Roman-Sosa G, **Henningson J**, Wilson WC, Balasuriya UBR, García-Sastre A, Richt JA. Infection and transmission of ancestral SARS-CoV-2 and its alpha variant in pregnant white-tailed deer. *Emerg Microbes Infect*. 2022 Dec;11(1):95-112. doi: 10.1080/22221751.2021.2012528. PMID: 34842046; PMCID: PMC8725908.

McDowell CD, Bold D, Trujillo JD, Meekins DA, Keating C, Cool K, Kwon T, Madden DW, Artiaga BL, Balaraman V, Ankhanbaatar U, Zayat B, **Retallick J**, Dodd K, Chung CJ, Morozov I, Gaudreault NN, Souza-Neto JA, Richt JA. Experimental Infection of Domestic Pigs with African Swine Fever Virus Isolated in 2019 in Mongolia. *Viruses*. 2022 Dec 1;14(12):2698. doi: 10.3390/v14122698. PMID: 36560702; PMCID: PMC9781604.

Hamill V, Noll L, Lu N, Tsui WNT, Porter EP, Gray M, Sebhatu T, Goerl K, Brown S, Palinski R, Thomason S, Almes K, **Retallick J**, Bai J. Molecular detection of SARS-CoV-2 strains and differentiation of Delta variant strains. *Transbound Emerg Dis*. 2022 Sep;69(5):2879-2889. doi: 10.1111/tbed.14443. Epub 2022 Jan 5. PMID: 34964565; PMCID: PMC9240106.

Artiaga BL, Morozov I, Ransburgh R, Kwon T, Balaraman V, Indran SV, De Carvalho Madrid DM, Gu W, **Henningson J**, Ma W, Richt JA, Driver JP. Evaluating α -galactosylceramide as an adjuvant for live attenuated influenza vaccines in pigs. *Anim Dis*. 2022;2(1):19. doi: 10.1186/s44149-022-00051-x. Epub 2022 Aug 1. PMID: 35936354; PMCID: PMC9339466.

Doerksen T, Christensen T, Lu A, Noll L, Bai J, **Henningson J**, Palinski R. Assessment of porcine Rotavirus-associated virome variations in pigs with enteric disease. *Vet Microbiol*. 2022 Jul;270:109447. doi: 10.1016/j.vetmic.2022.109447. Epub 2022 Apr 27. PMID: 35561657.

Tsui WNT, Hamill V, Noll L, Lu N, Porter EP, Harbidge D, Cox E, Richardson C, Gray M, Sebhatu T, Goerl K, Brown S, Hanzlicek G, **Retallick J**, Bai J. Molecular detection of SARS-CoV-2 and differentiation of Omicron and Delta variant strains. *Transbound Emerg Dis*. 2022 Sep;69(5):e1618-e1631. doi: 10.1111/tbed.14497. Epub 2022 Mar 13. PMID: 35218683; PMCID: PMC9115370.

Hetrick K, Harkin KR, Peddireddi L, **Henningson J**. Evaluation by polymerase chain reaction assay of persistent shedding of pathogenic leptospires in the urine of dogs with leptospirosis. *J Vet Intern Med*. 2022 Jan;36(1):133-140. doi: 10.1111/jvim.16309. Epub 2021 Nov 19. PMID: 34799884; PMCID: PMC8783323.

Nair A, Hove P, Liu H, Wang Y, Cino-Ozuna AG, **Henningson J**, Ganta CK, Ganta RR. Experimental Infection of North American Sheep with *Ehrlichia ruminantium*. *Pathogens*. 2021 Apr 9;10(4):451. doi: 10.3390/pathogens10040451. PMID: 33918856; PMCID: PMC8070521.

Trevisan G, Linhares LCM, Schwartz KJ, Burrough ER, Magalhães ES, Crim B, Dubey P, Main RG, Gauger P, Thurn M, Lages PTF, Corzo CA, Torrison J, **Henningson J**, Herrman E, McGaughey R, Cino G, Greseth J, Clement T, Christopher-Hennings J, Linhares DCL. Data standardization implementation and applications within and among diagnostic laboratories: integrating and monitoring enteric coronaviruses. *J Vet Diagn Invest*. 2021 May;33(3):457-468. doi: 10.1177/10406387211002163. Epub 2021 Mar 19. PMID: 33739188.

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ABSTRACTS:

Jamie Henningson, Ben M. Hause, Lucas Huntimer, Shollie Falkenberg, Jodi McGill, Tom Halbur. An influenza D virus vaccine protects cattle from respiratory disease caused by homologous challenge. 2016. *American Association of Veterinary Laboratory Diagnosticians*, Greensboro, NC.

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Shang P, Li Y, Shyu D, Carrillo A, Naraghi-Arani P, Renukaradhya GJ, **Henningson J**, Fang Y. 2015. Attenuation of porcine reproductive and respiratory syndrome virus (PRRSV) by inactivating the ribosomal frameshifting products nsp2TF and nsp2N: Implication for the rational design of vaccines. *North American PRRS Symposium*, Chicago, IL.

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Wang Y, Guo R, Ransburgh R, Hill J, Shang P, **Henningson J**, Zhang W, Fang Y. 2015. Characterization and application of monoclonal antibodies against porcine epidemic diarrhea virus. *North American PRRS Symposium*, Chicago, IL.

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Jamie N. Henningson, Bhupinder Bawa, Guy H. Loneragan, and Daniel U. Thomson. Hoof sloughing in beef cattle following transportation: a preliminary clinical Report. 2014. *American Association of Veterinary Diagnosticians*, Kansas City, MO.

Schumacher L, Miesner M, **Henningson J**. Multisystemic hemangiosarcoma in a sheep. 2012. *American College of Veterinary Pathologists*, Seattle, WA.

RESEARCH:

Current Collaborative Projects:

African Swine Fever and Rift Valley Fever Vaccine Projects. PI: Jurgen Richt. Testing of vaccine candidates in challenge models. Provide full pathology support. 2019.

Heartwater (*Ehrlichia ruminantium*) in Sheep; PI: Roman Ganta. Developing a challenge model to explore vaccine development. Provide necropsy support. 2018-Current.

Classical Swine Fever. PI: Jishu Shi. Testing vaccine candidates in challenge models. 2015-Current.

Bovine Respiratory Syncytial Virus in Calves that are immunosuppressed or deficient in Vitamin A & E. PI: Jodi McGill. Provide necropsy and histopathology support. 2017-Current.

SELECTED RESEARCH EXPERIENCE:

December 2012-Current	Collaborative research projects include: prostate cancer in a mouse model, nasal carcinoma in dogs, influenza, porcine reproductive respiratory syndrome, bovine respiratory disease syndrome, classical swine fever virus, cattle fatigue syndrome, Seneca valley virus, influenza D in cattle, interstitial pneumonia in cattle and others. Have assisted at least 12 members of the Kansas State faculty through pathology collaboration on projects and grants.
July 2010-October 2011	Swine Influenza Virus and Porcine Reproductive and Respiratory Syndrome (PRRS). Duties: cell culture, virus isolation and immunocytochemistry, ELISAs, histopathology and immunohistochemistry– <i>Ames, IA</i>
June 2004-January 2008	Bovine Viral Diarrhea Virus Research with NS4B and N ^{pro} mutations. Duties: cell culture, virus isolation, PCR, immunoperoxidase staining, ELISAs and others – <i>Lincoln, NE</i>
November 2006-Jan. 2008	Characterization of Bovine Viral Diarrhea Virus persistent infection in alpacas. Duties: histopathology and immunohistochemistry – <i>Lincoln, NE</i>
January 2007	Characterization of Bovine Viral Diarrhea Virus acute infections in alpacas. Duties: gross examination – <i>Lincoln, NE</i>

May 2005-July 2006	Characterization of Pulmonary Hypoplasia and Anasarca due to lymphoid hypoplasia in Shorthorn and Maine Anjou cattle. Duties: gross examination, histopathology, ancillary testing – <i>Lincoln, NE</i>
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TEACHING:

2023-Current	VDMP 831 Veterinary Virology-Viruses of Small Ruminants and Swine Circovirus (4 Lectures)
2022-Current	Lead Ocular Pathology Rounds for ophthalmology and pathology resident training
2022	Taught senior veterinary students on necropsy rotation (VDMP 902)
2020-2021	Veterinary Diagnostics and KSVDL Guest Lecture in NBAF Laboratory Training Program.
2018-2020	Ocular and Reproductive Pathology in Veterinary Systemic Pathology; 7 lectures, 4 laboratories.
July 2016	C.L. Davis Gross Pathology Course on Equine and Poultry Diseases. A course for veterinary pathology residents preparing to sit the ACVP board certification. This included organizing 469 gross image for equine and 307 for poultry along with producing notes that included disease name, cause, etiology, morphological diagnosis and sometimes pathogenesis. I also helped coordinate the course.
November 2011-Current	Instruction of 4 th year veterinary students on necropsy procedures; JCP rounds, gross review and practice gross tests with residents.
September 2014-Current	Seminars for veterinary student extracurricular meetings and wet labs: Diagnostic cases to the student chapter of AABP, 2013; Poultry wet lab to student chapter ACVP, 2015; Diagnostic cases to summer veterinary elective feedlot course, 2016.
September 2013-Current	Instruct senior student on case examples for immunohistochemistry and using tissue dye to mark surgical margins.
Sept 2014-Current	Instruction of ophthalmology and pathology residents in ocular pathology rounds every other Friday.
April 2015-Current	Instruction of 2 nd year veterinary students on diagnostic sampling in sophomore pathology laboratory.

August 2013-Sept 2016	Kansas State Veterinary 1 st year veterinary student orientation to pathology and KSVDL.
October 2009-Sept 2010	Organization and instruction of general pathology rounds and gross pathology rounds to veterinary pathology residents at the University of Wisconsin-Madison.
Sept 2008-Sept 2010	Instruction of 4th Year Veterinary Students on Necropsy Rotation; Lecturing on reproductive pathology, preparing and teaching reproductive pathology laboratory, preparing and grading exams for second year students in Systemic Pathology at the University of Wisconsin-Madison School of Veterinary Medicine.
January 2008-May 2008	Assisting in General Pathology Laboratory answering student questions and tutoring students in General Pathology Course of the Professional Program for Veterinary Medicine at University of Nebraska-Lincoln.

STUDENT COMMITTEES/MENTORING:

Sept 2016-Dec 2018	Serve on course work only master committee for Jennifer Phinney.
Sept 2016-May 2018	Serve on master committee for Ben Bennett on Acute Interstitial Pneumonia in finishing phase feedlot cattle.
Sept 2015-February 2018	Served on masters committee for Dr. Sam Hocker on examining tyrosine receptor targets in canine nasal carcinoma.
January 2012- August 2015	Served on one PhD Committee for Dr. Alexander Opoku-Acheampong on a study of prostate cancer in TRAMP mice.
January 2013-Current	Part of the graduate teaching faculty in DMP.
Sept 2014-Current	I currently have a master's student, Jennifer Phinney, who is working on developing diagnostic ISH with in KSVDL.
September 2014-Current	Mentoring 10 1 st year veterinary students interested in pathology, public health and research.

PATHOLOGY COURSES/CONTINUING EDUCATION:

October 2022	22nd Davis-Thompson AAVLD Diagnostic Pathology Symposium: Diseases of the Nervous System
October 2016	Diagnostic CL Davis Dermatopathology Course- <i>Greensboro, NC</i>

December 2015	Plum Island Foreign Animal Disease Course- <i>Southold, NY</i>
December 2015	Zoonoses: Protecting People and Their Pets Online CE course-the Center for Food Security and Public Health, Iowa State University.
October 2015	AAVLD CL Davis Fish Pathology Course- <i>Providence, Rhode Island</i>
September 2015	Emerging and Exotic Diseases of Animals Online CE Course-the Center for Food Security and Public Health, Iowa State University.
November 2013	ACVP CL Davis Course- <i>Montreal, QC, Canada</i> . A Day with Brian Wilcock. This course covered surgical pathology and ocular pathology.
November 2013	ACVP Post-meeting workshop- <i>Montreal, QC, Canada</i> . Quantitative Histomorphometry: Image analysis and Stereology-Methods and Application.
December 2012	ACVP CL Davis Course- <i>Seattle, Washington</i> . Birds do it...Bees do it...A primer on Diagnostic Reproductive Pathology.
December 2012	ACVP Post-meeting Workshop- <i>Seattle, Washington</i> . Immunohistochemistry in Canine and Feline Cancer Diagnosis and Prognosis.
July 2011-October 2011	604 Seminar (Cases from the Iowa State University Pathology Department) – <i>Ames, IA</i>
Spring 2011	Molecular Pathology: Inflammation, Iowa State University, Professor: Dr. Mark Ackermann – <i>Ames, IA</i>
June 2009	C.L. Davis Descriptive Veterinary Pathology – <i>Virginia Beach, VA</i> . Week long course teaching the proper way to write pathology descriptions.
April 2009	C.L. Davis Gross Pathology Course- <i>Washington DC</i> . Week long course covering gross pathology of all species.
August 2007	C.L. Davis 50 th Pathology of Laboratory Animals – <i>Bethesda, MD</i> Week long course on the pathology of laboratory animals.
December 2006	C.L. Davis Cytology for the Anatomic Pathologist – <i>Tucson, AZ</i> One day seminar on interpreting cytological smears.

October 2006 C.L. Davis Diagnostic Avian Pathology – *Minneapolis, MN*
One day seminar on the pathology of poultry.

SELECT PROFESSIONAL PRESENTATIONS:

2023	Presentation of “What KSVDL does for Kansans (and beyond)” to Kansas Farm Bureau, Government Relations and Johnson County retired teachers.
2021	The Herculean Effort for KSVDL SARS-CoV-2 Testing and the Comparison to Possible FAD Village Response. Diagnostic Medicine Pathobiology Departmental Seminar.
July 2019	Presentation to the Australian Delegation for Beef Export expansion: KSVDL Overview and The NAHLN
July 2012-2017	Outreach Newsletters in KSVDL Diagnostic Insights: Marking surgical margins with tissue dye (July 2012), What is Immunohistochemistry (Sept 2012), What’s the Beef with Bovine Genetic Disease (Dec 2012), Canine eosinophilic folliculitis and furunculosis (April 2013), Schistomiasis (Nov 2013), Blackleg: It is that time of year (May 2014), Too much of a good thing...Over supplementation of minerals in cattle (January 2016), and Ocular lymphoma (2017).
March 2016	Jamie Henningson. Cases of hepatic necrosis in Cattle. Academy of Veterinary Consultants (AVC) – <i>Fort Worth, TX</i> ; presented 15 min presentation on cases of hepatic necrosis in cattle.
June 2015	Jamie Henningson. Case of Malignant Catarrhal Fever. Kansas State June Conference– <i>Manhattan, KS</i> ; presented 15 min case on Malignant Catarrhal Fever.
December 2014	Jamie Henningson. Bovine Clinical Cases and Pathology. Academy of Veterinary Consultants (AVC) – <i>Kansas City, MO</i> ; presented 1 hour seminar on bovine clinical cases and pathology.
November 2014	Injoon Kim and Jamie Henningson. Rhabdomyosarcoma in a Guinea Pig (<i>Cavia porcellus</i>). American College of Veterinary Pathologists (ACVP) – <i>Atlanta, GA</i> ; poster presentation.
October 2014	Jamie N. Henningson, Bhupinder Bawa, Guy H. Loneragan and Daniel U. Thomson. Hoof sloughing in beef cattle following transportation: a preliminary clinical Report. American

Association of Veterinary Laboratory Diagnosticians (AAVLD) –
Kansas City, MO; poster presentation.

- February 2013 **Jamie Henningson** and Gary Anderson. The Bovine Respiratory PCR Panel. Kansas State Veterinary Diagnostic Laboratory conference– *Manhattan, KS*; seminar.
- December 2012 **J. N. Henningson**, D.R. Braucher, A.L Vincent, C.L. Loving, P. Kitikoon, P.C. Gauger, and M.E. Kerhli. Adenovirus Vectored Vaccines Against Influenza A Virus Do Not Result in Vaccine Associated Enhanced Respiratory Disease Following Heterologous Challenge in contrast to Whole Influenza Virus Vaccine. American College of Veterinary Pathologists (ACVP) – *Seattle, WA*; poster presentation.
- December 2012 L Schumacher, M. Meisner, **J. Henningson**. Multisystemic Hemangiosarcoma in a sheep. American College of Veterinary Pathologists (ACVP) – *Seattle, WA*; poster presentation.
- November 2012 **Jamie Henningson**. Investigation into poor growth/unthriftiness in a Herford calf. Kansas Veterinary Medical Association Continuing Education Conference– *Manhattan, KS*. Oral presentation.
- February 2012 **Jamie Henningson**. Marking surgical margins with tissue dye. Kansas State Veterinary Diagnostic Laboratory continuing education conference – *Manhattan, KS*; oral presentation.
- December 2011 **J.N. Henningson**, K.S. Faaberg, B. Guo, S.N. Schlink, L.C. Miller, M.A. Kappes, M.E. Kehrli, Jr., S.L. Brockmeier, T.L. Nicholson, A.C. Vorwald, and K.M. Lager. Comparison of the Pathogenicity of Chinese and Low Virulent US Porcine Reproductive and Respiratory Syndrome Viruses. American College of Veterinary Pathologists (ACVP) – *Nashville, TN*; oral and poster presentation.
- January 2009 **Jamie Henningson**. Cerebral and Renal Cryptococcosis. Pathologists Night Out–*Madison, WI*; Oral presentation.
- December 2006 **J. N. Henningson**, D. J. Steffen, C. L. Topliff, K.L. Kurth, R. R. Dubielzig, B. W. Brodersen, D. Bedenice, K. M. Eskridge, R. J. Callan, C. Reggiardo, G.P. Rupp, C. L. Kelling. Viral Antigen Distribution in Alpacas Persistently Infected with Bovine Viral Diarrhea Virus. American College of Veterinary Pathologists (ACVP) – *Tucson, AZ*; poster presentation.

- June 2006 **J. N. Henningson**, D. J. Steffen, C. L. Topliff, K.L. Kurth, R. R. Dubielzig, B. W. Brodersen, D. Bedenice, K. M. Eskridge, R. J. Callan, C. Reggiardo, G.P. Rupp, C. L. Kelling. Viral Antigen Distribution in Alpacas Persistently Infected with Bovine Viral Diarrhea Virus. North Central American Association of Veterinary Laboratory Diagnosticians – *Lincoln, NE*; oral presentation.
- December 2005 **Henningson, J.N.**, Topliff, C.L., Gil, L.H.V., Donis, R.O., Steffen, D.J., Charleston, B., Eskridge, K.M., & Kelling, C.L. Effect of the viral protein N^{pro} on virulence of bovine viral diarrhea virus and induction of interferon type I in calves. Conference of Research Workers in Animal Disease (CRWAD) – *St. Louis, MO*; poster presentation.
- November 2005 **Jamie Henningson**, Jon Beever, David Steffen. Pulmonary Hypoplasia and Anasarca in Shorthorn and Maine Anjou cattle. American Association of Veterinary Laboratory Diagnosticians – *Hershey, PA*; oral presentation.
- November 2004 **Jamie Henningson** and Bruce Brodersen. *Mammomonogamus laryngeus* infection in a calf. American Association of Veterinary Laboratory Diagnosticians – *Greensboro, NC*; oral presentation.

JOURNAL REVIEW:

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| 2015 | Journal of Veterinary Science and Medical Diagnosis Advances in Influenza Research |
| 2017 | BMC Veterinary Research |

SELECT GRADUATE COURSEWORK:

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| June 2019-2023 | Public Organization Theory, Public Budgeting, Public Personnel Administration, Policy Analysis and Evaluation, Managing Crises, Communication with Constituencies, and Cultural Competency and Diversity Management. |
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June 2004-Jan. 2008	Immunology, Bioinformatics, Molecular Virology, General Pathology, Intestinal Histopathology, Veterinary Histopathology, Advanced Systemic Pathology, Veterinary Histopathology, Biochemistry, Statistical Methods in Research, and Surgical Pathology.
September 2005	Molecular Biology Training Course; Oregon State University – <i>Corvallis, OR.</i>
April 2005 - Sept 2005	Nebraska Symposium of Interdisciplinary Graduate Science Research; Veterinary and Biomedical Sciences representative.

AWARDS:

2006-2007	Milton E. Mohr Scholarship and Fellowship; University of Nebraska, Lincoln, Center for Biotechnology
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LICENSURES:

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- Kansas Veterinary License, #7025
 - Nebraska Veterinary License, #3190 (inactive)
 - Wisconsin Veterinary License, #6268-50 (inactive)

PROFESSIONAL MEMBERSHIPS:

November 2017-Current	United States Animal Health Association; Bovine and Bison Committee, BVDV Sub-Committee
September 2009-Current	American College of Veterinary Pathologists
November 2004-Current	American Association of Veterinary Laboratory Diagnosticians (AAVLD) - Chair of Pathology Committee; AAVLD Auditor Pool Member
August 2015-2020	American Veterinary Consultants (AVC) Member
August 2017-2020	AVC and AAVLD Liaison
September 2015	Phi Zeta member -2016 Kansas State Chapter President
Aug. 2000-December 2008	American Veterinary Medical Association (AVMA)

COMMUNITY SERVICE:

2016-2020	Girl Scout Troop Leader
2018-Current	N2N Ogden (Feed children of Ogden 4 times per year)
2017-2019	MHK Youth Mountain Biking Coordinator
2018-2021	KS Interscholastic Cycling Board